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The report addresses issues related to the process approach to the management of the organization, highlighted the benefits of the process approach. The notion of a "business process" and highlights its distinctive features, defined system principles describing business processes.

Key words: "a process approach to management", "business process", "the principles of the business process."

Any economic system is a holistic education that permeated different levels of intensity of relations and interactions of people, organizations, and other institutional structures. Economics in its fundamental part fixes the set of elements, connections, relations, which form a relatively stable overall economic system. In difficult market conditions, a number of problems related to the conservation of this resistance. One such problem is the management of the organization.

The most effective approach to the management of modern conditions is a process approach, as with the economic position of its use contributes to the economic performance of the organization.

As part of the process approach any entity treated as a business system, which is a connected set of business processes, the ultimate objective of which is to produce a product or service. Despite the difference in the functions and tasks of the structural units at different levels of government, all of which interact with each other. This interaction makes it compatible to the organizational system of the company. Indeed, in the course of work people come together, creating a certain organizational systems to work together. This creates organizational management structure. In most cases, the formation of these structures is a subjective process, depending on the will and desires of management. However, this process is subject to objective laws that are inherent in organizational systems.
In the State Standard of the Russian Federation GOST R ISO 9000-2001 represented a process definition and process approach.

Process - any activity or set of activities that uses resources to transform inputs into outputs. Process approach - a systematic identification and management processes and organization used primarily to ensure their interoperability. As standard, the process approach is a tool for the implementation and maintenance of a quality management system designed to continually improve performance to meet the needs of all interested parties. [1]

In the economic literature, the business process is defined as: a set of activities, in which the "input" using one or more types of resources, and as a result of this activity on the "exit" created a product that represents the value to the consumer [2] work flow passing from one person to another [3] "a structured, measured set of activities", created for a specific output for a given customer or market, which suggests to focus on how the work is carried out at the plant [4], a set of internal steps ( s) of activity, starting with one or more inputs and ending creation of products required by the client and meets their cost, durability, service and quality [5], logical series of interdependent activities that use the company's resources to create or receive in the foreseeable or measurable, predictable future utility customer exit, such as a product or service. [6]

Based on the definition of business processes and studies VV Repin and VG Eliferova, you can select features of the business processes, inputs and outputs, activities for the transformation of inputs into outputs, process resources, including technology to perform business process management activities of business process [8].

The system of business processes in an organization depends on many factors: the industry sector, the characteristics of strategic management, applied technologies. IO Zhuravleva identifies two groups of factors that affect the efficiency of business processes: subjective (the number of employees by department, the prices of raw materials, internal workflow, etc.) and objective (seasonally proizhvodstva, level of competition, inflation, etc.). [7].

Considering the business process as a system, VV Repin identified several key elements that must be present in the modeling of the business process: planning,
implementation of activities, registration of factual information, control and analysis, decision-making. Each of these elements is important in the implementation of the business process. The absence of even one of these elements in the business process leads to the fact that the system is poorly managed (unmanaged) and inefficient. V.V.Repin as the characteristics of the structure of the business process offered such as the scale of the process, the length of the process, the level of detail of the process.

Depending on the implementation of the business process can be large scale to have hundreds of input and output to get the results that are important for a number of clients in the later stages of production and consumption of the product (service). The length of the business process - is a subjective characteristic length of a business process, which is determined by analyzing and making decisions about what kind of activities of various organizations (departments) to consistently refer to the activities carried out within the business process. The level of detail of the business process is defined by the level of detail of the review. Scaling the length and level of detail of the consideration of the business process is defined by the specific challenges faced by the company management. Building a system of business processes should be carried out sufficiently flexible, otherwise it will lead to the emergence of formal business processes, which will continue to exist only on paper.

One important area of business process management is their description. To describe the business processes of the organization Budagyanets NA provides a framework of principles [10] The principle of input (s) and output (s) of the business process, the principle of availability provider of business process, the principle of availability of client business process, the principle of having the owner of the business process, the principle of having the boundaries of the business process; principle of interaction and relationship of business processes, the principle of measurable and manageable business process. Above principles allow us to identify the business processes as such.

The principle of input (s) and output (s) of the business process means that any business process has an input, which is defined for a business process and use for this purpose resources. Input - the resources (material, information) required to execute and
get the result of the process that transformed or consumed in the performance of the process.

The principle of provider of business process is that the process needs resource provider (the performance of other business processes). Internal supplier of business process - other business processes of the company, department or officer of the person providing the inputs (resources) for the considered business process.

The principle of the customer (consumer) business process. Customer - the consumer business process. Customers are the primary, secondary and indirect. The primary client is the party that receives the primary output of the process defined within the boundaries of the process described. Secondary clients are secondary outputs.

The principle of the owner of the business process makes it necessary to determine the person in the organization responsible for the process of goal setting, resource allocation and evaluation.

The principle of the boundaries of the business process involves the need to clearly define the boundaries of the process, ie points where the process begins, ends, and fit in with other processes. The upper boundary of the process may be a point where the outputs of other processes fit with the data. The lower boundary is the point at which the output of the process is the input to other processes. The boundaries of business processes defined customer requests.

The principle of interaction and relationship of business processes means that all business processes are interconnected with each other and together constitute the organization.

Principle measurable and manageable business process reflected the quantitative and qualitative characteristics of business processes. In a study of EV Maimin these characteristics are meaningful. [9]

Among the qualitative characteristics of the researcher highlights: effectiveness, efficiency and adaptability.

The effectiveness of the business process - a figure that reflects the result of achieving this goal and is measured at the level of customer satisfaction. Efficiency - an indicator that evaluates the use of resources, the ratio of outcomes and costs required
to implement the business process. Adaptability - a measure of the ability of a business process to respond to changes in the environment.

Quantitative indicators of business processes - performance, durability and cost. Productivity - the ratio of the number of units at the output to the input of the units of the process. Duration of business processes - a measure of the length of time from the beginning of the process until its completion, for assessing the timeliness and accuracy of operations of the business process. Value - an indicator that determines the costs required to complete a business process.

Qualitative and quantitative indicators of business processes related to each other and define the metrics of business processes of the organization.

In the analysis of these indicators is a comparative evaluation of the level of functioning of business processes with the desired, enabling timely adjustments in the process and effective management. Manageability is achieved by optimizing the business process.

The process approach is today popular in the practice of business organizations. The crisis has been an increase of interest of heads of organizations to implement a process approach.

References:


The report addresses issues related to the concept of the state industrial policy and its importance at the present stage of economic development of the country. Special attention is given to the characteristic features of the state industrial policy.

Key words: "industrial policy", "state industrial policy," "especially industrial policy."

For the sustainable development of the national economy, industrial production is key. However, at the present stage of economic development are serious changes in the...
majority of domestic enterprises. Russian industrial enterprises are not competitive enough in the market of industrial products. In this connection, a hot topic in economics is the formation of industrial policy at the state level.

This topic is being actively discussed in the scientific literature. In this direction, we investigate questions related to the definition of industrial policy and its features of the formation at various levels.

Thus, the IJ Kushnir believes that industrial policy is a system of government measures and efforts to promote the development of the economy and individual sectors, representing an important part of the overall economic policy. [4].

Abalkin defines industrial policy as an element of social and economic policy, which is "a system of measures aimed at the progressive changes in the structure of industrial production according to your national goals and priorities". [1]

Industrial policy facilitates the exit of industry structural crisis due to:
- to overcome the mismatch between the emerging new techno-economic paradigm of industrial development and the institutional structure of society;
- The completion of industrial restructuring in the unity of technological, industrial, and institutional change as the most important phase of the cyclic structure of the industry. [7].

EM Primakov defines industrial policy as a set of measures aimed at the development of the national economy, new technologies and products with high added value, and modern information and other services, human capital. [2].

Definition of industrial policy is given and in legislation. For example, the Report of the Committee on Industrial Policy of the Federation Council of the Federal Assembly for industrial policy is a set of actions of the state as an institution to be taken to influence the activity of economic entities (companies, corporations, businesses, etc.), as well as to certain aspects of this activity related to the acquisition of inputs, production, distribution and sale of goods and services in all phases of the life cycle of the entity and the life cycle of its products. [3]

In 2008, deputies proposed a draft Federal Law "On the National Industrial Policy in the Russian Federation» N 98281-5, which served as the development and
implementation of strategic priorities for the industry as a basis for economic and social spheres. The project, industrial policy is a legal and economic measures and actions of subjects of industrial policy emanating from the priority to ensure the competitiveness of the economy, a stable and innovative economic development of the Russian Federation, subjects of the Russian Federation and municipalities.

According to V. Draganov, one of the authors of the "project is not the industry and is aimed at the entire industrial complex of Russia, the experience of foreign countries shows the use of mechanisms of Industrial Policy for the stabilization and growth of the national economy, the promotion of exports of domestic industrial products, natural and national conservation other resources to ensure optimum stability of the internal market." [5].

From the standpoint of international economists industrial policy is the "public policy that has an impact on the distribution of resources between industries. It contributes to the expansion of production, investment, research and development, modernization and reorganization of production within certain industries and at the same time limiting these processes in other sectors". [8]

In its broadest sense, the industrial policy - "is government policy that has as an immediate goal to provide a certain influence on the structure, function, performance of the various sectors of industry". [8]

According to AI Tatarkina a cyclically developing economies are coming out of the structural crisis of the industrial policy to promote new types of sectoral structure of industry, on the stage of economic growth - its development and enhancement, the stabilization phase - the implementation of the existing building. Depending on the stage of development of industrial policy provides either support the existing structure of the industry, or the formation of a new type of industrial structure. [7].

Thus, given the above, the industrial policy of the state can be defined as part of the overall economic policy, which is the system of government, legal and economic measures aimed at developing and progressive changes in the structure, function, performance of different industries according to your national goals and priorities.
Analysis of the accumulated experience of the theoretical points to the following features of industrial policy:

- Industrial policy promotes economic development;
- Industrial policy is implemented according to specific national goals and priorities;
- Industrial policy based on priority to ensure the competitiveness of the economy, a stable and innovative economic development of the Russian Federation;
- Industrial policy promotes industrial output of the structural crisis;
- Industrial policy is a system of measures aimed at the progressive changes in the structure of industrial production;
- Industrial policy influences the distribution of resources among industries;
- Industrial policy promotes the expansion of production, investment, research and development, modernization and reorganization of production within certain industries and at the same time limiting these processes in other industries;
- Industrial policy affect the activity of the entity, as well as certain aspects of the activities related to the acquisition of inputs, production, distribution and sale of goods and services in all phases of the life cycle of the entity and the life cycle of its products.

**Literature**


J21317-003

Pivovarova E.V.

DEVELOPMENT OF BIOPHARMACEUTICAL PRODUCTION
IN THE ALTAI REPUBLIC
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The article represents the analysis and working out of the complex of scientifically based suggestions and recommendations on the development of biopharmaceutical cluster “Gorny Altay”. Measurements on cluster initiatives realization on the territory of the Altay Republic are suggested.

Key words: innovative development of the region, biopharmaceutical cluster, organizational and economical mechanism, the area’s productive potential, development indicators.

The transition of pharmaceutical industry to innovative models of development and the increase of its competitiveness both in Russian and foreign markets are the most important strategic problems on a federal level nowadays. The project of the Altai Republic on formation of biopharmaceutical cluster can and should become one of the growth points of the pharmaceutical industry in the country. Development of a
biopharmaceutical cluster will bring the development of tourism in the Altai Republic to a qualitatively new level; it will create additional workplaces for people living in rural areas (72% of the population of Altai Republic live in rural districts) and also will allow to make careful use of the produced vegetable and animal raw materials.

At the first stage, it is necessary to prove the relevance of the establishment of biopharmaceutical cluster, to describe advantages of the region as a platform for formation of innovative development of medicinal products, and also to enlighten the issues of the resource potential and the climatic conditions of the territory.

Gorny Altai has been a raw material source for production of biological preparations for a long time. There is a large number of wild plants which can be used in pharmaceutical branch (from 500 to 700 items). The biopharmaceutical cluster is suggested to be developed on the basis of the private and state partnership. The state in this case assumes providing the private companies with necessary infrastructure and granting them privileges in the form of subsidies. The idea of a cluster is successfully combined with the development of special economic zones of tourist and recreational type such as "Altai valley".

Today there is a number of enterprises in the Republic engaged in cultivation and processing of medicinal and technical raw materials and production of antler reindeer breeding. Processing of medicinal and technical raw materials and production of antler reindeer breeding is carried out by 11 enterprises in the Altai Republic.

Production of the processing enterprises is realized in retail trade system and pharmacy network, tourist camps and rest houses, health resorts in the Altai Republic and many other regions of the Russian Federation.

The main processing capacities on the territory of the municipality "City of Gorno-Altaisk" are concentrated in “Respublikansky pchelotsentr” OOO, “Phytopam” OOO, Federal State Unitary Enterprise “Gorno-Altayskoye” of Rosselkhozakademiya.

Directly on the territory of the municipal formation “Mayminsky Area” the processing of medicinal raw materials and products of antler reindeer breeding is carried out by three enterprises: "Narine" OOO, “Biostimul” OOO, “Karym” OOO. “Pantoprojekt” OOO is also engaged in processing of antler reindeer breeding
production. The above mentioned enterprises account for more than 90% of the existing facilities in processing and storage of finished products, located on the territory of the Altai Republic.

In terms of location, the cluster will be situated on the territory of three municipalities: Gorno-Altaisk, Mayminsky and Chemalsky areas. This is due to the fact that all main enterprises for production of biopharmaceutical products are located in these territories: “Narine” OOO, “Karym” OOO, “Biostimul” OOO, “Phyto-PaM” ZAO, “Rasteniya Gornogo Altaya” OOO, “Neopant-Chemal” OOO; in Mayminsky and Chemalsky Areas there being implemented the largest projects of the Altai Republic in the field of tourism: OEZ TRT Altayskaya dolina, GLK "Manzherok", tourist complex "Altai Resort", tourist complex "Maryin Ostrov" and others; in Gorno-Altaisk and Mayminsky area the largest scientific organizations of the Republic are located: FGBOU VPO "Gorno-Altaisk State University", Federal State Unitary Enterprise “Gorno-Altaiskoye” of Rosselkhozakademiya, GNU "The Gorno-Altaisk research institute of agriculture of the Russian Academy of Agricultural Sciences", AURA "The Altai regional institute of ecology".

The main coordinating body of the cluster management will consist of the Council, comprising representatives of the main organizations - participants of the cluster. The Council of the cluster will be elected from among the representatives of members of the cluster for a period of three years, and its main task will be determination of the development strategy. The form of the work of the cluster Council will be meetings, which will be held as required. The Council of the cluster makes decisions by a majority of votes from the total number of members present at the meeting, each member of the Board of the cluster possesses one vote.

The Research center of Federal public budgetary educational institution of the higher professional education "Gorno-Altaisk State University" will become a core of a cluster. The structure of the planned centre is represented on the figure.

Creation of the research center requires reconstruction and modernization of the existing Republican Research Laboratory. The costs of reconstruction and
modernization of the buildings will amount to 550,000 rubles and the supply of Central communication will cost 20,000 rubles.

When creating a cluster it is expected to support the following projects:

- the project "The Organizations of Research and Development of Innovative Production of Food, Cosmetic, Preventive and Recovery Appointment from Mineral and Biological Resources of Gorny Altai" at "NPL Himii Biogeoresursov", OOO.

NPL’s sphere of activity:

- Research of physical, chemical and biological properties of peloids; development of natural production on the basis of processing of the specified raw sources, as well as vegetable and biological raw materials;

- Scientific justification of technologies for processing of various raw resources of the region, recreational in particular; development of structures and technologies in
order to receive model samples of innovative natural production of preventive, recovery and cosmetic appointment;

- Development of the specifications and technical documentation for production;
- Development of compositions and technologies of receiving organic and mineral humic preparations as fodder additives, preventive and medical preparations in animal husbandry (antler reindeer breeding, sheep breeding, cattle breeding).
- project "Organization of Production of Phytoproduction on the basis of Herbal Medicinal Raw Materials".

The main implementation indicators of the biopharmaceutical cluster establishment in the Republic of Altai are:

- increase in the gross regional product and in the exports of the Republic share of products manufactured by the participants of the cluster; end products, competitive on the Russian and the international markets rank first.
- increase in number of new workplaces in the framework of cluster;
- growth of volumes of research, development and innovative activity within a cluster;
- reduction of discrepancy percentage between the number of the experts graduated by primary, secondary and higher professional educational institutions and the market demand for these experts within a cluster;
- growth of specific weight of goods and services of small and medium businesses made and rendered within a cluster by means of mechanisms of outsourcing and subcontracting.

Literature:


3. Shvakov E. E. Special economic zone of tourist-and-recreational type as a form of innovation development of the Republic of Altai: monograph / Shvakov E. E.,
Today one of actual problems of the Russian economy is transformation of temporarily free monetary resources of physical and legal entities in an investment. Now the market of investment resources is divided into that part of means which is put by large investors, and that which small and average investors could provide.

The first work both at stock market, and at the bank. The second in a bigger measure carry out investments in commercial banks. As a rule, profitability of bank deposits doesn't provide a large increase of means, often it appears below a rate of inflation, that is the real cost of bank deposits decreases eventually. Therefore small investors show interest in alternative investments of means. So, for last years deposits to MMM, credit consumer cooperatives became them.

The general feature of these forms of attraction of financial resources – absence of control from the state. It often leads to loss of invested funds that increases social tension in society, reduces welfare of the least provided part of the population. Despite preventions of various state structures of need carefully to choose objects of an investment of means, small investors continue to pursue higher profit, without giving itself the report on what risks thus they accept, whether will be able to return the invested money then. Therefore from the state is important to respond to the appeared interest of small and average investors in new forms of an investment of means and to undertake measures for their protection.
The purpose of this article is the analysis of opportunities of expansion of forms of attraction of means at simultaneous decrease in risks of investments in such types of collective investment as investment funds (joint-stock (AIF) and share (mutual fund)), funds of bank management (OFBU) and the PAMM-account.

Characteristics of profitability of considered forms of investments are provided in the table in 2012. From the table it is visible that though mutual funds for the same objects of investments show both positive, and negative profitability, and profitability of OFBU is lower, than at deposits, but on the average they are investment attractive. It belongs and to PAMM-accounts though according to them data only about the portfolios which have shown positive profitability (except for data on the maximum sag for any day during the considered period) are provided.

**Table**

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<th>The name of fund (account)</th>
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Appeal of collective investments from the point of view of profitability even more increases by its comparison to growth of indexes of MICEX and RTS - 2,77 and 5,38% respectively, and also rates on deposits - to 12% (1). What directions investments develop in collective investments?

Legislatively regulated forms of attraction of financial resources are investment funds and OFBU. They have institutional protection of decrease in risks of loss of means which is reduced to the following: a) isolation of the attracted resources from the operations which are carried out by managing directors at own expense; b) control from regulators behind carrying out operations (The Federal Service for Financial Markets (FFMS) and the Russian Federation Central Bank (CB), the self-regulating organizations (SRO)); c) licensing and the reporting about carrying out operations.

OFBU practically didn't change conditions of the functioning. Though since January, 2013 of the Central Bank of the Russian Federation I made the decision not to create new OFBU, having suspended the Instruction No. 63 regulating them functioning, having explained it is sufficiency of attraction of means through mutual funds and AIFY.

The market of investment funds for 2012 became more volume: the cost of net assets of mutual funds increased by 48,92 billion rubles and made 530,78 billion. Funds became 44 more and now than them in Russia 1378 (1).

Their forms were added with aggressive types of investments. For example, funds of especially risky venture investments, hedge funds are legislatively entered. The last, as well as OFBU, can carry out investments in foreign currency, securities, natural jewels and the metals, derivative financial instruments. For protection of interests of small and average investors of an investment in them are allowed only to the qualified
investors. In this regard hedge funds can not open information on the activity therefore the official statistics of their profitability is absent.

Closeness of hedge funds is represented not quite justified as FFMS supervises even structure of their assets. For example, deposits to one credit organization shouldn't exceed 25% of all money; the estimated cost of investment shares of mutual funds and (or) shares (actions) of foreign investment funds – 30%, etc. besides, hedge funds have to have the control system of risks including restrictions of the sum of sizes of an open long position no more than 30% of assets; establishment of limits on the cost of financial instruments under urgent contracts; daily analysis of change of values of open positions and so on.

Restrictions of groups of the investors, having the right to put financial resources in hedge funds, contradicts also to tendencies of their development in world practice. Now began to appear:

- the funds guaranteed a hedge guaranteeing return of the main sum of investments and/or the small guaranteed income, and also profit fixing (transfer of a part of profit to the guaranteed sum);
- nano hedge funds – for investors with the small capital.

They have the smaller cost of occurrence, are focused on the mass investor, and at the expense of diversification and the monitoring system installed by the regulator provide the smaller size of risk in comparison with spontaneous, institutionally not issued forms of an investment of means which rather PAMM-accounts which have recently appeared in the Russian market (Percent Allocation Management Module - the module of management of percentage distribution) are.

According to incomplete data, PAMM-accounts are open in Russia 50 thousand by investors, are served 1тыс. managing directors were accumulated also by $12 million investments (3). That is, and in this area rather extensive market was created. In too time, reduction of risks of this form of an investment of means is defined by only the mechanism of maintaining the account:
- on investment Orsk accounts transactions of the managing director of the own account are in proportion duplicated. It assumes that the managing director not to lose the money will be invested in probably more profitable operations;

- it is possible to put the limiter of losses and most to make the decision at their receiving a message of operation farther or to bowl off, it isn't dependent on further actions of the managing director.

Managing directors of PAMM-accounts advertize them as risk-free. For example, pointing to opportunity to enter and bring means out of management at any time, to watch their maintaining on the account in real time.

Maintaining PAMM-accounts by the Russian legislation isn't regulated. The violation of the law at their maintaining goes on the following positions: a) it is possible to transfer to trust management only the means intended for an investment in securities, and such accounts are most widespread on the market FOREX; b) money banks and the management companies having the corresponding license of FFMS or at least on broker service have the right of management; c) according to transactions with the property given to trust management the trustee has to specify that he acts in such quality, otherwise he is responsible before clients for losses only the property. Versions of accounts offered on FOREX and contracts usually break these standards of the Civil Code. Therefore in disputable situations the client can't use legal protection.

As a whole, the system of decrease in risks when using PAMM-accounts is under construction on reputation of the managing director. It reminds these investments of means in credit consumer cooperatives with all that it implies from here possible consequences in the form of increase in the country of number of the deceived investors.

Thus, restrictions on access of average and small investors to legislatively regulated more risky forms of an investment of means in the form of, for example, hedge funds, leads to that persons inclined to risk pass to placement of temporarily free monetary resources in forms which are not less risky, but not having a legislative regulation (for example, the considered PAMM-accounts). Therefore it is advisable to continue improvement of the Russian legislation in the investment sphere.
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First, any investment fund, it isn't dependent on object of an investment of means (actions, bonds and other tools) can bring both profit, and losses. Therefore restriction of access to investments in hedge funds only the qualified investors looks inexpedient. It leads to replacement of work of managing directors supervised from FFMS with investment portfolios to use of PAMM-accounts on which it is possible to invest without any control and any restriction. Abuses here in process of expansion of number of investors start growing. So, in January in the Volgograd region one of managing directors appropriated more than $140 thousand the accumulated means. About it one of investors thanks to what business became known casually learned.

Secondly, it is expedient that all forms of trust management were surely licensed, had legislatively approved system of decrease in risks (as, for example, hedge funds) and were supervised by FFMS together with SRO. Forms of investments which don't meet these requirements, would be expedient to be forbidden.

Otherwise in Russia there can be again the new deceived investors attracted by means of new financial instruments. It is represented that similar measures will allow to expand forms of collective investments and will reduce the related risks.

References:
2. Site OFBU Association – http://ofby.ru (address date 24.01.2013y.)
3. Rating of providers of signals of ZuluTrade – http://pamming.ru (address date 24.01.2013y.)

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AGRO-INSURANCE IN THE STAVROPOL TERRITORY TOOK PLACE THE YEAR
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Abstract: The paper is devoted to the topical questions of occurrence and implementation of law on agricultural insurance, the main problems faced by both insurers and insured persons at the conclusion of contracts of insurance with state support in the Stavropol territory. Offers correctional activities for amendments to the Federal law «On the state support in the sphere of agricultural insurance».

Key words: agro-insurance, agricultural producers, agricultural risks, the agro-industrial complex

1 January 2012, entered into force the Federal law «On the state support in the sphere of agricultural insurance» and the introduction of amendments to the Federal law «On agricultural development» № 260-FZ. The previous system of agricultural insurance, carried out with state support, did not allow to ensure the effective protection of the interests of landowners, including from large-scale natural risks. So, for the period from 2008 to 2011 from the Federal budget on support of agro-insurance allocated 14 billion 398,5 million rbl., thus in this period was negative dynamics as the number of organizations that have concluded the contract of insurance (in 2008. - about 8.3 thousand contracts, 2009.- the order of 5 thousand. in 2010. - 3,9 thousand. in 2011. - the order of 4 thousand), and as for the proportion of cultivated area of insured crops (in 2008. - 25%, in 2010. - 13%). In 2011, there was observed some growth of these indicators, however, taking into account such stimulating farmers to insurance of factors, such as drought in 2010 and an increase in subsidies from the state budget, increase in the number of organizations, which have concluded the insurance contract, the eligible cannot be recognized as sufficient [7].

Drought 2010 demonstrated numerous problems and showed that the market of agricultural insurance, including those supported by the government, is in a state of, quite far from the ideal. Nevertheless, the positive fact is, that now to the issues of agricultural insurance appeared genuine and quite a lively interest. The activity of agricultural producers in matters related to insurance contracts, significantly increased in comparison with the year 2009, has improved their awareness of insurance. As a logical result of the increase of General interest to the theme that was designed for-the
draft law from the «About the state support in the sphere of agricultural insurance», adopted by the state Duma of the Russian Federation, approved by the Federal Assembly and signed by the President in July 2011. Its main goal is to provide agricultural producers protected from large-scale natural risks. In General the law is aimed at that, agro-insurance has become a popular and effective tool for reducing the risks in agricultural production and improve the financial sustainability of agricultural enterprises[4].

In the course of implementation of the new law is already there have been positive trends, however, the agro-insurance with state support had not been able to fully overcome some of the problems turned out to be unacceptably low coverage of crop insurance, are not managed to fully get rid of misuse of subsidies. [2]

At the round table meeting «agro-insurance 2012. Practice, problems, perspectives» the participants of the insurance market and of representatives of the government discussed the first steps of the implementation of the Law. The President of the National Union of agroinsurers Roots Bigdov informed that the participants of the market are still experiencing difficulties with insurance in the Volgograd and Voronezh regions, as well as in the Altai krai. And on the contrary, the agricultural producers of active insured in the Stavropol and Krasnoyarsk territories, and also in the Samara and Saratov areas.

In General, by the end of 2012 the share of the National Union of agroinsurers account for about 61% of the insured area under insurance contracts with state support. The average premium per 1 hectare amounted to 700 rubles, the sum insured per 1 ha was equal to 13 thousand roubles. The members of the Union during the insurance period reduced the tariffs on the average on 20%. In some regions of the decline exceeded 30%.

According to the head of the all-Russian insurers ' Association (Aria), Andrei Kigima, agro-insurance should become a model of how to effectively use budget funds. According to him, today agro-insurance became a topic for discussion in the whole world because of the challenges posed nature. In this connection at the forefront of the development of preventive measures, and the tasks that are currently set in front of the

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Western insurance companies, will soon be given to the Russian market. So, how is convinced the head of the BCC, in the strategy of development of the insurance market for the period up to 2020 should be more space is devoted to the development of insurance of agricultural risks [5].

At the meeting of the government of Russia in October 2012, devoted to the issues of agro-insurance with state support of the Governor of Stavropol territory Valery Zerenkov noted that the Stavropol region is a special from the point of view of the agriculture of the region. The edge of the combines in its territory of four soil-climatic zones - from semi-desert to damp foothills. Almost every year the agrarian sector of the Stavropol territory is faced with all its negative for agriculture natural phenomena, including hail damage and drought. In such conditions, for agricultural producers, naturally desire to reduce their risks and protect the investments made in the future harvest [3].

For the development of a new system of agri-insurance were offered the following measures:

- establishing differentiated threshold of occurrence of the insured event for different regions of the country taking into account their peculiarities;
- insurance of agricultural crops in individual fields;
- raise the level of qualification of the regional experts on the confirmation of the insurance loss and determination of damage;
- creation of метеопостов in each district of the Stavropol territory, in order to improve on the territory of the region forecasting of climatic threats.

At a meeting of the government of the Stavropol territory on 5 December 2012, there were discussed issues, related to the development of the insurance market in the region, including insurance in agro-industrial sector. In the meeting participated representatives of bodies of Executive power and local self-government of the Stavropol territory and insurance organizations. Deputy Chairman of the regional government Andrei Burzak pointed to the importance of building a culture of insurance in the environment of the enterprises and organizations and, in particular, agricultural producers, taking into account the specifics
of the agrarian region. In the last year, the regional insurance market reached 13.6 billion rubles, which is 26.4 per cent more than in the previous year and in 2.7 times higher than the level of 2005. Despite the dynamic growth of the insurance market, not solved a number of problems, which hamper its development [1].

In most cases, the increase in the insured organizations of agro-industrial complex prevent doubts agrarians in the fact that in case of occurrence of the insured event they really will receive compensation of damage. Upon occurrence of the insured event, some leaders of farms demanded compensation from insurance contracts that they signed without reading.

In this situation, to explain the necessity of agri-insurance and features of insurance contracts, insurance companies and representatives of government agencies should conduct training seminars for heads of households.

From all the above it follows that the agro-insurance is not only actual, but also a vitally important problem. Throughout the year, meetings were held, meetings and round tables, in order to identify problems arising from agricultural producers in the insurance with state support. Were discussed the practical moments, already insured agricultural producers. Proposals have been made to improve the effectiveness of agri-insurance. Which, naturally, will lead to the introduction of amendments and additions to the Federal law of July 25, 2011. № 260-FZ «On the state support in the sphere of agricultural insurance».

References:

1. Andrey Burzak called on to develop a culture of agri-insurance // http://fedpress.ru/news/econom/agricult/1354788631-andrei-burzak-prizval-razvivat-kulturu-agrostrakhovaniya (the date of the circulation 01.02.2013 year)

In this report examines the multi-faceted problem of small business, which has become the subject of a detailed analysis and theoretical substantiation, both in home and in foreign literature. Together with the issues of business development in the industry in conjunction with system-wide his role in the market transformations of the Russian society remain insufficiently explored. Problems of organization of sustainable
interaction of small industrial enterprises between them, the experience of the successful functioning of small multi-disciplinary business structures, especially for the food industry to remain relevant in the transition to innovative type of development of economy.

Key words: food industry, business organizational structures, small businesses, innovative type of development.

The food industry is one of the strategic sectors of the economy, to ensure the sustainable supply of the population with necessary quality food.

Over the last decade in the food industry fully completed the process of privatization, which has allowed enterprises to adapt to the conditions of the market economy. Before industry has the task of raising the efficiency of enterprises, production diversification and increase of competitiveness of produced goods. The food industry is one of the strategic sectors of the economy, to ensure the sustainable supply of the population with necessary quality food.

Food industry keeps its leading position in the structure of industrial production of Russia, occupying a share of 11.5% and on a par with the metallurgical production and the fuel industry, is one of the leaders in industrial production.

Today, the food industry includes more than 30 sectors, comprising 43 thousand of existing enterprises, which employ about 1.4 million people. The food industry makes a significant contribution to food security of the country, has both economic and social motives development. Social priorities are driven by high specific weight of food products in the consumer basket of the population, price competitiveness compared to foreign analogues. Economic priorities are in a strong consolidation of a niche market, opportunities of export orientation, the presence of specific assets that require modernization. This is confirmed by the fact that the share of investment in the food industry in 2006 year to 2009 year increased from 516 to 829 billion rubles. In comparison with 2006 year investments increased by 1.2 times [1].

The enterprises of food industry are subject to threats, related to the competition on the market of food products (the appearance of new foreign and domestic competitors, the goods-substitutes); low level of use of production capacity, due to the
lack of a stable, high-quality and sufficient raw material base and the low solvent
demand of the population; lack of development of a transport infrastructure (the
remoteness of the producers of the processors and the use of the services of
intermediaries, dealers); inflationary depreciation of receivables for sale of food
products intermediaries in the credit; high tax burden and the unavailability of external
financing sources.

The subjects of the functioning of the food industry are: state, regional and local
bodies of power and administration, the agricultural enterprises of different forms of
ownership and organizational-legal forms, as well as enterprises producing means of
production for the industry, enterprise infrastructure, trade, and consumers. The object
of interaction are the relationships between the actors in the regional food complex on
the production, distribution, exchange and consumption of food products. Integral
objective of the regional food complex is to ensure food producers effective conditions
of individual reproduction, and its consumers are receiving food in sufficient quantity,
assortment and at an affordable price. The achievement of this goal requires the search
for adequate forms of organization of production and management, one of which is the
small business. Management, based on the construction of the business organizational
structures, can be considered as a key factor that guarantees a high-performance and
stable work of the enterprises in new economic conditions and competitive struggle.

Creation of a new mechanism of industrial-economic activities on an
entrepreneurial basis implies the change of the essential features, the key elements and
the performance of organizations.

The main essential features of small enterprises as business systems are: social,
people's economic and commercial efficiency; innovation; sustainability; and leadership
and competitiveness, strategic focus, and consumer orientation.

In diagrammatic form of business organization can be represented by an inverted
pyramid (figure 1.), in the basis of which is the management of the enterprise. The main
responsibility of the leadership, instead of the traditional management and control, is
supporting the efforts of divisions and employees of doing business, creation of
conditions for the development of entrepreneurship. The next level is the organization's
resources (human, financial, material, information, innovative). The task of this block - security units, their business, resources. Higher still are doing business entrepreneurial cells, aimed at specific market segments. This may be the status of the profit centers (strategic business units), relatively independent of the company, as well as subsidiaries of the company. The top of the pyramid (in this case - the upside-down basis, i.e., the widest part of) - it is the consumers that determine the direction of the units of the organization. The structure of the business organization «turns her face to the consumer, allows to react flexibly to changing requirements. Thus there is a possibility to delegate the rights and responsibilities of those who directly do business, increases the motivation of the people and the efficiency of their work.

![Diagram of small enterprise as a business organization](http://www.sworld.com.ua/e-journal/J21316.pdf)

Fig. 1. The principle of operation of a small enterprise as a business organization. Status auto on the basis of [2].

**Consumers**

**Business of the cell (division of the organization)**

- The production of A
- The production of the products B
- The production of the products C

**Resources of the organization:**
- Material, financial, personnel, information

**The management of the organization**


The effectiveness of the entrepreneurial system is represented by efficiency of use of resources; the survival of the business in the changing conditions of the environment; the obtaining of a profit due to the satisfaction of the needs. All of these components form a combined model of a small enterprise.

A great influence the operation of the business structure as an «open system» in terms of impacts on the various factors of an environment focused on the domestic and foreign (L. Von Bertalanffy, H. Barnard, T. Parsons, R. Merton) economic literature. From the point of view of the system approach, of interest to the work of such Russian scientists as Yu.Yudin, I.Blauberg, E.Mayminas, A.Uemov, V.Sadovsky [3].

The impact of external environment on the business structure is characterized by the following features:

- complexity, which is characterized by the significant number and variety of influencing factors;
- the interdependence and interconnection of interacting factors;
- uncertain, unpredictable, random nature of many business-processes;
- dynamic, i.e. the high speed of changes in environmental factors.

On entrepreneurial management organizational structure directly influence of factors of external environment the direct impact (legislation, resources, customers, competitors, authorities, tax system) and the factors of indirect effects (politics, economy, scientific and technical progress, ecology, culture, social factors).

Thus, effective, balanced combination of these factors, getting a synergetic effect of their impact focus will be to ensure the functioning and development of the enterprise as a whole on a new basis, and to enhance the competitiveness of domestic small enterprises at the expense of:

- provide reliable, accurate information on the structure and dynamics of demand, tastes and desires of buyers, the external conditions of functioning of the enterprise;
- the creation of a flexible adaptive organizational structure of the entrepreneurial type;
- orientation of the organization of the competitors in the selection of the nomenclature of production which it intends to produce;
- rational selection, placement and successful solution of social programs;
- the creation of such of the goods (commodity assortment), the quality of which complies with the requirements of the market, i.e. the creation of an effective system of marketing management;
- the marketing of their products and normal financial well-being;
- the creation of a system of operational information provision and monitoring market activity;
- use of opportunities for strategic management, planning and forecasting.

In connection with the necessity of transition to innovative type of development in the process of the functioning of the adaptive organizational structure of the entrepreneurial type is determined by factors of a strategic nature:

- focus on the achievement of objectives. Since the objectives are the main characteristic of any organization, the organizational structure of management shall contribute to their achievement. This is provided by the determination of rights and completeness of the responsibility of each management level for achievement of the tasks set before it;

- how promising is expressed in the fact that the management system should not only be decided questions of an operational nature, it is necessary to work on the definition of strategies related to the future development of production and management. With this purpose in the organizational structure it is necessary to provide block forward-looking, strategic management, separating it from the block of operational and current management;

- flexibility and ability to develop. The necessity of the development of the organizational structure is explained by the trend of continuous improvement of production, changing external conditions, emerging imbalances in the control system. In these conditions, the organizational structure should be sufficiently flexible, capable to perceive corrective action. In practice, this can be achieved by creating a temporary target groups (departments) and service development;

- achievement of the coordination of interests. The division of labour has led to the creation of units, among which in the management process there is a conflict and
opposition. Thus, in the organizational structure should be a mechanism to reconcile the contradictions and set reasonable compromises. This can be achieved by introduction in structure of legal and sociological services of an appropriate professional, the organization of the councils of the labour collective;

- personalisation. Every enterprise is unique in the sense that it has the features stipulated by the existing composition of personnel, equipment, formal and informal managerial links and many other features. Therefore the development and implementation of measures to improve the organizational structure should derive from its features. In connection with this, any kind of generic guidelines can be used only as indicative of the data;

- the efficiency of the management. The organizational structure should facilitate the most efficient implementation of management processes, increase productivity of managerial employees in the exercise of their functions required. Efficiency can be achieved through various activities, including the creation of units, whose function was to conduct analysis of existing organizational structure, functional and hierarchical division of labour, the organization of management processes.

Thus, business adaptive management structures focused on the implementation of the following tasks:

- to contribute to the solution of complex large-scale problems, expanding the potential of the enterprise;

- give us an opportunity to focus attention on improving the efficiency of use of available production, labor and material resources in the framework of a large industrial complex, consisting of tens of interconnected enterprises;

- provide the concentration of efforts of the enterprise on the implementation of complex of works, which was made possible through the use of computer technology and create in each of the major industrial company intra-company information-the computer network, processing huge volumes of digital and textual information;

- creation of conditions for the production and marketing of high-quality products and services while increasing the level of production efficiency;
- providing design, development and delivery to the market of new types of products.

The main elements of the business adaptive organizational structure of the company are the production, business, economic and social potential, strategic management, marketing, ecology, information.

The effectiveness of such a structure is determined by the efficiency of use of resources; adaptation of enterprises to the changing conditions of the environment; the obtaining of a profit due to meet the needs of consumers.

All of these components form a combined model of adaptive system of management of the enterprise, which is noted for, on the one hand - strengthening the market orientation of the enterprises, commercialization of their activities, on the other - the increase of efficiency of use of resources, finding and using all the potential of self-development. Experience of reforming of the enterprises of domestic industry shows that the failure of the enterprises in the economy of transition impact of institutional economic and technological factors - the growth of transaction costs, costs of production, technological backwardness, the inconsistency of the quality level of products to the requirements of domestic consumers, international standards and unstable macroeconomic situation.

Use of opportunities of strategic management, planning and forecasting, realization of opportunities of integration and strategic partnership in the interests of sustainable development, industrial and social potential of the enterprise are conditioned by the effectiveness of the organizational structures of the entrepreneurial type. For the structures of the entrepreneurial type is characterized by:

- focus on the practical result of an industrial-marketing activity (profitable realization of goods, the conquest of a certain share of the market, strengthening of competitive positions, exit to the target level of the profitability of the commercial and other transactions);

- direction of activity of the enterprise is not on the short-term, immediate, and on the long-term, promising a result of an industrial-marketing work.
The functioning of the business management system is based on the principles of target orientation and integration, that is, the combination of the social, economic, production and sales activities. These development factors predetermine the major directions of adaptive structures of the entrepreneurial type:

- a comprehensive study of the current and forecasting of perspective of the market, its demands, as well as the external (in relation to the company) of the environment;
- an objective assessment of the enterprise's own production, distribution, export and other potentials;
- elaboration of long term strategy of marketing activity;
- planning of commodity policy, formation and management of commodity assortment, proceeding from requirements of the prospective market and opportunities of economic units;
- formation of demand and activities to stimulate sales (FOSSTIS);
- planning and implementation of sales operations;
- management of marketing activities and monitor its implementation.

The realization of functions of marketing, in fact, permeates all areas of business organization, therefore it is logical to consider marketing as the most rational approach organizations are adapting to the changing conditions of macro - and microenvironment.

From the methodological point of view of marketing as a market of the concept of management, is of interest approach I.I. Kretova [4], which identifies four blocks of the integrated functions of marketing management and a number of subfunctions in each of them.

Analytic function: a study of the market and consumers; the original structure of the market, the goods and the internal environment of the enterprise.

- The production function implies organization of production of new goods, development of new technologies, logistics and quality management, competitiveness of finished products.
- Sales the function (sales) is implemented through the organization of the system of commodity movement, the service, the system of formation of demand and sales promotion, conduct targeted commodity and sales policy.

- The function of the management and control means the organization of strategic and operational planning at the enterprise, information management, risk management, communication sub-function - organisation of the communications system at the enterprise and organization of control (feedback, the functioning of the communication and information systems in a single complex).

The implementation of these functions and full disclosure of the entrepreneurial capacity of the enterprise is determined by the targeted building a business structure, which in its form and content is the real expression of system of marketing of the enterprise management.

The choice of the model of formation of adaptive structure of the entrepreneurial type of influence such moments, as the specificity of the enterprise, production capacity and personnel potential, goals and objectives of the overall management system and the volume of marketing activities (figure 2). The most important factor is the difference in the issue of consumer goods and industrial goods. In particular, the products of wide consumption, produced by the majority of the enterprises of the food industry, has a number of specific features:

- direct contact with the consumer, which is often carried out directly in the form of a survey, questionnaire design, interviewing;
- the external environment puts forward new requirements to the organoleptic the products, to the level of its potential competitiveness;
- preference is given to the direct methods of sales with minimal trade-Agency network;
- take into account the technological opportunities of manufacturer for the range of products.

At the organization of adaptive structure of the entrepreneurial type it is necessary to ensure:

- flexibility, mobility, adaptability management structure. As a system of
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management of marketing requires considerable flexibility, efficiency of decision-making, a corresponding organizational structure of management of the services and their periodic reorganization. The simpler structure, and lower management level, the more mobile system management, operational decision-making process and the higher the chances of success; - compliance of the scale of marketing service and the degree of its effectiveness and volume of sales of the company. For
Fig. 2. Factors affecting the model of business management structures. Compiled by the author
Russian enterprises, for which marketing in the highest degree is required when entering the external market, the importance of the volume of export-import operations in percentage terms to the total volume of supplies, if this percentage is low, to create special expensive service has no meaning;

- the compliance of the structure of the specifics of the range of manufactured products, the structure of the marketing service, with economic independence.

The creation of the structure of the entrepreneurial type, allows you to more effectively organize assigned to the management objectives. Development of the model of such a structure expressing the essential features of the adaptive business structures of enterprises, and creates a favorable atmosphere for innovation and competitiveness of the enterprise, the more fully complies with the requirements of the market reforms in the food industry. The result of these transformations should be a large-scale spread of structures of the entrepreneurial type, ensuring complete satisfaction of the needs of the society and each of the members of the organization.

Thus, in the process of market transformation of the national economy in the scientific and practical plan identified the importance of adaptive dynamic business management structure. The creation of adaptive business organization with the use of vertical marketing systems contributes to the intercompany integration. The complexity and ambiguity of the conditions of sustainable development of the enterprises of the food industry requires the use of a complex of marketing events and software development, including the development trends, monitoring of outcomes, making timely adjustments to achieve its stated strategic objectives.

References:
3. A.V. Kruglov. Regulation of the external and internal environment of
entrepreneurial structures as the basis of their sustainable development // proceedings of the S.- Petersburg University of the economy and Finance. - 2004. № 4 P. 63-65.


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AUDITOR'S RISK PERSPECTIVE OF INDEPENDENT AUDIT IN UKRAINE

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In the article the modern concept of audit risk, causes and possible effects on its management decisions at the company. We investigate various approaches to scientific problems of definition of audit risk, the existing contradictions and methods of its determination.

Keywords: audit risk, audit, independent audit, external audit, internal audit methodology.

Introduction


Problems related to determining the nature of economic risk factors that cause them, as well as methods for their evaluation considered such scholars as L. Donets [6], S. Illyashenko [7], O.Yastremskiy [8], V. Kochetkov [9], V. Lukyanova [10], I. Ivchenko [11], V. Vitlinskyy [12, 15], N. Mashina [13], M. Klymenjuk [14], N.
Proskurina [16], T. Tretyakova [17] as well as and other scientists. Problem. In the course of the study was the goal to define contemporary existing approaches to audit risk and determine the prospects for further development of the concept of audit risk.

The main material. The current state of the economy (especially after the significant impact of the global financial crisis) is complex and uncertain. In recent times, dramatically increased the likelihood of economic crises, increased uncertainty in business carried out, which is due to the complexity of the market mechanism functioning of the global economy and a large set of different interests that face in the process of establishment. In such circumstances, the role of modern research concepts of risk, their evaluation, classification and management measures, significantly increased.

According to the owners and other users of financial statements was needed, firstly, understanding of the reliability of financial information as well as the size and likelihood of possible distortions it may contain after the audit, and secondly, the owners and other users of financial statements require auditors assessment of business risks, the likelihood of worsening financial condition, financial performance, resulting ordinary events.

Due to increased competition in world markets, the availability of a large variety of threats for the development of the economy, the owners formed a need for more efficient information about actual and potential risks that may adversely affect the performance of the financial statements.

This necessitates a detailed study of the nature and risks of audit risk in particular his assessment, changes are subject to risks when implementing the integration of internal and external audits, classification and factors that form the audit risk and its influence on the content and extent of audit procedures and audit activities in general.

The idea of the approach of the study is that the integration of internal and external audits significantly affect audit risk and allows you to implement effective risk management, information for which will be based on the implementation of audit
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procedures and their results of internal audit. In addition, this approach will also affect, downward, to the risks of material misstatement.

Reducing the risks of material misstatement or will reduce the overall level of audit risk at a constant amount of audit evidence to be collected by the external auditor, or reduce their numbers, and thus reduce the amount of audit procedures and therefore the cost of the external audit. This approach will also increase the efficiency of obtaining information about the presence of risks that may arise in the course of business.

The concept of business risks, as well as the organization of risk management has gained importance since the late 1990s, development of market relations, the complexity of the mechanism of functioning of the economic mechanism, globalization and increased competition formed the needs of research and development proposals for improving ways to assess business risk, the definition measures to reduce it and to develop effective mechanisms for active influence on him. The main objectives of the current concepts of risk management is to promote the sustainable development of enterprises by predicting potential threats, their evaluation and timely impact on them by implementing appropriate measures.

Modern concepts of risk management have become widely implemented in developed countries have long realized that it is cheaper to prevent the occurrence of adverse conditions and negative phenomena in the enterprise than to spend money on their neutralization. In domestic practice risk management concepts currently are under implementation and is not widely used. Myopic policy domestic managers in risk management leads to unnecessary losses, which in turn leads to a decrease in the competitiveness of enterprises.

Only after the financial crisis, the issue of risk management has become popular among the leaders of Ukrainian enterprises. The need for a thorough study of individual risk proved too unstable business environment, permanent changes in tax and business laws governing the exercise of economic activity, high cost of credit, the rapid changes in market conditions, increasing competition because of globalization of economic space, changes in the
foreign exchange, stock, commodity markets.

Proper risk management will involve the possible negative consequences and, at the stage of planning, economic activity, to develop a set of measures that will minimize the likelihood of risk or significantly reduce the negative consequences of their occurrence.

Investigate the established scientific approaches to the nature of risk, which is reflected in the respective definitions of the authors (Table 1).

Probability sign of risk characterizes the likelihood of non-compliance results desired or planned. Terms of risk is the uncertainty, randomness and opposition. Uncertainty - a development where the factors that affect their development is unknown, because of ignorance or lack of information and lack of understanding of the laws of economic phenomena and processes that do not allow confident and expected to manage the enterprise.

Randomness - a development that began to develop a different way than in the past due to new factors that influenced this were impossible to predict. Countering - a development that develop in a conflict of interest or the actions of other parties, including competitors, government, employees and others. Adverse effects - are certain losses that occur as a result of the negative scenario, or create adverse business conditions or other circumstances that impair the business environment. Most scientists do not consider the option of positive developments as a risk.

Due to the specific implementation of audit risk has certain features that require research into various aspects of risk (table 1).

Table 1

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<th>Scientists</th>
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<td>S. Bardash</td>
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During the audit, the auditor is responsible for his opinion on the financial statements of the client. Conclusion Reporting is based on the professional judgment of the auditor on the audit received in evidence. Therefore, the collection of evidence the auditor should be thorough (the auditor should plan your work so that all relevant aspects that may affect the decisions of users of financial statements have been audited), and in assessing the evidence - objective. The risk that the auditor will form a wrong opinion on the financial statements in those cases where it has significant distortions that can affect the decisions of users of financial statements, called the audit risk.

Given that risk assessment is carried out at least twice, there are two concepts...
evaluation: (initial and final). Initial risk assessment carried out on the understanding of the economic entity and its environment. Further, during the audit, the amount of risk specified. The final risk assessment is formed at the final stage after summarizing audit results.

During the risk assessment should be considered as a risk implementation error or abuse of a client, and the risk of implementation errors auditor. For measurement of risk, the foreign practice not using absolute or relative value of risk, and their qualitative characteristics: high, medium, low. Indicator for assessing the risk of the auditor establishes itself on the basis of professional judgment.

Audit activities are business activities, so the risk of audit acts in the context of probable violation enterprise client its obligations to pay for services rendered, the claims of the material nature of audit clients or other stakeholders.

In the meaning of audit risk, the risk emerges as the probability that the auditor expresses inappropriate audit opinion in the case of material misstatement of the financial statements. In this context it is also considered the concept of risk detection, which is the probability that the planned audit procedures would be insufficient for the formation of the corresponding audit opinion.

In the sense of risk, as the audit, the risk emerges as the probability of occurrence of certain circumstances, after the auditor's report (opinion) that may affect the financial statements, which was investigated by the auditor. Therefore, the formation of an adequate perception of the owners and other users of financial performance reporting, the auditor should assess the risk of doing business and to determine their possible impact on the financial statements.

In the context of the integration of internal and external audit risk can be defined as the probability of failure to obtain the desired economic effect if the implementation of the planned measures.

Regardless of the type of risk should be assessed by the criterion of its justification (justified and unjustified). This expected result must match a defined degree of probability of its failure to obtain also determine if the risk does not exceed a specific maximum limit. So, in the context of the study features of the concept of
integration of internal and external audit risk should examine separately both directly and separately as audit risk, which is subject to audit.

Audit risk to international standards of quality control, auditing, review, other assurance and related services - is the risk that the auditor expresses inappropriate audit opinion if the financial statements are materially misstated. We believe that this approach to the determination of audit risk is exhausted and can be used to study the characteristics of the economic approach to internal and external audits. Based on the study it can be concluded that the terminology has changed in some way, in particular, specifies content statements that affect audit risk and its components, internal control objectives are not only to detect and correct material misstatements, as well as to prevent their occurrence. It should be noted that the assessment of audit risk and its components are subject to the professional judgment of the auditor. It is associated with the process of auditing and a risk business audit firm.

In the modern concept of risk is important to determine the risk of material misstatement, which is estimated at financial statements as a whole and at the level of statements about classes of transactions, account balances and disclosures. Risks of material misstatement at the overall level of financial reporting mean risks are associated mainly with the financial statements as a whole and potentially affect many different statements.

Risks of material misstatement at the assertion level are assessed to determine the nature, timing and extent of further audit procedures to obtain sufficient and appropriate audit evidence. These arguments enable the auditor to express an opinion on the financial statements at an acceptably low level of audit risk. Auditors use various approaches to achieve the objective assessment of the risks of material misstatement.

Risks of material misstatement at the assertion level consist of two components: inherent risk and control risk. Inherent risk and control risk is the risk of the entity. Combining internal and external audit company can significantly reduce the risk of doing business.
The study showed that those companies where there is a system of internal audit, inadequate communication with the external audit, which in turn reduces the efficiency of the internal audit, and also leads to neglect or incomplete account of his work in assessing risks. The main reason for this discrepancy is the internal audit requirements and criteria set by the external audit, and the fact that according to the international standards of quality control, auditing, review, other assurance and related services the external auditor can determine whether it is appropriate to use the work of the internal auditor.

Conclusions. Summarizing the existing scientific approaches to risk, one could argue that it is characterized by the negative effects that may occur with some degree of probability, which may occur under certain mandatory conditions of risk. Based on the research risk is characterized by the following features: the probability of occurrence, if occurrence and negative consequences.

References:


THE PUBLIC FINANCIAL CONTROL OF UKRAINE IN THE GLOBAL ECONOMY

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The report examines the role of state financial control in the global economy and the impact of globalization on the organization of state financial control. It is concluded that the state financial control in terms of increasing globalization significantly modified, becomes public, it been singled system supranational control.

Keywords: State Financial Control, the global economy, organization, supranational control.

Introduction

Confirmed relevant legal and policy imperative ensuring Ukraine's aspirations to full participation in political and economic life of Europe logically due to geopolitical location and history of our state.

During the last decade, Ukraine stubbornly wants to get closer to European standards. The strategy further activity in the field of European and Euro-Atlantic integration is active transition to modern European methods, promoting interagency cooperation at the horizontal level, empowerment of middle and lower management units in the exchange of information, encourage initiative, well-thought proposals and the final results of their implementation, study and broadcast useful experience of other European countries in the field of public administration integration processes. The success of this course and the Ukraine of the Ukraine - European Union qualitatively new status will depend on: the implementation of a consistent and balanced reforms in economic and social spheres; efficiency of the approximation of Ukraine to the EU legislation, the implementation of the Agreement on Partnership and Cooperation between Ukraine and the EU and its members.

 Preconditions for the development of control in Ukraine
The concept of public financial management system [1] asserts the priority of Ukraine's European integration vector of development and requires maximum consideration during the development of the public finance system of the European Union.

The originality of public finance in transition, their deep inner contradictions, incomplete transition processes most evident in financial control. This is due to its objective role in the implementation of national financial policy, its complexity and comprehensive nature.

The current global economic crisis has demonstrated the need to incorporate external threats to national economies, including the practice of financial control in the face of uncertainty. During a long enough period of evolution of modern Western societies were formed institutions and instruments of financial control on a national scale. In a globalized world (and especially in the implementation of neo-liberal version of the latter), as is the formation of the global financial and commodity markets, control over them by the national in origin and functions of governmental institutions lost, and international and supranational institutions financial control just starting job. In these conditions becomes important theoretical understanding the role of state financial control in the global economy.

The article aims is defining the role of state financial control of Ukraine's aspirations to integrate with the European Union and developing proposals for its improvement.

Studies in the system of economic control show that the term "public financial control" in different countries are treated differently. For example, in the U.S. - is "operational audit", in Canada and the UK - "audit benefits of using money", in Norway and Sweden - "audit performance (control)", in Russia - "public audit".

Analysis of the views of scientists, set out in a special economic and legal literature suggests that there are several points of view on the concept of state control [2]: 1) a separate form of government activities; 2) the control functions of government; 3) methods and tools; 4) the scope of the specially authorized; 5) of the state.Ju.I.Pivovarclassifies the appropriate scientific approach with the release of the
four major groups: the first group of scientists examines the state financial control as a function of control; the second - considered it inappropriate to narrow control only to a method for the rule of law and fiscal discipline, suggest the presence of feedback, expressed in exposure control for more efficient use of financial resources; the third - see it as the monitoring and verification; the fourth group of scientists - believe that the state financial control is a means of assessing the achievement of goals. [3]

Certainly, presented the views in a limited way reflect the nature of financial control. For a clearer understanding of its essence, in our view, it should be considered comprehensively in the coordinate system: the goal → way (means) → result.

Moreover, it is important to remember that government control is not an attribute of a single, more totalitarian regime. He is always inherent in any State which seeks to ensure the implementation of policies, laws and other legal acts, the protection of public interests. The question is, what goals and mechanisms of control, his support in the community, how it helps the stability of the institutions of the state, rights and freedoms, the progressive social and economic development.

Establishment and development of SFC in EU countries

On the organization of the state financial control could not affect in the globalization process, including the integration of Ukraine into the European Union. Thus, the state audit - an institution that exists today in almost all countries of the world. International Organisation of Supreme Audit Institutions (INTOSAI), established in 1953 to study and dissemination of good practices in the control practices include accounting chambers (and similar regulatory authorities) one hundred and eighty-nine states, only three fewer than the number of UN member states.

In the course of globalization and supranational arise regulatory authorities exercising control over public finance various economic and financial alliances, such as the European Court of Auditors, acting on behalf of the European Parliament [4].

The functioning of any independent state association is not possible without a clear and effective system of financial control budget. In 1971, the European
Community were given their own financial resources, and this was the creation of a specialized and independent supreme audit institution Europe - Chamber EU.

Objectives Chamber EU - an independent audit of revenues and expenses of the European Union and constructive evaluation disposition budgeted institutional bodies in Europe, such as:

- legitimate to engage in financial transactions;
- legally are they organized;
- if not observed fraud and corruption.

All the measures are aimed at ensuring the economy and efficiency of the use of public funds at all levels of the EU and to obtain the maximum monetary benefit citizens of the Union.

The EU Constitution guarantees the independent status of the Accounting Chamber as a full member of the EU institutions and fiscal relations. Accounting Chamber task - to control the budget process at all levels of distribution (including regular inspection reports on revenue and expenditure budget line all the institutions created by the EU) to check which public funds received and expended budget users (ie, whether it responsible for financial management, cost and whether appropriate resources are used effectively.)

Taking control measures aimed at studying the budget process as a whole, the Chamber EU uses the so-called system control method, is widely distributed in many European countries, along with the method of checking accounts and contractual obligations.

Since 1994, the Accounting Chamber is obliged to provide an annual opinion on the authenticity of accounts, providing an opinion on the financial statements and the legitimacy of the European Union and the legitimacy of transactions with the use of funds from the EU budget. This conclusion is based on the results of detailed financial audits. Court of Auditors is financed from the EU budget, which is approved by the European Parliament. [5]

In June 2010, the Ministers of Economy and Finance of the 27 EU countries in Luxembourg reached a political agreement on the establishment of Eurofisc-network.
created by national tax administrations, which should focus on the identification of new cases of cross-border VAT fraud and the fight against them. The Ministers expressed support for the general approach to enhance cooperation between the tax authorities and to provide EU Member State - the means to more effectively combat such fraud.

As part Eurofisc a mechanism of multilateral early warning and data exchange on new types of cross-border VAT fraud, which causes annual multibillion-dollar damage to the national budget of the EU. In particular, this is a so-called "carousel" scheme, where the goods are sold by several operators in different Member States without paying VAT.

France at the summit of the leaders of the twenty leading countries (G 20) 4 April 2009 even demanded specific action to create a mechanism of international financial control, and its President Nicolas Sarkozy threatened to leave the meeting if they are not taken.

At a meeting of finance ministers of twenty leading countries in September 2009, has already appeared coherent doctrine of behavior as in a crisis, and after its completion. And on all these forums, it was a question of institutions and forms of control over the finance globally.

And in the European Union in January 2011, earned a new mechanism to identify the risk of the global financial crisis in the early stages -The European Systemic Risk Board (ESRB), which comprises the heads of all 27 EU countries. ESRB has become one of the four new structures created by the European Union in recent years to monitor the financial, banking, securities and insurance markets in the EU.

State control in the context of globalization

State control in the system of market relations in the context of increasing globalization substantially modified and becomes public, because it creates a situation where virtually no one in the world can not solve the problems of the new century alone, with only his own system of state control. Present system prevailing in
most countries, the electronic system is responsible for the financial control of nominal non-cash basis. [6]

Furthermore, the importance of attention to the globalization processes in the organization of the state financial control due to the need to allow the formation of a system of financial security of the state of the transnational nature of the threat emanating from the operation of the global financial system and the global currency market.

Thus, the state control in the system of market relations in the context of increasing globalization substantially modified and becomes public, because it creates a situation where almost any country in the world can not solve the problems of the new century alone, with only his own system of state control. Furthermore, the importance of attention to the globalization processes in the organization of the state financial control due to the need to allow the formation of a system of financial security of the state of the transnational nature of the threat emanating from the operation of the global financial system and the global currency market. Globalization processes and leave their imprint on the subject of financial control, has listed a supranational system of control.

Condition of SFC in Ukraine

At this time, the system of state financial control in Ukraine partly in line with the basic principles of systems of financial control in the EU, which concerns financial management and control, internal audit and harmonization at the central level.

In current models of governance basic element of public internal financial control is a shared responsibility of the heads of state and municipal sectors to Parliament and the public, as in the EU countries such element is the financial management and control as a function of managers responsible for the activity of a particular organ.

Due to the gaps in the national legislation beyond the state financial control for a long time remained important for the state sector activities, including the development and the revenue at all levels and public utilities, corporations, holding
companies, and other entities in authorized capital of which more than 50% owned by state and municipal entities, other enterprises, institutions and organizations that use state and municipal property, proper use of funds that are available to subjects of entrepreneurial activity when giving them tax breaks; the formation and use of the funds and property of the state funds. [7]

In Ukraine, as in some countries in Eastern Europe, dominated by centralized model of state financial control elements decentralized - in part on a previous control. According to the recommendations of the European Commission's system of public internal financial control should equally cover the full control of all the public finances and the finances EU, one of the important signs of readiness of the country - a candidate for EU membership - is the introduction of the reimbursement procedure lost finances.

Conclusion

In order to eliminate the shortcomings in the functioning of public financial control system to prioritize and implement its current model. The main objectives of the reform of public financial control of Ukraine are:

- identification with current conditions of Ukraine and EU regulation principles of public financial control, based on the responsibility of the head;

- the creation of a common legal framework for the development of state financial control as part of the government;

- the formation of institutions that provide the development of a national system of financial control;

- identification with European experience methodology internal control and internal audit;

- improving the staffing of internal audit services, curriculum development of internal audit and certification programs auditors using international experience. To improve the system of governance and innovative achievements taking into account institutional changes necessary to assess the state financial control to bring it in line with the stage of social and economic development. Furthermore, we must decide on the organization and functioning of public financial control in the system of
government by organizing conceptual framework and analysis of state financial control, identify strategic directions and main stages of its development.

References:
1. The concept of public financial management system / zakon3.rada.gov.ua/laws/show/633-2012-% D1% 80

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UDC 657.6:339.17

Yuriev A.

METHOD PERFORMANCE AUDIT OF OPERATIONAL ACTIVITY COMMERCIAL ENTERPRISES

Kiev National University of Trade and Economics
The report deals method performance audit operational activity commercial enterprises, which built on the national methodological grounds considering practical experience countries with market economies. Also presented criteria and indexes of estimation of performance audit operational activity commercial enterprises.

Key words: performance audit, method, efficiency commercial enterprises, criteria of performance audit.

Introduction

At the present stage of development of market relations emerged objective necessity to develop methods of performance audit operating commercial enterprises.

Method performance audit operations of commercial enterprises, which is a combination of techniques, subordinate the practical implementation of specific tasks, should serve to achieve the final result - reviewing the effectiveness, efficiency and effectiveness. Accordingly, the method performance audit - a set of test procedures that are appropriate methodological foundations audit effectiveness and to determine how effective, efficient and economic activity is operating commercial enterprise.

To acquaint the operating activities of commercial enterprise and the environment in which it is conducted, including a system of internal controls, the auditor should perform the following procedures: requests to the management or other employees of commercial enterprises, analytical procedures, observation and inspection. Selection procedures for obtaining evidence and their relationship with the audit process is an important methodological problem that ensures efficiency and quality audit.

Basic procedures method performance audit can be associated with key strategic directions of trade enterprises and represented by the scheme shown in fig. 1.

Also, should provide additional audit procedures with respect to significant risks. For example, there are features that characterize the significance of risk:

-Communication risk of unfair actions;
- Communication of risk of significant changes in the industry, new requirements for accounting and reporting, etc.;
- Increased complexity of business transactions;
- Communication of risk of business transactions that seem unusual or not typical of the company and are important for accountability.

fig. 1. Methods and procedures for performance audit

The duty of the auditor in relation to, significant risks "to evaluate the organization established the risks controls, including control activities, and determine whether they are performed." And in the absence of adequate control of the risks according to the standard auditor shall inform the representatives of these circumstances the owner.

A similar obligation is set to the risks under which can not or should not reduce the risk of distortions of information on the level of preparation of the financial
statements to an acceptably low level by gathering audit evidence and perform audit procedures on the merits.

Operational trading company largely depends on the competence and integrity of management and the external environment, which is commercial enterprise. Performance management can be defined by four criteria, which in turn contain specific criteria in [1]:

Information about achieving efficiency is the first criterion, the essence of which can be formulated as follows: to optimally monitor, maintain and promptly notify management of commercial enterprises achieve efficiency, must be accurate and reliable performance information.

Information about achieving efficiency as a criterion contains five subcriteria:

1) Efficiency measured action - considering the ratio of the cost of acquisition and cost of sales (unit costs, etc.), reflecting the amount of resources used to create a uniform and measurable items to be satisfactory compared with the relevant objectives and standards.

2) Efficiency measured hard action as subcriteria used to assess the effectiveness of operations associated with the collection, storage and disposal of goods in terms of the validity of administrative decisions. This information reflects the current level of performance in comparison with the planned, actual dates of efficiency in comparison with those in the business plan and the actual cost of resources compared with planned.

3) Quality and service level indicators show that the quality and level of service should be satisfactory in comparison with the relevant standards and purpose, and meet the expectations of customers and cost.

4) Use of capacity shows that the implementation of the required amount of goods or services are optimally used staff and equipment, increase technological efficiency and quality of service.

5) Information about achieving efficiency should be relevant, timely, reliable and complete to ensure a reliable estimate of the achieved performance, identify areas of responsibility breaches and the necessary strategic decisions as actions adjustments.
and corrections should be carried out quickly to minimize losses from breach efficiency.

The second criterion, the optimization of efficiency, can be formulated as follows: opportunities and innovative ideas for improving to continuously explore and exploit.

This criterion includes four subcriteria:

1) Alternative delivery. Should explore the possibility of using other methods of delivery, which will improve efficiency.

2) Optimization of existing systems and procedures as subcriteria proves the need for continued examination, to simplify the current systems and procedures, elimination of duplication and overhead, simplifying processes and working methods. Such examination shall be conducted in accordance with the possible functional effects on efficiency and total cost of the entire commercial enterprise.

3) Using advanced technology and automation. Continuous research capabilities of information technology and automation of manual operations and their application to reduce the monotony of work and error rate, increase turnover and provide customers the best service.

4) Continuous optimization effort to reduce costs: have always considered options for reducing costs, preserving the quality and continuity of functions of commercial enterprise. It is also necessary to minimize the administrative functions by analyzing the needs of commercial enterprise, trade processes of modernization and restructuring of commercial enterprises in order to reduce the levels of management and speed up decision making.

The test management system and methods of work can be summarized as follows: administration, operational systems, processes and working methods should aim for efficiency.

This criterion includes five subcriteria:

1) Strategic plans should strive for efficiency. Planning should include the possibility of risks and consequences of inefficient operations, determining to switch
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to less expensive methods, rationalization of the range of goods and services, the possible restructuring of the enterprise for more efficient operation.

2) Performance plans should be based on the principles of risk management on effective methods and procedures of rational and standards for the quantity and quality of products, quality and service levels.

3) Operating systems and procedures. Operations should be developed and implemented with effective systems, processes, procedures and working methods, as well as the availability of qualified personnel.

4) Monitoring and control operations. Operations to plan, monitor and inspect. If it is necessary to be performed timely corrective actions based on the reports of the results obtained to achieve the planned objectives on time and allocated funds.

Workspace as a criterion can be defined as: always be a work environment that emphasizes efficiency and in which managers and workers, according to authorities, aimed at achieving it.

This test contains six subcriteria.

1) Efficiency as a priority. Always should be emphasized that efficiency is a priority and that her achievement is common to employees of commercial enterprise.

2) Focusing on clients and services. Merchant at all levels should provide high quality products and services to customers.

3) Responsibility, roles, responsibilities and rights in respect of efficiency, clearly defined and communicated to stakeholders.

4) Support and recognition of labor. Must use appropriate incentives to encourage managers and employees to improve efficiency and efforts to achieve it. Positive results in this direction are marked and rewarded accordingly.

5) Training and Development. The management and staff provided appropriate training and development opportunities to continue to improve productivity and customer service.

6) Action in the context of collective agreements. Achieving efficiency should be taken into account in the related conditions of collective agreements.
It should be noted that during testing of the system of internal control can be obtained evidence for all the listed criteria.

After calculation and analytical measures necessary to implement the audit efficiency. In this case there are two options, depending on the nature and effectiveness of mandatory audit:

- If the performance audit was initiated by the owner, not satisfied with the use and management of its property or assets, the results will be required for further use. In this regard, it is possible to complete its implementation report, which will be equal to the auditor's report and the recommendations will be monitored by the relevant services;

- If the performance audit is an initiative of the administration of commercial enterprise, in this case the use recommendations are reflected in the report, remains at the discretion of management.

Note also that the performance audit has to justify his appointment. For this purpose, can be used indicators that are designed to evaluate the need for performance audit.

Conclusion

These figures, call them criteria will evaluate the effectiveness of the performance audit. The main criterion of efficiency audit operating commercial enterprises should be performance - the criterion is expressed in the final report, in which auditors should assess the actual state finance commercial enterprises, to find ways to improve it (if possible) and to develop reasonable guidelines that can be applied in this situation.

Thus, the performance audit report operating commercial enterprises should contain the following sections:

- Assessment of the effectiveness of the company;
- Recommendations to improve the actual condition or practice management;
- Calculation of possible additional social impact of implementing audit recommendations efficiency;
- Economic impact, which will be painted on the cost effectiveness audit and additional positive cash flow. For a more reasonable conclusions necessary to develop a normative criterion of value.

In justifying predictions auditors need all the positive results brought to the attention of management and encourage employees.

When a worse outcome do some additional checks to determine the causes that led to such consequences. Thus, the feedback will be provided between subject and object audit efficiency.

Opinion on the results of evaluating the effectiveness of operating commercial enterprise can be formed in accordance with international standards of auditing.

Thus, the recommendations for planning performance audit operations of commercial enterprises, sequence and content of its stages, methods of obtaining evidence to assess the characteristics of its activities, environmental factors and the effectiveness of internal controls can be used in practice for the purpose of expressing an opinion on the effectiveness of operating of commercial enterprise.

References:
Management of Business-Processes at the Enterprise

In the article, the essence of the business process in the management of processes in the enterprise, it describes the main characteristics. Presented provisions could serve as a basis for future theoretical and applied research to improve the management of enterprises.

Keywords: business process, process approach, a description of the business process management, process management.

The modern period of development of enterprises is characterized by increased attention to the process-oriented management principles. From the point of view of optimizing the operation of the business nature of the process approach is to find effective ways to regulate the business processes in enterprises and the management of their resources.

Using a process approach to management improves economic performance of businesses by providing them the opportunity to assess the implementation of the processes on a «cost-benefit». The main advantage of this approach is to create a continuous control, providing optimal relationship between individual manufacturing processes across the enterprise, as well as their combination and interaction. The introduction of process-oriented management can provide clarity in the interaction units, timely management information necessary for the effective control and management decisions [2].

Business process – a logical, sequential, interrelated set of activities that uses resources, generates value and produces the result. The characteristic properties of each business process is the length of time and the availability of well-defined entry and exit. As a rule, the input process understand the resources that is material and non-material elements necessary for its implementation. The concept of the «input»
of the business process has a broad meaning: first, all the basic elements are subject to certain transformations, and secondly, various events and factors related to the elements of the process and act on them, and third, a set of established rules to ensure optimum performance of the process. Output of the process – this is the result obtained in the course of its implementation. Quite often, the output of one of the business process is an input in the subsequent [3].

Business processes are often a combination of key, management, and support processes.

Key processes (value creation) are joining the job and work for specific customer requirements with the use of key performance competencies. They are strategically important and at the same time specific. These include: the development and product design, manufacturing and assembly, etc.

Management processes contain tasks aimed at long-term development and the realization of the goals of the enterprise. These include: strategic development of the company, long-and medium-term planning, staff development, staff motivation, etc.

Support processes are necessary tasks and work to maintain key processes, but do not lead to the immediate value to the customer, such as data processing, maintenance, logistics, etc.

In other words, the basic processes in the course of which the value of the object is created production processes ensure that create conditions for the proper implementation of the basic, development processes aimed at improving the basic characteristics of the object of production, as well as technology and equipment [1].

At present, both in Russia and abroad, procedure descriptions of business processes is highly regulated, but there are several main sections.

1. Standard forms describe the business process. We recommend using standard sample standard form describing the business process. This will ensure a common approach to the process of fixing the various actuators, which then facilitates the analysis process.

2. Map the business process – a graphical representation of the business process as a flowchart. Registration Card to synchronize operations and trace the flow of
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information between departments. At the stage of the map of the employee performing the work, does not require expertise in the area described by the Business Process, it only captures knowledge of artists, how and what they are doing.

3. The route of the business process. In real-world business processes often involves several business units and for them to distribute the roles in the process. Along with this there are branching and parallel actions. In this case, the routes provide logistic scheme of the process – the movement of all types of productive resources.

4. The matrix of the business process – table analysis of the interaction processes allowing to identify the most important business processes, establish their relationship and to assess their impact.

5. Flowchart – a diagram of relationships between all participants of a business process, namely, customers, suppliers and performers.

6. A detailed description of the business process can be in any form suitable for the enterprise, but should contain the basics: the full name of the business process, the code of the business process, the definition of the business process, which reveals its main content, the purpose of the business process, the owner of the business process responsible for long-range planning process, business process manager, responsible for the ongoing maintenance process, standards of business process business process inputs (streams coming from the outside and to be converted) outputs of the business process (conversion results) resources available business process, business processes of internal and external suppliers – sources of inputs, business processes customers – users of the results of the business process under consideration, the measured process parameters, the performance indicators of the process [4].

7. Regulation of business processes. Large business processes appropriate to make out in a separate document, the other business processes can be executed in the form of provisions of the office and job descriptions. In regulation should lay the following requirements: defining the targets of the business process for the next period, analysis of the owner of the business process deviations from the normal
Business process management in the enterprise requires their constant improvement and optimization, so the essential tools of process management are the approaches and methods to improve business processes. In the modern process management are two conceptual approaches to improve business processes:

1) gradual (incremental) approach to improve processes within the existing management structure, requiring little or no capital investment requiring them at all.

2) cardinal approach that leads to significant changes in the process and a fundamental change in the organizational structure of management.

Both approaches are based on a common foundation of the theory and methodology of process-control processes. They are similar and that are aimed at identifying duplication, bottlenecks, expensive centers, the missing information. However, despite a number of common features, these approaches have significant differences.

Thus, the first approach is more focused on improving the fragmented processes within functionally specialized governance structures for the purpose of unification and standardization. In practice, process improvement, this approach reduces to the transfer functions of structural units in the created Process units, that is to simply rename them, and not modify the content and purpose.

The second approach to process improvement requires, above all, the study of the processes themselves as a set of operations that are of value to the consumer. The approach is fully implemented process management, it is possible to avoid a functional specialization in the management or significantly reduce its role through integration of business processes.

The introduction of process-oriented management can ensure a stable and harmonious development of production, accuracy in the interaction units timely management information for effective monitoring and decision making. However, despite all the advantages, the process approach to management in Russian companies have not yet received proper distribution, and its implementation much
slower than abroad. Domestic enterprises are trying to transition to process management face a number of problems arising from the complexity of the changes our views of the leaders of the need to change the hierarchical structure of the company.

References:


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APPROACHES TO IMPLEMENTATION PROCESS CONTROL
AT THE ENTERPRISE

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In the article describes the features of process management in the enterprise, the characteristic of methodological approaches to the implementation of process management. Classification approach is presented for comparison and evaluation of implemented projects to improve the management of enterprises.

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Keywords: process approach, system management processes, approaches to process management.

The idea of representing the company in the form of a set of processes, and the management of its activities – through a set of management processes, began to spread in the early 50's of the twentieth century. Even then, many leading foreign companies, this campaign risked apply in practice, proved effective, progressive and promising transition of the management of production, based on the process approach.

Based on the analysis of a number of companies in the U.S., Japan, UK and Germany, have implemented this approach, identified its main advantages that reduce costs, increase efficiency of resource use and increase the competitiveness of the production, including: reducing labor costs for the execution of processes, increase the accuracy of process performance, increasing the ability to respond quickly to changing conditions of the environment, improving manageability and production as a whole [2].

At present the system of enterprise management is predominantly hierarchical structure of the vertical type, consisting of a set of functional units, each of which defines the goals and objectives, and then on the basis of accounting records by monitoring their implementation. Despite the shortcomings, such as non-transparent use of production resources, shifting responsibility and conflict at the junction between the levels of the hierarchy, lack of reliability of reporting, this control system continues to be used in most businesses [1].

A modern system of management based on the process approach to market conditions allows a more objective assessment of the situation, reasonably determine and compare the lost opportunity and advantage; identify bottlenecks that disrupt the normal course of production, correct deviations and failures in the implementation of each process. As a result, the effectiveness of management of the enterprise as a whole is achieved through better management of individual processes.

Domestic enterprises, mainly large companies, in an attempt to move to process management face a number of problems arising from the complexity of the changes
our views of the leaders in the principles of management and the need to change the hierarchical structure of the company. Along with this, there are significant differences not only in terminology but also in the approach to process management. This raises the need for classification of the main characteristics that distinguish the various approaches that can help business leaders evaluate the implemented projects. Analysis of methodological aspects of process management revealed characteristics that can distinguish approaches to its implementation in the enterprise.

The first classification attribute can distinguish the direction and limits of change, according to which there are three main approaches.

1. The gradual improvement of business processes. This type include Japanese management, where businesses are constantly in the mode of process improvement, and artists perform the task of continuous improvement of its work. The advantages of this approach include the fact that the gradual optimization associated with minimal risk and minimal resistance from the staff, but there is a negative point – the time factor. In today's fast-changing conditions of the market situation requires the ability of managers quickly rebuild business processes and implement innovative changes dramatically. If the company over a long period has not been given much attention management system, and attention was paid only for tactical purposes, the solution backlog of problems during this time in an expeditious manner possible – will require more radical design. Of course, the gradual improvement for businesses characterized by relative stability operations. In this case, process management is not an implementation of optimization measures, and, above all, adjusting the control system for all processes.

2. Local optimization of business processes. Each new project is the improvement of a single business process, and the optimization of their description and are not related to each other, and some aspects of the work may not be covered transformations. This approach is used companies in which the critical success factors are concentrated in specific well-localized activities. This case does not require a radical transformation of the entire system of management. Some specialists do not consider such projects to the process approach, because only a complete
process model is the goal of transformation. However, the individual process allows for optimization only on the local level.

3. Engineer or a radical redesign of business processes. Large-scale project of reengineering associated with fairly high risk and is suitable for managers, self-confident and willing to improve all the performance of the company as soon as possible [4]. Feature techniques, adhering to fundamental transformation of existing processes, is to centralize and scale of the changes, a single format specification and optimization procedures.

Despite the fact that such a feature as the «direction and the limits of change» is important in the choice of methodological basis, in the economic literature there are many other, equally important, criteria. The second sign that distinguishes one from the other approach is the sequence of stages of the project, according to which the theory of process management are clearly marked, as a rule, three main stages: an «as is», «as it should be», the transition.

Most techniques involves the creation of business process models «as is» with further optimization, while in the foreground rather laborious work on the description of the existing business processes for further analysis and improvement. Along with this release approaches, eliminating phase of the model 'as is' and modeling company in terms of «how it should be». In this case, the project itself – a kind of translation companies in the state "as it should be", regardless of its performance at the moment. By moving the stage «as it should be», in the first place the company receives a significant reduction in time to implement. However, due to the fact that there is a scientific and methodological basis of the process approach is too weak to create effective models of enterprise «as it should be», in practice, this approach is rarely used.

The third difference in methodical approaches to the implementation of process management – is the role of experts in the project and the degree of involvement of staff. The question of the participation of consultants is one of the important, since almost all of the literature devoted to the improvement of the management of the enterprise on the basis of the process approach, provides guidance on the need to
maximize the involvement of staff in the project change. The role of consultants is reduced to the implementation of the methodological function or role of the curator. According to the consulting companies on projects implemented directly consultants do the work of description, analysis and design of business processes. An enterprise in this work in the best case involved a working group or one responsible to help in arranging interviews and approvals. Advisory role in the project depends on the type of consulting: expertise, process, training. According to the research facilities in Russia and abroad, it is recognized as the most effective training consultancy.

The fourth principle is the essential difference is recognized as borders of business processes, according to which emit penetrating and segmented approaches. According to experts in the field of process management, at present this is the most controversial topic.

From the point of view of supporters through the implementation of process management approach is this: all the processes in the company moves through various departments, process owners are responsible for the entire value chain of a particular product, they do not have at their disposal resources and «get» them from functional services; organizational structure due to the reorientation of responsibilities significantly expands horizontally.

The use of cross-cutting approach control system is accompanied by significant changes, which in turn causes the resistance of staff and increase the risks of project failure in the implementation phase.

Allocation of business processes is segmented basis softer: the boundaries of business processes are defined according to boundaries departments or positions, the processes are functions of the structural elements, interconnected inputs and outputs, are responsible for the process are assigned according to their position in the hierarchy and vested necessary to of resources, they are responsible for the income or the result of the process and for the costs of its implementation.

In modern conditions, enterprise management system acquires a broader meaning than just the composition and range of administrative bodies and posts. As the most progressive method of building a modern enterprise management system is
to use the process approach, which is based on the representation of the company in the form of a set of processes that make up a particular technology and operated in order to achieve its objectives, and production management through control of each process of the set.

Consideration of approaches to process management and its implementation suggest that the choice of methodological aspects determined by the objectives of the project, depending on the situation at the company.

References:


In article describes the features of process management in the enterprise. The characteristic of the basic stages of the implementation of process management in the enterprise.

Key words: process, process approach, implementation stages of process management.

The process approach to Russia has not yet received such an extension, as in the corporate sector in the West. Recently, however, the interest of Russian companies to the description and improvement of business processes grows. Benefits of the process approach for enterprises appear to reduce transaction costs, reducing the time to perform the procedures and improve the accuracy of their performance, improve response time to change, improve asset utilization, increase the sense of responsibility of staff.

The work was organized around processes, improves manageability of business, forcing the organization to think about what it does with the client's position. Implementation of the process approach requires a revision of established views on the principles of change management and the hierarchical structure of the company. Besides acute lack of methodical literature on the theory of process management. According to the experts, despite the fact that the use of the same approach in practice it turns out that there are significant differences not only in concept, but in a methodical approach to process management.

The procedure for the introduction of the process approach in the company consists of nine major steps performed in a clear sequence.

The first stage – the definition of enterprise processes. It should be guided by the ISO 9001:2001 standard, according to which it is important to identify the processes needed for the quality management system to determine the sequence and interaction of these processes, as well as the criteria and methods needed to ensure the effectiveness and the implementation as and when their management [1].

To medium-sized enterprises can be identified at an average of about 2000-2500 processes. The most common mistake when implementing process management of domestic enterprises is an attempt to begin to describe comprehensively all existing
processes, which leads to lack of resources and difficulties in management. It is therefore necessary to compile a complete list of exclusive real processes. Should identify the process chain, describe their interactions, to determine the direct consumers, suppliers and channels.

The second stage – the definition of long-term and short-term goals, which allows to specify and clarify the purpose of each process. Defining the goals of a process can develop a system of appropriate management actions to better achieve them. Do not underestimate the importance of setting goals, because they are the starting point for planning, serve as the basis of motivation and serve as a reference point in the monitoring and evaluation of results. Important point is to set targets processes - determination of their sequences [2].

Any fixed target, corresponding to a specific process is the end result, the achievement of which directed the implementation process. Therefore, well-defined process goals help to pursue further effective control and help to increase the efficiency of the entire organization.

The third stage – the definition of the relationship between the processes. The characteristic properties of any process is the length of time and the availability of well-defined entry and exit. By entering the process understand the resources that is material and non-material elements necessary for its implementation. The output of the process is the result obtained in the course of its implementation, while often the output of one process is the input to the next [2].

Fourth stage – definition of responsibilities and competencies for each process. One of the reasons why the effectiveness and efficiency of the process is the uncertainty in the responsibility of staff. Required for effective process management is the allocation of responsibility for their output. The owner of the business process – the official, has at its disposal the resources to control the course of business processes and to be responsible for the results and the effectiveness of its implementation.

Fifth stage – analysis of the structure of the process and identify the resources needed for its implementation. Graphic description of the process contributes to a
better understanding of the flow and sequence of actions and further detail, the extent of which the description of the process depends on the methods and tools (notation, flowcharts, etc.).

Sixth step – defining criteria for evaluation of performance measured values and setting parameters. At this stage the performance criteria of processes and systems to measure them for optimal control processes, risk map for the elimination or reduction of the probability of occurrence of such risks and the development of preventive actions, methods of measurement, analysis methods of process information.

Seventh stage – implementation and management of the process undertaken in accordance with the requirements of GOST R ISO 9001-2000 and involves planning processes, providing them with resources and services. This, in turn, implies the identification of resources necessary for the functioning of processes with a given efficiency and effectiveness, identify the mechanism for developing measures to achieve planned results and set goals, the definition and implementation of procedures for change management processes, procedures and decision-making in the event of discrepancies or failure processes, etc. [1].

The eighth stage – conducting monitoring and evaluation process. This is done once with the required measurement and standards in the implementation of the sixth stage of the algorithm. The need to control factors such as uncertainty, crisis prevention, the increasing complexity of processes. During the check, compare the progress with the targets, namely to measure the results to determine the level of tolerance, compare the actual results with the planned, to conclude the process of achieving the goal.

In order to exercise effective control, it is necessary to comply with such provisions as the connection control strategy, the performance of all types of control, accuracy, flexibility and timeliness. Thus, if there was developed a clear structure of the process, identify indicators of measurement and control points, the implementation of this phase will be made much easier and more efficient.

The ninth stage – Definition and implementation of measures aimed at improving the process. At this stage it is necessary to analyze the causes of deviations
in the implementation process, to develop and to apply the necessary corrective
action. In this case, management should not only always looking for alternative
solutions to improve processes, but also to motivate staff involved in the
implementation process, to develop and deliver its vision to streamline, improve and
eliminate the «narrow» places. Must continually identify opportunities for
improvement and cost reduction, which will improve the quality and efficiency of
processes [3].

Application of a set of proposed measures will allow the management company
to avoid a lot of problems in the implementation of the process approach in practice.
A clear definition of the strategic and tactical goals, a description of processes,
identifying the relationship between them can focus on the most important business
processes. This helps to solve the problems of an applied nature, to prepare a
management structure to changes in the transition to a process-oriented management,
and also to prevent loss of time talking about all the processes. Definition of powers
makes staff more accountable for the implementation of specific processes, largely
removes the resistance to change and paves the way for more efficient work
motivation.

References:


2. Milaevskaya S.S. Organizational and economic aspects of the process control
in beef cattle: diss ... Candidate. Econ. Science / Milaevskaya Svetlana Sergeevna. –

3. Repin V.V., Eliferov V.G. The process approach to management. Business
The article describes the characteristics of the process as a management object from the position of the process approach, the purposes of a process. The indicator of management effectiveness evaluation process.

Key words: process, process approach, the purpose of the implementation process, performance processes.

Process management is a system of targeting processes, which, through a balanced combination of its characteristic elements provides reception planned in quantitative and qualitative terms of production volume, increased technological discipline, as well as the optimal allocation and efficient use of all resources. Process management involves a comprehensive analysis and consideration of all internal and external factors that are on the one hand limit the use of production resources, and on the other - provide favorable conditions, to be used for the intended purpose.

The main purpose of management is to ensure the stability and continuity of all processes, as well as the continuous improvement of their performance. The main task of process management is to establish and apply effects capable than others to ensure greater effectiveness of a process to optimize the use of resources.

Using a process approach to management processes should help improve the economic performance of businesses by providing them the opportunity to assess the implementation of the processes on the principle of «input-output». One of the fundamental principles of the process approach is the claim that every action is considered either as a separate process, or as one of the elements of a process.
Process – it is a purposeful collection of interrelated or interacting activities which transforms resources (inputs) to the entrance of the product (results) at the output of value to the consumer. In other words, any activity using resources, and managed in order to transform inputs into outputs to produce a result, can be considered as a process [2].

The characteristic properties of any process is the length of time and the availability of well-defined entry and exit. As a rule, the input process understand the resources that is material and non-material elements necessary for its implementation. The output of the process is the result obtained in the course of its implementation. Quite often, the output of one process is the input to the next.

Enterprise process model is the basis for the analysis of processes, which often leads to the conclusion that their changes, both technological and from an organizational point of view, in order to increase profits, reduce costs, improve product quality, increase production capacity, etc. .

In practice, as key elements of process control from the standpoint of the process approach are the following:

1. Determination of components of the process and procedures of their interaction.
2. Defining goals, objectives, and expected results for each process.
3. Allocation of responsibility for the results of each process.
4. Determination of inter-process communication with suppliers and customers.
5. Develop a list of documents regulating the execution of processes.
6. Choice of methods, techniques and tools to achieve the process.
7. Determination of the effectiveness of the criteria and indicators of process performance [1].

An indispensable condition for evaluating the effectiveness of management processes is the presence of criteria that reflect the thrust of the process. Management is considered effective if the control actions provide the maximum value of the corresponding test. The main criterion of the effectiveness of the process is the degree of achievement of the goal that is set either by combining the evidence on the
effectiveness of the process or the use of common assessments and opinions from experts. Effective process control acts as a valuation indicator used to identify alternative options when choosing resources and evaluate the functioning of production structures as a whole and each part separately.

Process management involves identifying the objectives of a process that allows you to develop a system of appropriate management actions to better achieve them.

The main objectives of the processes usually distinguished:

1. Compliance with the requirements established by the regulations.
2. Improving the performance of the process and the stability of its performance.
3. Optimizing a combination of cost-benefit or cost of resources in the implementation process [4].

Important point is to set targets processes – determination of their sequence. Obviously, the first need to ensure that the process discipline, that is, strict compliance with the standards and specifications, and then increase the effectiveness of the implementation process, and only after the attainment of these objectives can talk about reducing the cost of resources is in progress. It should be noted that after the process were set the first two goals, they become mandatory for achievement, and the achievement of the third objective can be in the future. If put all three goals, achieving them is equally binding.

Assessment of the degree of achievement of the process requires appropriate indicators are quantitative and (or) quality parameters characterizing the process and its result [4]. In the management process appropriate allocation of three main groups of indicators for the purposes and in accordance with their sequence


To determine the extent to which the actual performance of a process scheduled (set) using the formula:

\[
C_c = \frac{\Pi\phi}{\Pi p} \quad \text{Kp}
\]
where $C_c$ – the extent to which performance; $\Pi \varphi$ – the actual value of the index, $\Pi \Pi$ – the value of the planned figure, $\mathbf{K}_{\text{rn}}$ – correction factor risk mismatch, determined on the basis of expert estimates for each process.

As a result, if the $C_c < 1$, the goal of the process is reached and control is ineffective, if $C_c \geq 1$, the purpose of the process is reached, therefore, manage efficiently.

2. Performance Indicators Process Control, revealing the improvement in performance indicators of the first group.

The degree of improvement of process indicators is given by:

$$
\Pi \Delta = \Pi \varphi \\
C_u = \frac{\Pi \varphi - \Pi \Pi}{\mathbf{K}_{\text{ru}}}
$$

where $C_u$ – the improvement in performance; $\Pi \Delta$ – index value reached, $\Pi \varphi$ – the actual value of the index (initial), $\mathbf{K}_{\text{ru}}$ – correction factor deteriorating risk, defined on the basis of expert estimates for each process.

In this case, there are three cases: $C_u > 0$ indicates an improvement in process performance, performance management, $C_u = 0$ indicates the absence of improved process performance, management of under-performing, $C_u < 0$ indicates a deterioration in the process, the management is inefficient.

3. Performance indicators of the process, giving the most complete assessment of the process and provide a basis for further decision-making guidance.

The efficiency of the process can be defined as the ratio of the value-added process of production to the cost of resources in the process of considering the time of its implementation:

$$
\Delta V \\
\mathcal{E}_\Pi = \frac{\Delta V}{\Delta C} = f(t)
$$

where $\mathcal{E}_\Pi$ – the effectiveness of the process $\Delta V$ – value added products, $\Delta C$ – cost resources expended; $t$ – time of the process.
If $\mathcal{E}_n \geq 1$ goal of the process is reached, performance management, and if $\mathcal{E}_n < 1$, the purpose of the process is not reached, the management is inefficient [3].

Creation of process control systems based on the process approach in the current market conditions allows a more objective assessment of the situation, reasonably determine and compare the lost opportunity and advantage; identify bottlenecks that disrupt the normal course of the production process; correct deviations and failures in the implementation of each process. Thus, the efficiency of production management as a whole is achieved by improving the management of individual processes.

Further develop and improve management processes should be mainly due to the use of modern approaches to management, global management concepts of adaptation to Russian conditions, elimination of inefficient management practices, strengthen the relationship of all levels of government to improve the organizational structure of the company, attract qualified managers and etc.

**References:**


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THEORETICAL BASIS OF PROCESS APPROACH TO COMPANY MANAGEMENT

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The article describes the characteristics of the business process from the perspective of the process approach. The classification of business processes. Considered theoretical aspects can be used in further research of enterprise management systems.

Keywords: process approach, process management, business process specifications, types of business processes.

Development of market relations requires enterprises continuously improve efficiency and competitiveness through the use of scientific and technological progress, advanced domestic and international experience, effective forms of management and control, as well as the rational allocation and use of resources. Of particular significance, issues of business management in developing and implementing a set of measures to increase their adaptability to rapidly changing conditions of the macroeconomic environment. Under present conditions of economic development process approach to the management of the business, the essence of which is to build a system of business processes and their management in order to achieve maximum impact activities, is one of the most progressive and effective. As part of the process approach of any business activity is considered as a set of interrelated business processes and its management through control of individual processes.

The main advantage of the process approach is to create a continuous control, providing optimal relationship between individual business processes within the enterprise, as well as their combination and interaction. Process management – a management tool, not only reduces waste, but also improving the quality of products,
as well as allowing to have full information about the current business process and make timely and strategically correct decisions [2].

One of the fundamental principles of the process approach is the claim that every action is considered either as a separate process, or as one of the elements of a process. In the economic literature there are many interpretations of the concept. The analysis of the work of national and international scientists has revealed similarities existing definitions, because almost every one of them it is a «set of actions» or «sequence of activities» [3]. All existing approaches to this issue can be divided into two groups.

The first group is E. Deming, who said that the process – a set of interrelated activities, the result of which performance is the result that is of value to the client [1]. The second group includes M. Hammer and J. Champy, E. Oyhman and E.M. Popov, considering the process as a stable, purposeful sequence of activities, in which the input uses one or more of the resources to build on the output of the product is of value to the consumer [4, 6].

The main characteristics of any business process from the standpoint of process management are the following:

1. The inputs of the business process – the objects needed to perform and produce a specific result of the business process. Distinguish the primary input of the business process that raises its beginning, and the secondary entrance of the business process, not the beginning of the initiation of the business process, but necessary for its implementation.

2. The outputs of the business process – the objects that result from its implementation. Similarly isolated primary output – the main result, defined goal and purpose of the business process and the secondary output – side out, which will be demanded by consumers and the secondary is not the primary purpose of a business process.

3. Resources business process – information, finance, raw materials, personnel, equipment, infrastructure, software, in other words, all that is needed to complete a business process.
4. Supplier of business process – is a subject that provides input (resources) to complete a business process. External supplier – a company, division or officer of another company, which provides input (resources) to complete a business process. Internal Service – other business processes, division or officer of the person providing the input (resources) to perform this process.

5. The consumer business process – a subject that receives and uses the output (results) of the business process.

Domestic consumer – the other business processes, division or officer receiving the outputs (results) of the considered business process. External customer – business-to-consumer, department or officer of another entity receiving the outputs (results) of the business process of the enterprise.

6. The owner of the business process – the official, has at its disposal the resources necessary for the implementation of the business process, manage the progress of the business process and to be responsible for the results and performance of the business process [5].

7. Indicators of the business process – is the quantitative and qualitative parameters characterizing the business process and its result.

Quantitative indicators can be divided into three groups:
- performance of a process;
- characteristics of the product of the process;
- indicators of customer satisfaction process.

Qualitative indicators of the business process are:
- effectiveness – the extent to which the results of the process to the needs and expectations of customers;
- business efficiency – the ratio of the results achieved to the resources used, or the best use of resources in achieving the desired result of the process;
- flexibility (adaptability) – the ability of a business process to adapt to changes in external conditions without reducing its effectiveness and efficiency;
- productivity – the ratio of the number of unites at the output to the input of the units in the implementation of the business process;
duration – the time needed to complete a business process, or the time between the start of the process and its completion;

cost of the process – a set of expenditure required for a single execution of the process in terms of money.

All existing in a particular enterprise processes characterized by certain features, so to improve their management to classify them.

1. In relation to obtaining added value: key business processes – processes that ensure the real operational challenges associated with the creation and sale of the product to the consumer, that is a process whose operations are directly related to the product of the company, and thus influence the creation of added value;

   – supporting business processes – processes that ensure the basic processes, but are not directly related to the product produced, but they are indispensable operations for the creation of added value;

   – management business processes – the processes that control the main and supporting processes, which include the process of strategy, business planning and control.

2. The place in the hierarchy of objectives of the enterprise:

   – business processes of the upper level – the processes most important to the enterprise and towards the realization of its strategic objectives;

   – business processes of the average – the processes aimed at achieving tactical goals of the enterprise;

   – business processes of the lower level – the processes aimed at achieving operational goals of the company.

3. Degree of difficulty:

   – monoprocesses – monosyllabic business processes;

   – nested processes – monoprocesses that are part of a more complex business process (macro-process);

   – related processes – which are defined and consistently implemented on a particular algorithm monoprocesses.

4. The level of detail:
- macroprocesses – consolidated business processes, a level of detail necessary to describe the business processes of the upper level;
- subprocesses – business processes, a level of detail necessary to describe business processes of the average;
- micro-processes – business processes that have the most extreme level of detail used to describe the business processes of the lower level.

In modern conditions, the introduction of process-oriented management of the enterprise is able to provide a stable and harmonious development of production, the clarity in the interaction units, timely management information for effective monitoring and decision making. However, despite all the advantages, the process approach to management in Russian companies have not yet received proper distribution, and its implementation much slower than abroad. The process approach is the core of modern management theory, should therefore be considered only in conjunction with other determining factors.

References:
RUSSIA’S ACCESSION TO THE WTO AND ITS AFTER-EFFECTS

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Introduction

The one of the most significant events that influence the international position of Russia is its entering the World Trade Organization (WTO), which took place in the end of 2011. Russia applied for membership in the General Agreement on Tariffs and Trade (GATT) in June 1993 and the GATT Working Party was transformed into the World Trade Organization Working Party in 1995.

President Vladimir Putin has made WTO accession a priority for Russia, and after languishing for several years, the Russian accession negotiations began to see real progress under his Administration.

Russia has finally joined the World Trade Organization at a ceremony in Switzerland 16.11.2011, after 18 years negotiating its membership. The Swiss brokered a deal between Russia and Georgia earlier that year that removed the last obstacle to Russia's accession. Georgia had tried to block Russia's WTO entry since the two countries fought a short war in 2008.

Russia was the last major economy that was not part of the trade group, and joining is expected to be a boon for Russian consumers and businesses. Exporting companies in Europe, Asia and the United States eagerly await open access to a population of 142 million people with growing incomes and an expanding middle class.

The main part

There are a great number of opinions concerning after-effects of Russia’s accession the WTO. For the European Union Russia's entry into the WTO provides an important boost to European companies. Russia is the EU's third biggest trading partner, with member countries exporting 108bn euros of goods to the country, including 7bn euros worth of cars and 6bn euros of medicines.
A so-called “tariff disarmament” that would necessarily accompany a Russia-EU free trade area would probably last 7 to 10 years and will proceed through annual gradual reductions in tariffs on finished goods. Also the free trade area agreement must provide for a possible temporary freeze on – or possibly even an increase in – tariffs if there emerge imbalances on individual goods markets, thereby jeopardizing national production and employment. The same action must be taken in case of serious disproportions in the balance of payments.

In case the free trade area brings positive results with regard to the industrial goods, eventually there will emerge an issue of mutual liberalization in the movement of services. This will take much more time and will require stage-by-stage conclusion of corresponding agreements for each specific kind of services (transport, insurance, tourism, etc.) [1].

In estimating the customs value of goods and determining the state of goods’ origin, the EU abides by the rules of the World Trade Organization and has not yet introduced any specific regulations in this field. The future Russia-EU free trade area must be a realm where corresponding WTO rules are applied. Russia’s goal is committed adherence to these rules, which, to date, has not been fully achieved. If in the course of building a free trade area, Russia and the European Union liberalize their mutual trade, the parties in many cases will have no other way to protect their national production, markets, employment and social stability than by taking measures that involve non-tariff regulation. Therefore, any future agreement between Russia and the EU must include rules for taking such measures by the parties in the spirit of consistent trade liberalization.

In the field of non-tariff regulation, the EU, as a rule, also abides by WTO international legal norms. If the proposed Russia-EU free trade area agreement has references to corresponding WTO documents that would suffice. However, the agreement must contain special instructions and regulations on some non-tariff restrictions where the European Union applies its own norms and rules. This concerns anti-dumping measures, technical and ecological standards and norms, and measures of sanitary and phytosanitary control [1].
If a free trade area does become a reality, the EU will eventually demand equal conditions for participating in competitive biddings, along with Russian companies; this would include Russian state orders for the supply of goods and services and for construction projects in Russia. If this issue arises (which will happen most likely in the long term), Russia must address it on the basis of the principles of reciprocity and mutual benefit.

At the same time, however, opening up the Russian market will mean the direct export of products – via European firms – produced in other countries, which will weaken interest in investment in Russia as a way to penetrate its domestic market. But on the whole, the formation of a free trade area will increase direct investment from the European Union, most importantly in the manufacturing industry.

It must be emphasized that immigration restrictions and the strict Schengen regime apply to Russian citizens in full measure. The usual allegations by leading European politicians and high-ranking officials from Brussels and Strasbourg, which say that Russia is denied visa-free travel due to its so-called instability, are absolutely unconvincing considering Russia’s real situation. Meanwhile, the EU offers visa-free entry to citizens of about 60 other countries, including much less stable states than Russia (for example, Argentina). Such discrimination contradicts the very idea for creating a Russia-EU free trade area and, moreover, a Common Economic Area.

From the very beginning of the free trade area negotiations, Russia should have sought a framework agreement on the regulation of labor migration in the future Common Economic Area. On the basis of such a document, Moscow would be in the position to conclude corresponding bilateral agreements with participating countries. Such agreements must ensure equal rights for Russian labor migrants – at least with labor migrants from third countries (Turkey, etc.). They also must regulate their employment, employment quotas, social issues (such as remuneration of labor, health services, pension schemes, and unemployment insurance), and the duration of labor contracts. Full account must be given to Russia’s interests.

The formation of a Russia-EU free trade area is impossible without the free movement of Russian citizens and shipments across “European” land, that is,
between the Kaliningrad exclave and mainland Russia. It is important that this movement be essentially simplified already at the initial stage of the future free trade area negotiations.

Looking at consequences of Russia’s accession the WTO for the Russian relationship with the USA it’s necessary to stress some qualitative and quantitative effects. As a number of observers have pointed out, WTO accession would likely bring more stability and predictability to the relationship, reducing the opportunities for unilateral actions. For example, Russia would be limited on how high it could raise its tariffs, as it did on car imports during the recession. It would also be obligated to adhere to WTO agreements on implementing SPS measures (sanitary and phytosanitary measures), safety and certification procedures, and other trade-related measures [2].

In addition to these qualitative effects, Russia's WTO accession could have some quantitative effects. One study forecasts that U.S. exports of agricultural products, including meats, grapes, apples, and processed foods, would increase two or three times as a result of reduction in Russian tariffs and standardization of SPS measures. The United States could also realize an increase in exports of civil aircraft and aircraft parts, telecommunications equipment, and pharmaceuticals as a result of lower Russian tariffs. Furthermore, improvements in Russia’s enforcement of intellectual property rights and concessions on foreign investment could raise the level of investor confidence and increase the level of U.S. business investment in Russia, including investment and trade in services.

The fact of Russia’s joining the WTO aroused hot discussions in the public and scientific literature about its positive and negative effects on Russian economy. Some experts argue that joining the WTO will create the right conditions for the further improvement of Russian business climate, for an influx of foreign investment and for boosting Russian export while also retaining the possibility of giving support to key branches of Russia’s economy. Russia is achieving a completely new level of integration into the global economic system. The removal of trade barriers is likely to stimulate greater and more diversified trade between Russia and the rest of the world.
According to some forecasts Russian membership will boost its economy by tens of billions of dollars each year. Due to becoming a WTO member, Russia will have to import certain rules and regulations that will address the very issues that foreign investors usually complain about, like corruption, the protection of minority shareholders and the independence of the judiciary [3].

**Conclusion**

Russia's accession to the WTO and fulfillment of multilateral commitments in domestic support, market access, sanitary and phytosanitary measures, and technical regulation will stimulate increased transparency in foreign trade regulation, improve the access of imports to Russia's market, and restrict Russia's possibilities for supporting its agricultural producers and imposing unjustified measures that impede trade.

However, economists have warned that any improvement will also depend on Russia clamping down on corruption, reducing bureaucracy and improving the rule of law.

But the short-term, immediate impact of Russia’s accession to the WTO is relatively minor. It is just like minor concessions made at the final stage of the negotiations, compared to the concessions made steadily over the course of the entire 12 years. The sectors to suffer most will be pig farming (duties on the import of live pigs have fallen by 87.5%), dairy and cheese production, as well as the manufacture of trucks and buses. Seafood will become more expensive for consumers. The key to understanding the short-term impact of WTO accession is the stance taken by the state banks, which farmers say discontinued livestock loans immediately after WTO accession, and also AvtoVAZ, which has begun importing automotive sheet metal.

The domestic automotive industry, rigidly competing with import, is the most sensitive to WTO accession. The consequences may affect the quality of the economic and social development of the country, which, in turn, may lead to the closure of the number of enterprises, the loss of jobs, the growth of unemployment and rehabilitation of the population. However, the extent of the damage will depend
on both the terms of our accession to WTO, and the branch actions of the modernization of production, the cost saving.

Although there are a lot of problems, Russia’s becoming the WTO member certainly gives a positive political signal. Russia has pronounced its endeavour to further integration into the global economy and to adoption of the common practices of international business. Nevertheless WTO membership is not a panacea for all the problems in the Russian markets, it won’t make Russia competitive in the West European market automatically, though it is an important step towards greater efficiency and predictability in the Russian business environment.

References


2. Russia's Accession to the WTO and Its Implications for the United States [Internet resource] URL: // http://www.crs.gov

3. Russia becomes WTO member after 18 years [Internet resource] // BBC News. URL: http://www.bbc.co.uk/news/business/

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Okselenko N.O.

CURRENT ASSETS MANAGEMENT ORGANIZATION OF AGRICULTURAL ENTERPRISE

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The specifics of the current assets management organization of the agricultural enterprise are considered in the article. The complex interrelation scheme of the
purposes, the current assets management problems of the agricultural enterprises and ways of their realization are offered.

Key words: management, current assets, efficiency, agricultural enterprise

The problems decision of the way out of agrarian sector of Ukrainian economy from crisis is objectively connected with transfer of the agricultural enterprises control systems into qualitatively new level which considers market conditions and management principles. A powerful reserve in a direction of the enterprises activity improvement of the given sector is an increase of their current assets usage efficiency which occupy considerable specific gravity in the actives structure of these enterprises.

To reach good results, it is necessary accurately constructed, well-founded and effective organization of actives management. The important component of the actives control system of the agricultural enterprises is a current assets control mechanism. Development of the current assets control mechanism of the agricultural enterprises and its effective application in practice is an actual problem at present because the effective formation and regulation of the current assets volume and structure will favour the support of a liquidity optimum level, will ensure the operability of production and financial cycles of activity and so high solvency and financial soundness of the agricultural enterprises.

Such scientists as Blank I.O., Gudzinsky O. D, Demjanenko M. Ja, Kovalev V.V., Sabluk P. T, Stoyanova O. S, Bocharov V.V., Teplova T.V., Unkovska T.E. and other considered the questions of the current assets management organization. Methodological and methodical bases of the current assets management are studied in their works. However, the specificity of the agricultural production was not considered. Some publications on this problem, unfortunately, do not form a complete theoretical and methodical basis of realization of the rational current assets management organization. In connection with this, the selected area of researches is actual and it has the scientific and practical importance.

Article purpose. The development of scientifically well-founded directions of formation of the current assets management system at the agricultural enterprises.
For the research objectives, we will define management as transformation of the information about an object condition to the command information from the subject. This is purposeful programmed or free influence on the objects for the achievement of the final aim by means of the phenomena, processes when there is an interaction with them in a mode of determined or free program/regulations.

It is distinguished a situational management, in particular the strategic decision making in process of the potential problems detection; and a venture management - the method of the administrative activity based on the apportionment of major tasks during the given period on which realization the main efforts are directed by the managing organization.

For the current assets management organization of the agricultural enterprises it is necessary to define accurately the interrelation of the purposes, the current assets management problems of the agricultural enterprises and ways of their realization.

On pic. 1 it is defined the main objectives and the current assets management tasks of the agricultural enterprises by author.
Control system of current assets of agricultural enterprises

<table>
<thead>
<tr>
<th>Aims</th>
<th>Tasks</th>
<th>Means of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninterruptedness guaranteeing of production process.</td>
<td>Record and rate setting of all current assets components every reporting date, analysis of their</td>
<td>Formation of current assets components according to volumes of economical activity and duration of operational and</td>
</tr>
<tr>
<td>Increase of current assets usage efficiency.</td>
<td>The analysis of the basic tendencies of current assets</td>
<td>Calculation of the forecast of changes in current assets on the nearest and</td>
</tr>
<tr>
<td>Maintenance of profitability growth of the enterprise</td>
<td>Estimation of short-term needs in cash resources and inventory</td>
<td>Turnover acceleration of a total sum of current assets and their elements.</td>
</tr>
<tr>
<td>Facilitation to a stable financial position of the enterprise</td>
<td>Ensure of increasing of current assets profitability.</td>
<td>Maintenance of optimum size of the most liquid current assets.</td>
</tr>
<tr>
<td>The constant control over the volume of current assets</td>
<td>Estimation of risk minimization factors the losses connected with formation and usage of current assets</td>
<td>Ensure of proper part of liquidity current assets in the form of the current financial investments.</td>
</tr>
<tr>
<td></td>
<td>Provision of the information for management decision-making, development and commissioning of modern techniques of current assets</td>
<td>Formation of an efficient portfolio of current financial investments for the purpose of maximization of current assets profitableness in optimum consolidation of current assets which give the direct return, and those assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minimization of risks and losses connected with their formation and usage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Detection, studying and use of efficiency increasing reserves of current assets usage; optimization of their structure from the point of view more</td>
</tr>
</tbody>
</table>

Pic. 1 Interdependence scheme of the aims and the current assets management tasks of the agricultural enterprises.

Generalization of the scientific literature gives a possibility to assert that the current assets management organization should be constructed on such principles:
- creation of the minimum current assets volume which provides a continuity of the production process and their circulation, and also their effective usage;
- rational placement of the current assets which are available, in the reproducing process spheres of the enterprise;
- formation and replenishment of the current assets at the expense of own and borrowed sources depending on the volumes of output;
- control of the storage and the effective usage of the current assets.

Conclusion. The current assets management organization of the agricultural enterprises is offered to fulfill on the basis of the determination and support of rational volume and structure of the current assets, the sources of their formation which will provide the maximum financial results of the enterprises, by means of use of the most expedient policy of the current assets formation for achievement of the peak efficiency of their usage.

References


ENTERPRISES CURRENT ASSETS FUNDING APPROPRIATE POLICY GROUNDING

Donetsk National University of Economics and Trade named after Mikhail Tugan-Baranovsky, 31, Shchorsa str., Donetsk, 83050

Introduction. Current economic conditions are characterized by the financial crisis threat emergence, a large number of social and economic problems, high levels of competition on the goods and services market. To maintain competitiveness under such conditions the company must respond quickly to changes in the business environment and ensure the achievement of high financial performance not only in the current period, but in the long run. Thus, one of the important tasks of assets management is the choice of a rational funding policy, because the amount of financial resources invested in current assets, plays a crucial role in accelerating the capital turnover and ensuring the company solvency.

The issue of appropriate current assets financing policy search is dealt with in many scientific studies of our and foreign scientists, particularly in the works of Melnikov K. I. [3] Brihem E. Yashchuk D. L. [5], Van Horne, Bubbles P. V. [4] Guseva A. I. and others. However, the issues of policy formulation and implementation of a company current assets financing improvement remain unsolved in today's global financial stagnation and it requires further researches.

The article aims at proposing the methodical approach to selecting the optimal current assets funding policy on the basis of identifying the degree of its left-sided and right-sided risks in the modern business environment.

Practical testing of justification appropriate policy of current assets funding was carried on the example of the limited liability company "Donbass Investment and Construction Company (hereinafter" Company "DIBK"), which is the management
company and develops the concept of building projects, developing new land sites [6].

The main text. On the basis of the Ltd. "DIBK" existing potential it is appropriate to use the corporate strategy of accelerated growth [4], which corresponds to the strategy of accelerated growth financial support, which involves the growth of financial resources potential, which are spent on the company working capital and fixed assets increase.

Thus, identifying the financing growth sources is important for the current assets financing policy management. Additional demand for its own and similar funds (growth rates) is calculated by comparing the aggregate norms for the planed year with the last year aggregate norms.

However, meeting the need for additional working capital by using the own sources is impossible, because in this situation, one of the most important tasks is to ensure effective borrowed funds involvement in creating the optimal current assets structure. It should be remembered that financing through borrowed funds is good, but to a certain extent, because too many borrowed funds increase financial risks and the potential threat of insolvency. According to the above, financial risk analysis is a very important aspect of ensuring the whole enterprise effective functioning as the enterprise financial position; its dynamics change and the possible forecasting for effective risk management.

So, to justify the appropriate policy of the enterprise current assets financing one should consider the problems and risks that may be faced with while carrying out its development (tab. 1).

### Table 1

**Phenomena which are right-handed and left-sided risks**

<table>
<thead>
<tr>
<th>Left-sided risks (asset)</th>
<th>Right-side risks (passive)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquidity</strong></td>
<td><strong>Profitability</strong></td>
</tr>
<tr>
<td>- slowly sold assets</td>
<td>- increase in</td>
</tr>
<tr>
<td>accumulation, unwarranted growth of receivables and the lack of inventory, unfounded</td>
<td>current assets that are not used, the increase in profitability</td>
</tr>
</tbody>
</table>
After defining the basic range of possible risks for the payments there is a list of parameters according to each group for Ltd. "DIBK" and its main business competitors. Determining the significance of the selected indicators in their overall impact within the group the possibility of probable risk is based on the use of expertise and determines the rank parameters using the Ueya’s [2], method which is based on a matrix of pairwise comparisons (1):

$$\tilde{A} = \|a_{ij}\|, \quad a_{ij} = \{-1, 0, 1\}$$ (1)

where $a_{ij} = -1$ means the preferred option $X_j$ over parameter $X_i$;

$a_{ij} = 0$ – equivalence of $X_j$, $X_i$;

$a_{ij} = 1$ – preferred option $X_i$ over $X_j$.

At the first stage of the study, the T. Saaty’s [1] analytic hierarchy is used to determine ponderability of each $i$-indicator assessment, which involves pairwise comparison of a group with respect to their effect on their common characteristics, and it is represented as the inverse of a symmetric matrix, which is then transformed according to the Ueya’s method.

To ease negative numbers handling, the transformation matrix of pairwise comparisons added matrix formula (2) is used:

$$\tilde{A}^+ = \|a^+_{ij}\|, \quad a^+_{ij} = \{0, 1, 2\}, \quad a^+_{ij} = a_{ij} + 1$$ (2)

The importance of indicators evaluation is determined by dividing the sum of the indicator values according to other ones in the group to the total performance of the group.

As a result of the calculations we obtain the ponderability indicator of right-sided and left-sided risk evaluation in certain models of current assets financing (tab. 2.). These data allow calculating the integral indicators in the respective groups.

Based on integral parameters of certain groups according to the method of fuzzy sets defined right-sided and left-sided risk evaluation scale which are in force at construction companies and their causes can be indicated (fig.1).
In accordance with our rating scale we defined the right-sided and left-sided risk level at the construction enterprises in the Donetsk region (tab.3).

Table 3

<table>
<thead>
<tr>
<th>Left-sided risk (asset)</th>
<th>Right-side risk (passive)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquidity</strong></td>
<td><strong>Profitability</strong></td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Ltd. &quot;DIBK&quot;</td>
<td>456,47</td>
</tr>
<tr>
<td>GI &quot;Hertz&quot;</td>
<td>478,6</td>
</tr>
<tr>
<td>Ltd. &quot;Building Alliance of Donbass&quot;</td>
<td>469,94</td>
</tr>
<tr>
<td>FPG &quot;Altcom&quot;</td>
<td>479,47</td>
</tr>
<tr>
<td>FPG &quot;DMS&quot;</td>
<td>446,68</td>
</tr>
</tbody>
</table>

Fig. 1 Types of risks of various financing models of a CA Enterprise
### Table 2

**Right-sided and left-sided risk performance evaluation in certain models of funding**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Significance</th>
<th>Ltd. &quot;DIBK&quot;</th>
<th>GI &quot;Hertz&quot;</th>
<th>Ltd. &quot;Building Alliance of Donbass&quot;</th>
<th>FPG &quot;Altcom&quot;</th>
<th>FPG &quot;DMS&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Left-sided risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Liquidity (Liquid)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of CA turnover in days</td>
<td>0,20</td>
<td>624,28</td>
<td>594,8</td>
<td>659,86</td>
<td>641,23</td>
<td>630,71</td>
</tr>
<tr>
<td>Capital intensity ratio (image) CA</td>
<td>0,20</td>
<td>1,18</td>
<td>0,87</td>
<td>1,32</td>
<td>1,44</td>
<td>1,51</td>
</tr>
<tr>
<td>Duration of one inventory turnover</td>
<td>0,36</td>
<td>843,01</td>
<td>841,30</td>
<td>859,10</td>
<td>881,20</td>
<td>899,70</td>
</tr>
<tr>
<td>Duration of one finished products turnover</td>
<td>0,04</td>
<td>1,38</td>
<td>1,36</td>
<td>2,40</td>
<td>2,70</td>
<td>1,65</td>
</tr>
<tr>
<td>Period of receivables repayment</td>
<td>0,20</td>
<td>139,19</td>
<td>123,10</td>
<td>141,66</td>
<td>167,98</td>
<td>141,01</td>
</tr>
<tr>
<td><strong>Profitability (Profita)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on current assets</td>
<td>0,56</td>
<td>21,38</td>
<td>22,08</td>
<td>14,32</td>
<td>18,76</td>
<td>19,08</td>
</tr>
<tr>
<td>Return of inventory</td>
<td>0,11</td>
<td>36,80</td>
<td>35,09</td>
<td>24,51</td>
<td>23,1</td>
<td>29,32</td>
</tr>
<tr>
<td>Profitability of finished products</td>
<td>0,33</td>
<td>39,55</td>
<td>39,72</td>
<td>21,5</td>
<td>19,4</td>
<td>23,4</td>
</tr>
<tr>
<td><strong>Right-side risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Liquidity</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall liquidity ratio</td>
<td>0,20</td>
<td>10,55</td>
<td>2,30</td>
<td>0,93</td>
<td>0,65</td>
<td>1,70</td>
</tr>
<tr>
<td>Current funding CA coefficient</td>
<td>0,28</td>
<td>0,92</td>
<td>0,96</td>
<td>0,86</td>
<td>0,80</td>
<td>0,91</td>
</tr>
<tr>
<td>The own working capital maneuverability</td>
<td>0,12</td>
<td>0,66</td>
<td>0,48</td>
<td>0,42</td>
<td>0,25</td>
<td>0,45</td>
</tr>
<tr>
<td>coefficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing their current assets adequacy ratio</td>
<td>0,20</td>
<td>1,32</td>
<td>1,12</td>
<td>1,42</td>
<td>1,89</td>
<td>1,35</td>
</tr>
<tr>
<td>Absolute liquidity ratio</td>
<td>0,20</td>
<td>1,97</td>
<td>0,53</td>
<td>0,18</td>
<td>0,15</td>
<td>0,2</td>
</tr>
<tr>
<td><strong>Profitability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on working capital</td>
<td>0,56</td>
<td>20,34</td>
<td>21,54</td>
<td>15,67</td>
<td>18,06</td>
<td>18,76</td>
</tr>
<tr>
<td>Return on working capital</td>
<td>0,33</td>
<td>19,43</td>
<td>21,3</td>
<td>19,89</td>
<td>20,4</td>
<td>19,5</td>
</tr>
<tr>
<td>Return on debt</td>
<td>0,11</td>
<td>43,50</td>
<td>25,65</td>
<td>28,51</td>
<td>26,54</td>
<td>30,31</td>
</tr>
</tbody>
</table>
Thus, the right-sided and left-sided risk evaluation analysis allow determining the most appropriate compromise policy for the Ltd. "DIBK" current assets financing (fig. 2).

![Diagram showing risk evaluation analysis for current assets financing policies]

**Legend:**
- Ltd. "DIBK"
- GI "Hertz"
- Ltd."Building Alliance of Donbass"
- FPG "Altcom"
- FPG "DMS"

**Fig. 2 Current assets financing policies model for building companies in the Donetsk region**

Using a compromise policy of enterprise current assets financing promotes adequate levels of enterprise financial stability and return on equity. However, as a result of using this strategy the company in certain periods of time can have extra current assets that will adversely affect profits, but it is considered as a result of the support of liquidity risk at a given level. Therefore it is necessary to objectively assess the company financial condition and decide according to this source of current assets financing.
Also industry-specific business characteristics are to be considered when developing current assets financing policies because different industries have different needs in current assets, have different capabilities in attracting credit resources and so on.

Conclusions. Thus, appropriate selection and implementation of current assets financing policy are essential to ensure a continuous process of social reproduction, stable financial status of all entities, the normal cash flow, and real accumulation of national wealth. In its turn, inadequate supply of company current assets is paralyzing its activity and leads to the financial position deterioration and increase financial risk of insolvency, which ruins the established processes of sourcing, manufacturing and sales and can trigger complete shutdown of the company.

In this article a methodical approach to the selection of the enterprise current assets financing optimal policy is worked out. This approach allows to identify the risks of liquidity and profitability inherent appropriate funding model of current assets and to focus on their neutralization for improving the enterprise current assets management.

Thus, reasonable enterprise current assets financing management policy is based on an objective assessment of left-sided and right-sided risks and their capabilities is one of the main areas to ensure the effective enterprise management. Thus, maintaining a policy of current assets financing leads to funds deficit and risks reduction; and enterprises profitability increases not only during the current period but also in the future.

References:


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UDK 330.15

Stasiuk V.V.

THE CHOICE OF FORMS OF PUBLIC-PRIVATE PARTNERSHIP FOR THE SPHERE OF THE MUNICIPAL WATER SUPPLY AND WATER DRAIN SYSTEM

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In the paper the well-grounded choice of the types of public-private partnership, which are reasonable for application in the sphere of municipal water supply and water drain system, was accomplished. The analysis of the major types of public-private partnership has been fulfilled.

Key words: enterprises of municipal water supply and water drain system; type of public-private partnership (PPP).
**Introduction.** The current situation in the national economy of Ukraine is extremely complicated. Consequently, the introduction of private investments and implementation of mechanisms of public-private partnership (PPP) are objective grounds for improvement of such situation. Ukrainian legislation as well as the Program of economic reforms for 2010-2014 “Wealthy society, competitive economic, efficient state” foresee the application of such type of partnership into various branches of economy of the country. However, having studied the great amount of the results of scientific research in this sphere, we came to conformation that the experience of foreign countries affirms convincingly the expediency of state limitation of the number of spheres and forms of implementation of PPP.

In European countries PPP is generally used for creation, operation and maintenance of infrastructure objects, especially in the water supply and water drain system. It is worth mentioning that the World Bank carries into practice annual monitoring of the development of PPP projects in the sphere of infrastructure both in all countries of the world and in separate regions [1, p.42]. In accordance with this monitoring 25 projects have been realized in Ukraine during 1992-2011. 12 million US dollars have been invested, but only 202.000 US dollars were invested into water supply and water drain system [2].

According to the World Bank the PPP projects include those ones which are being realizes on the basis of contracts of management, leasing, renting, concession, selling deposits [1, p.42]. The project is considered to be PPP if the share of private company is at least 25% [3].

Concerning Ukraine, there is no official systematizes statistical information about PPP not only in the water supply and water drain system but in the national economy in general. Though it is known that some PPP projects in the water supply and water drain system have been realized in Lugansk region (LTD “Luganskvoda”, which accommodates 85% customers of the region with central water supply and water drain, has been transformed into concession for 25 years since October 2008) and in Odessa
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(since January 2004 an integral property complex of the utility “Odessavodokanal” has been transformed into leasing to LTD “Infox”, a branch of “Infoxvodokanal” for 49 years) [4].

It is obvious that in this case concession and leasing are used as types of PPP. Nevertheless, the detailed analysis of the other forms of PPP, such as contract for accomplishment of operations (services), management contract of the whole property of enterprise and (or) its share and lease contract. These types of PPP affirm the possibility of their successful application into utilities of water supply and water drain system. It doesn’t contradict the project of the Low of Ukraine “About the major principles of interaction between the state and private partners”, adopted by the resolution of the Supreme Soviet of Ukraine on November 04, 2009, № 1697-VI. Each of the above mentioned types of PPP is shortly characterized below.

Contract for accomplishment of operations (services). Under service contracts the water supply enterprise should delegate fulfillment of some functions to private company for a certain period of time (general responsibility for the service remains in the municipal enterprise's competence). It is reasonable for the water supply enterprise to conclude contracts for the following kinds of operations: technical maintenance of specialized equipment (for example, pump units, water-purifying structures etc.); recurrent operation (purification of sewerage systems, fixing of water register indexes, displaying service bills for water supply and sewage system etc.); non-profile operations (technical maintenance of transport belonging to the water management enterprise, laboratory analysis of water, washing of service clothing etc.).

The contract for management of the integral property of the enterprise and (or) its share (for the period from 5 to 10 years). The water supply enterprise entrusts private company with responsibility for accomplishment of all tasks connected with its management. Moreover, the private company can spend costs on current maintenance of production equipment (these services are paid mostly in the fixed fee). Such type of PPP
creates higher commercial risk than in the case of contract for accomplishment of operations (services).

Leasing (the object is the main fund of the water supply enterprise). The analysis of the Law of Ukraine "About financial leasing" shows that the water supply enterprise can transfer to the leaseholder the main fund, which is its property, for a certain period of time. In the case of operating leasing the private company must pay fixed fee to the water supply enterprise. It will serve as stimulation for effective production activity and for reduction of consumption connected with it. The right for property of the main fund still belongs to the water supply enterprise, which is responsible for the quality of services and the establishment of tariffs, while all revenue is being left at the disposal of the private company.

Renting. In accordance with the Law of Ukraine "About renting of state and municipal property" (with changes and supplements) both separate property of the municipal water supply enterprise and its entire property complex (that is the whole enterprise) can be the objects of renting. The rent is being paid into the local budget and should be used for capital (fundamental) investments. In the case of renting of separate property of the enterprise the rent is directed for replenishment of circulating costs. It should be noted that under renting the right for property is being given to the private company and the rent payment is lower than leasing payment while all the risks of project are on the private investor (that's why the main way of the reduction of payment is concluding of contracts for longer period of time).

Concession (license to operate). In many foreign countries concession stands in front of all the other forms of partnership according to the number of transactions, amount of private investments and other important economic indexes. In total about 10% of services in the sphere of water use in the world have been transferred into concession to the private operators [4]. The major advantages of concession (according to the Law of Ukraine "About concession", with changes and supplements) are the following: transmission of the water supply enterprise into possession and use of private
sector on the returning basis (keeping in the municipal ownership); ensuring technical development of the water supply enterprise; the possibility to cancellation the concessive contract in the case of breaking its agreements and statements by the concessionaire; the possibility of returning the enterprise to the municipal ownership or transmission into concession to another subject of management etc. Possessing economical freedom the concessionaire can increase profitableness of the enterprise by using innovative operating during the term of concessive agreement.

It should be mentioned that concession seems to be similar to renting by its essentiality. Actually they are essentially different. The main distinctions are the following: under renting the water supply enterprise is used by the private company for enterprising activity, under concession it is used for satisfaction of municipal needs; under renting investments are made only according to the agreement with the water supply enterprise, in the case of concession investments are obligatory condition; the term of renting is up to 5 years, the continuance of concession is from 10 to 50 years.

In general distinctive features of renting and concessive relationships in the sphere of the municipal water supply and water drain systems have been depicted in the Low of Ukraine "About peculiarities of transmission of the objects of centralized water-, heat supply and water drain systems, which belong to the municipal property, into renting or concession" (adopted on November 20, 2010).

Conclusion. It should be emphasized that the question of choice and implementation of the certain types of PPP is especially actual task nowadays because of extremely difficult situation at the utilities of water supply and water drain systems where the greatest part of water delivery and sewerage network is in critical conditions. However, the state cannot offer appropriate help and decide this question itself. Only due to such form of management as PPP the municipal water supply system will be able to cope with difficulties, to attract additional financial, material and informative resources and to ensure appropriate quality of the water supply and water drain services.


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CURRENT ASSETS: ANALYSIS AND REPRODUCTION IN AGRICULTURE
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This report presents an analysis of the reproduction of the working capital of enterprises of the agrarian sector of the Stavropol Region, and a summary of the problems inherent in this process nowadays.

Key words: agriculture, the reproduction process, working capital, the Stavropol Region
The agriculture, as well as any other branch of a national economy can't exist without the current assets being important making part of property of each enterprise, and also a source of ensuring continuous process of production in branch along with the fixed production assets and a manpower [1, 3].

The size of current assets of the agricultural organizations of Stavropol Region in 2004-2010 increased average 14,1% a year that is 1,2 times higher than average annual growth rates of proceeds from sales of production and by 1,3 times exceeded rates of inflation [5]. Most significantly the size of money (by 4,9 times), receivables (by 3,5 times), finished goods (by 2,8 times) increased. The tendency of reduction of a share of current assets in the production sphere (from 57 to 49%) and increases it in the address sphere that is connected with existence of difficulties on realization of production and timely receiving payment for it was as a result observed.

Questions of rational use of current assets take an important place in system of the measures directed on increase of efficiency of activity and strengthening of a financial condition of agricultural enterprises [2].

Efficiency of use of current assets farms is characterized, on the one hand, by indicators reflecting use of current assets, and with another, indicators of quality of current assets [4].

The analysis of dynamics of indicators of use of current assets of the agricultural organizations of Stavropol Region during 2004-2010 testifies to delay of turnover of current assets (tab. 1). So in 2010 in comparison with 2004 duration of one turn of means increased for 51 days and made 369 days that testifies to delay of turnover of current assets, and, therefore, and to their less effective use. Confirmation of it also is reduction of coefficient of turnover by 0,17 points that was accompanied by increase of coefficient of fixing on 0,14 points.
Table 1

Dynamics of use of current assets of the agricultural enterprises of Stavropol Region

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of the address, days</td>
<td>317,4</td>
<td>309,3</td>
<td>341,1</td>
<td>292,0</td>
<td>401,1</td>
<td>392,5</td>
<td>368,7</td>
</tr>
<tr>
<td>Turnover coefficient</td>
<td>1,15</td>
<td>1,18</td>
<td>1,07</td>
<td>1,25</td>
<td>0,91</td>
<td>0,93</td>
<td>0,99</td>
</tr>
<tr>
<td>Fixing coefficient</td>
<td>0,87</td>
<td>0,85</td>
<td>0,93</td>
<td>0,80</td>
<td>1,10</td>
<td>1,08</td>
<td>1,01</td>
</tr>
</tbody>
</table>

Decrease in qualitative characteristics of current assets of the enterprises in 2004-2010 (tab. 2) was result of the revealed tendencies.

Table 2

Quality of current assets of the agricultural enterprises of Stavropol Region

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of security with own current assets</td>
<td>0,21</td>
<td>0,17</td>
<td>0,20</td>
<td>0,30</td>
<td>0,28</td>
<td>0,03</td>
<td>0,05</td>
</tr>
<tr>
<td>Coefficient of security of material stocks own current assets</td>
<td>0,29</td>
<td>0,25</td>
<td>0,31</td>
<td>0,51</td>
<td>0,20</td>
<td>0,04</td>
<td>0,08</td>
</tr>
<tr>
<td>Ratio of borrowed and own funds</td>
<td>0,82</td>
<td>0,93</td>
<td>0,91</td>
<td>0,71</td>
<td>1,02</td>
<td>1,11</td>
<td>1,03</td>
</tr>
<tr>
<td>Maneuverability coefficient</td>
<td>0,21</td>
<td>0,19</td>
<td>0,23</td>
<td>0,30</td>
<td>0,14</td>
<td>0,05</td>
<td>0,05</td>
</tr>
</tbody>
</table>

The coefficient of security with own current assets for the studied period till 2009 was in norm limits, but by the end of 2010 its value decreased on 0,16 points. That testifies to insufficiency at farms of own current assets, and emergence of need to resort to the credits for ensuring the current activity.

Value of coefficient of security of material stocks own current assets in 2004-2010 was below recommended and tended to reduction. So in 2010 in comparison with 2004 this coefficient decreased on 0,21 points and made 0,08, at optimum value not less than 0,5. Therefore, in 2010 only 8% of stocks of agricultural enterprises of Stavropol Region were financed at the expense of own means.

The coefficient of a ratio of borrowed and own current assets till 2008 was in norm limits, in 2010 its value increased by a quarter, and 1,03 rubles were the share of 1 ruble.
of own means loan. As a whole it is the negative moment as the zavisiost of the organizations from borrowed funds increased.

The maneuverability coefficient throughout all studied period lagged behind recommended value. In 2010 its actual size was lower standard by 10 times that testifies to low mobility of own means of the agricultural enterprises of Stavropol Region, that is only 5% of own capital are invested in current assets of farms. Activity is carried out generally at the expense of loans.

Noted tendencies in turn led to decrease in efficiency of use of current assets of the agricultural organizations (tab. 3). So in 2010 in comparison with 2004 the need for current assets counting on 100 rub of gross output increased with 68 to 88 rub or for 29%, thus the size of the received revenue for each 100 rubles of current assets decreased with 115 to 99 rub or by 14%. Most fully efficiency of use of current assets is characterized by their profitability. For the analyzed period this indicator was lowered twice that before is caused by deterioration of turnover of current assets.

**Table 3**

**Efficiency of use of current assets of the agricultural enterprises Stavropol Region**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets counting on 100 rub of gross output, rub.</td>
<td>68,1</td>
<td>73,5</td>
<td>78,2</td>
<td>67,0</td>
<td>82,9</td>
<td>93,9</td>
<td>87,7</td>
</tr>
<tr>
<td>It is received revenues for 100 rub of current assets, rub.</td>
<td>115,1</td>
<td>118,1</td>
<td>106,6</td>
<td>124,7</td>
<td>91,5</td>
<td>93,4</td>
<td>98,6</td>
</tr>
<tr>
<td>Level of profitability of current assets, %</td>
<td>23,1</td>
<td>12,6</td>
<td>18,8</td>
<td>37,8</td>
<td>17,2</td>
<td>9,5</td>
<td>12,3</td>
</tr>
</tbody>
</table>

From the above it is possible to draw a conclusion that recently the size of current assets of the enterprises is insufficient for ensuring rational parameters of reproduction in agriculture therefore improvement of conditions of reproduction process in branch didn't happen.
References:


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Bogatyreva M.R., Abdulgazizova A.N.

FEATURES LABORORGANIZATION IN A SMALL BUSINESS

Bashkir State University

This article discusses the characteristics and problems in the construction of compensation and benefits faced by small businesses. An important role in wage is the right choice of forms and pay systems.

Keywords: organization of work, wages, labor, small business.
Successful social and economic development of any country is impossible without better organization and compensation of employees in all sectors of the economy. In the various socio-economic problems generated in the period of economic reform and the basic principles of social and political life, a significant place is given to the organization is its employees.

For optimal functioning of organizations and businesses need to build such economic behavior, which makes it easy to adapt to Transform the environment. In this case, a special role is played by the effective management of the labor process, providing the interest of workers in high-end work and improve business results.

It was accompanied by labor rights for all historical periods, becoming more diverse and multifaceted. Work - it is a difficult and complex phenomenon, which clearly highlighted the social (and it includes more specific economic, social and institutional aspects) and technical-organizational (it includes a narrow technical-technological) side of (coordination) of its components. [1]

The experience of the various market economies suggests that the key to quality development of any nation is the simultaneous operation of large, medium and small enterprises, as well as activities that are based on their own labor.

The attractiveness of such a sphere of a business as a small business, due to the fact that its operation does not involve huge investments, requires significant financial and human resources. The positive role of small businesses across the country reflected in the fact that this business is more flexible, as opposed to another type of business, more responsive to changes in the environment, and also provides the creation of additional jobs.

The criteria for classifying companies as small business are the number of employees, regardless of the activity, and limit the amount of revenue. Under the rules of the Federal Law "On the development of small and medium enterprises in the Russian Federation" to small businesses include commercial organizations and cooperatives, the
average number of employees does not exceed 100 persons among small businesses stand out as micro - up to 15 people. [2]

Censuses federal statistical observation of the activities of small and medium-sized businesses, selectively presented in Table 1, can be noted that the rising trend in the number of small enterprises, which affects the number of workers employed in small business. [3]

Table 1.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>154,8</td>
<td>166,4</td>
<td>4,76</td>
</tr>
<tr>
<td>Bashkortostan</td>
<td>130,4</td>
<td>133,9</td>
<td>3,50</td>
</tr>
</tbody>
</table>

Due to the increasing number of people employed directly in the small business there is a need for optimal forms and systems of labor remuneration. Policy in the field of pay small businesses is part of enterprise management, and from it to a large extent on the efficiency of its work, as wages is one of the most important incentives for the rational use of labor.

Complexity in choosing the appropriate remuneration system for enterprises is particularly their activities, namely, what goals the organization and the values and attitudes which are characteristic for each individual worker. In addition, the external environment is constantly changing, as indicators of the labor organization. Therefore, the best is to create such an organization and the wage system, which takes into account all the features.

Managers of small and medium enterprises in our country, as a rule, do not pay enough attention to the development of effective forms of payment. The solution of such problems in recent years in the West and in many enterprises of the CIS is carried out with the transition to the new pay system - flexible tariff-pay system.
For example, according to the American Management Association for 2011., Flexible systems in the U.S. use 72% of companies. Performance is improved by 45%, the number of complaints of employees decreased by 83%, absenteeism - 84% of cases, resulting in loss of working time - by 69%, turnover decreased by 70-75%. Russian analysts believe that the introduction of flexible systems, profitability is increased from 5% to 50%, the income of employees increased from 3% to 30%. Particularly small businesses, of course, requires managers good skills and professionalism in the organization of workers. For characteristics that are unique to small businesses include: flexible work organization, the lack of a multi-level organizational structure, greater awareness of personnel, a lesser degree of bureaucratization of work; social insecurity.

And in order to achieve increased productivity, managers need constant business communication with the employees, encouraging them, if necessary - the elimination of conflicts in the team.

Thus, in the field of construction of compensation and there are quite a number of theoretical materials and development, accumulated experience, analyzes the advantages and disadvantages, and the behavior of managers in shaping and improving the organization of labor and wages requires a comprehensive study of the different sciences: economics, marketing, psychology, sociology, etc. [4].

References:


Iudin A.S.

THE INFORMATIONAL CRITERION OF IDENTIFICATION OF THE DISTRIBUTION LAW

The Russian state university of trade and economics, the Tula branch

Annotation: The new informational criterion of the distribution law identification is offered. It is shown that this criterion is universal and allows to test any hypothesis but not only Gaussian processes as the Pearson criterion.

It is shown that the informational criterion is more powered in comparison with the Pearson criterion and has a smaller beta error.

Key words: econometrics, entropy, distribution law, criterion.

Till now the main method of identification of the distribution law is the method of the Pearson grounded on application statisticians $\chi^2$. It apply at the analysis of almost any random variables. The problem consists that the structure of criterion of the Pearson is the next - it is intended for inspection only one hypothesis: whether the given distribution is normal?

Other criteria have not received due propagation.

Authors suggest to apply informational criterion [2].

Let's assume that the value space of the continuous random variable $X$ is divided into a finite number $k$ parts (intervals) $A_i$: $x \in (x_{i-1}, x_i)$, where $x_i$ ($i=0...k$) - boundary points of intervals. Let $p_1, p_2, ..., p_k$ - appropriate values of a probability function, so

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\[ p_i = P(x \in A_i); \quad \sum_{i=1}^{k} p_i = 1 \]  \hspace{1cm} (1)

The system \( \mathbf{X} \) having a finite number of states, is characterized by the uncertainty which value is defined by a measure of the Shannon-Wiener (entropy):

\[ H = h = -\sum_{i=1}^{k} p_i \ln p_i \]  \hspace{1cm} (2)

The probabilities used in expression (2), as a rule, are defined by practical consideration, hence, at calculations, instead of exact values it is necessary to use the empirical estimations calculated through frequencies of observations of appropriate states, i.e. as an entropy estimation value will be used

\[ H^* = -\sum_{i=1}^{k} p_i^* \ln p_i^* , \]  \hspace{1cm} (3)

where \( p_i^* = \frac{f_i}{n} \) - relative frequencies; \( f_i \) – frequencies of observations of appropriate states; \( n \) – an amount of observations (sample size).

As it has been shown by G.P.Basharin [1], the statistical estimation of entropy (2) has asymptotically normal distribution with parameters

\[ \begin{align*}
M(H^*) &= h - \frac{1}{n} \\
D(H^*) &= \frac{a^2 - h^2}{n}
\end{align*} \]  \hspace{1cm} (4)

Here

\[ a^2 = \sum_{i=1}^{k} p_i \ln^2 p_i \]  \hspace{1cm} (5)

Parameters \( a^2 \) and \( h \) we will name further entropy distribution parameters.

Let's generalize reduced outcomes for the analysis of continuous distributions.

Let \( W(x) \) is a density function of probability of some random variable \( \mathbf{X} \) with a variance \( \sigma^2 \).
We normalize random variable $X$ and we will introduce the new random variable $\tilde{X} = X/\sigma$ having a density function $w(x)$. We will divide a random variable range into intervals a breadth $\Delta x$. We will enumerate these intervals from lower to upper bound numbers of the positive integers from 1 to $k$. Let probabilities of hit in each interval are equal accordingly $p_i, i = 1...k$.

Let's mean

\[
\begin{align*}
    h &= -\int_{-\infty}^{\infty} w(x) \ln w(x) dx \approx -\sum_{i=1}^{k} p_i \ln p_i + \ln \frac{\Delta x}{\sigma} \\
    a^2 &= \int_{-\infty}^{\infty} w(x) \ln^2 w(x) dx = \sum_{i=1}^{k} p_i \ln^2 p_i + 2h \ln \frac{\Delta x}{\sigma} - \ln^2 \frac{\Delta x}{\sigma}
\end{align*}
\]

(6)

It is possible to display that the variance of empirical entropy as before is described by expression $D(H^*) = \frac{a^2 - h^2}{n}$, where $n$ – a sample size.

The estimation of entropy $H^*$ has a normal distribution with parameters $M(H^*) = h$ and $D(H^*) = (a^2-h^2)/n$.

Values of entropy parameters for some types of distributions are reduced in tab. 1.

Let's consider value

\[
J_e = \sqrt{\frac{a^2 - h^2}{n}} \left( H^* - h + \ln \frac{\Delta x}{\sigma} \right)
\]

(7)

Here $a^2, h$ - entropy parameters of a prospective parent distribution; $\Delta x$ - a breadth of intervals of a partition of a range of an random variable $X$; $\sigma$- its average quadratic deviation; $n$ - a sample size.

At coincidence of empirical distribution with prospective theoretical distribution of parameter $J_e$ will be Gaussian with a unit variance and zero expectation.
The choice of limiting value $J_c$ at which the estimation of entropy $H^*$ should be in a confidence interval, depends on the selected significance level $\alpha$. This value is from a known ratio:

$$P(|J_c| \leq t_{1-\alpha}) = \frac{2}{\sqrt{2\pi}} \int_{t_{1-\alpha}}^{t_{1-\alpha}} \exp\left(-\frac{x^2}{2}\right) dx$$

(8)

Table 1.

<table>
<thead>
<tr>
<th>The distribution law</th>
<th>h</th>
<th>$a^2$</th>
<th>$a^2-h^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>The exponential distribution $w(x) = \exp(-x)$; $x \geq 0$</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Normal (Gauss) distribution $w(x) = \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{x^2}{2}\right)$</td>
<td>1.4189380</td>
<td>2.5133850</td>
<td>0.5</td>
</tr>
<tr>
<td>Rayleigh distribution $w(x) = x \exp\left(-\frac{x^2}{2}\right) (x \geq 0)$</td>
<td>0.9420343</td>
<td>1.2986621</td>
<td>0.411233477</td>
</tr>
<tr>
<td>Maxwell distribution $w(x) = \sqrt{\frac{2}{\pi}} x^2 \exp\left(-\frac{x^2}{2}\right) (x \geq 0)$</td>
<td>0.9961067</td>
<td>1.4270493</td>
<td>0.434820745</td>
</tr>
<tr>
<td>The central normal distribution $w(x) = \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{x^2}{2}\right) (x \geq 0)$</td>
<td>1.2319012</td>
<td>2.0175806</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Weibull distribution

\[ w(x) = \gamma x^{\gamma-1} \exp(-x^\gamma), \quad (x \geq 0) \]

\[ a^2 = 1 + (1 - \ln \gamma)^2 - \frac{2(\gamma-1)}{\gamma} (C \ln \gamma + C + 1) + \left( \frac{\gamma-1}{\gamma} \right)^2 \left( C^2 + \frac{\pi^2}{6} \right) \]

Here \( C = 0.5772157 \) - Euler's constant.

For the purpose of reliability assessment and a potency of informational criterion its comparing with criterion of the Pearson \( \chi^2 \) has been led.

Comparing of a potency of criteria by a simulation modelling method has displayed that a potency of informational criterion same, as at criterion of the Pearson while probability to reject a true hypothesis slightly more low [2].

Let's consider an example of usage of informational criterion.

Observations over failures of servers at the large enterprise are reduced in tab. 2.

Table 2

<table>
<thead>
<tr>
<th>Number of observations</th>
<th>Value</th>
<th>Number of observations</th>
<th>Value</th>
<th>Number of observations</th>
<th>Value</th>
<th>Number of observations</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( i )</td>
<td>( xi )</td>
<td>( i )</td>
<td>( xi )</td>
<td>( i )</td>
<td>( xi )</td>
<td>( i )</td>
<td>( xi )</td>
</tr>
<tr>
<td>1</td>
<td>31.9</td>
<td>26</td>
<td>2045.4</td>
<td>51</td>
<td>95.4</td>
<td>76</td>
<td>984.3</td>
</tr>
<tr>
<td>2</td>
<td>1600.9</td>
<td>27</td>
<td>797.0</td>
<td>52</td>
<td>313.4</td>
<td>77</td>
<td>3146.5</td>
</tr>
<tr>
<td>3</td>
<td>654.9</td>
<td>28</td>
<td>4.3</td>
<td>53</td>
<td>262.2</td>
<td>78</td>
<td>21.1</td>
</tr>
<tr>
<td>4</td>
<td>2023.1</td>
<td>29</td>
<td>1645.2</td>
<td>54</td>
<td>1468.6</td>
<td>79</td>
<td>1158.8</td>
</tr>
<tr>
<td>5</td>
<td>134.5</td>
<td>30</td>
<td>377.8</td>
<td>55</td>
<td>1321.0</td>
<td>80</td>
<td>3217.7</td>
</tr>
<tr>
<td>6</td>
<td>3704.3</td>
<td>31</td>
<td>404.0</td>
<td>56</td>
<td>1238.8</td>
<td>81</td>
<td>2397.9</td>
</tr>
<tr>
<td>7</td>
<td>743.2</td>
<td>32</td>
<td>988.0</td>
<td>57</td>
<td>283.7</td>
<td>82</td>
<td>729.8</td>
</tr>
</tbody>
</table>
8 | 49.9 | 33 | 2573.2 | 58 | 209.0 | 83 | 582.7  
9 | 1143.2 | 34 | 205.4 | 59 | 2871.1 | 84 | 22.4  
10 | 262.2 | 35 | 857.9 | 60 | 682.2 | 85 | 381.5  
11 | 372.2 | 36 | 773.5 | 61 | 917.6 | 86 | 522.3  
12 | 128.9 | 37 | 220.9 | 62 | 3008.5 | 87 | 3010.2  
13 | 1203.0 | 38 | 563.8 | 63 | 2217.6 | 88 | 5917.8  
14 | 474.8 | 39 | 775.7 | 64 | 1372.8 | 89 | 2066.9  
15 | 191.0 | 40 | 2331.8 | 65 | 806.1 | 90 | 291.4  
16 | 401.5 | 41 | 52.8 | 66 | 1642.7 | 91 | 1652.0  
17 | 762.1 | 42 | 455.3 | 67 | 1507.1 | 92 | 3078.7  
18 | 39.6 | 43 | 105.9 | 68 | 3475.2 | 93 | 1025.0  
19 | 1507.8 | 44 | 1976.1 | 69 | 400.8 | 94 | 250.9  
20 | 42.7 | 45 | 240.5 | 70 | 1171.6 | 95 | 422.5  
21 | 595.7 | 46 | 20.3 | 71 | 863.3 | 96 | 340.9  
22 | 30.1 | 47 | 797.6 | 72 | 1590.5 | 97 | 880.8  
23 | 31.9 | 48 | 1736.0 | 73 | 225.0 | 98 | 353.6  
24 | 1600.9 | 49 | 1407.2 | 74 | 1199.2 | 99 | 734.3  
25 | 654.9 | 50 | 107.3 | 75 | 1379.3 | 100 | 310.6

The data contains convergence on duration of non-failure operation, i.e. slice of times from one failure to another (in hours). It is necessary to lead data analysis for the purpose of identification of the distribution law by means of criterion of the Pearson. It is necessary to mark that the researched random variable, according to the common reasons, should submit to exponential distribution.

Statistical sampling parametres have following values:

Arithmetic average- \( \bar{x} = \frac{1}{100} \sum_{i=1}^{100} x_i = 1025.5 \);
Average quadratic deviation: $S = \sqrt{\frac{1}{99} \sum_{i=1}^{100} (x_i - \bar{x})^2} = 1037.46$;

Maximum and minimum values in sampling: $x_{\text{max}} = 1039.8$; $x_{\text{min}} = 945.1$.

Algorithm of creation of the histogram is the following.

1. We divide a range of a researched random variable into intervals breadth $S$ (tab. 3).
2. We calculate the histogram, i.e. it is defined, how many time the random variable $X$ gets to each interval (tab. 4).

| Table 3. Intervals of a partition of a range of a random variable. |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Number | INTERVALS |
| Nu | 0-1025 | 1025-2050 | 2050-3075 | 3075-4100 | 4100-5125 | 5125-6150 |
| Range | 1 | 2 | 3 | 4 | 5 | 6 |

| Table 4. The histogram |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Number $i$ | INTERVALS |
| Number | 1 | 2 | 3 | 4 |
| Frequency $f_i$ | 63 | 23 | 8 | 6 |

Entropy is defined from given tab. 4 under the formula

$$H = -\sum_{i=1}^{k} \hat{p}_i \cdot \ln \hat{p}_i = -\sum_{i=1}^{n} \frac{f_i}{n} \ln \frac{f_i}{n} = 0.99997.$$  

Exponential distribution has following values of entropy parametres (tab. 1): $h=1$; $h^2-a^2=1$.

The informational criterion settles up under the formula
Critical value of informational criterion is defined through a normal distribution function:

$$t_\alpha : P(|x| > t_\alpha ) = \alpha; \quad \alpha = 2 \cdot \frac{1}{\sqrt{2\pi t_\alpha}} \int_{t_\alpha}^{\infty} \exp\left(-\frac{x^2}{2}\right)dx.$$  

Here $\alpha$ - a fiducial probability. At $\alpha=0.05$ the quantile $t_\alpha=1.96$.

Since $|J_c| < t_\alpha (0.00003 < 1.96)$ a null hypothesis about exponential distribution of a researched random variable is accepted.

Thus, it is shown that the informational criterion exceeds criterion of the Pearson and it will be used at the analysis of complicated systems.

**Bibliography**


offered. The new principles are universal and they allow to take into account any nonlinear and non-Gaussian processes.

**Key words:** econometrics, entropy, simulation

The informational method of simulation considered in this paper, is presented in the form of a solution of two tasks: 1) the analysis of hereditary effects in a line-up of relationships of cause and effect; 2) development of associations between factors and the indications simultaneously interacting with each other. The mathematical fundamentals of a solution of these tasks in machine industry have been developed for the analysis of engineering procedures in the eighties the XX-th centuries and generalised in the monography [1].

I. *Simulation of hereditary effects*

The informational method of simulation of hereditary effects is grounded on introducing of a line-up of factors interacting sequentially against each other in the form of an information channel in which the information on the first factor arrives and sequentially will be transformed to the information on a total indication.

Let's consider a case when initially unique factor \( X \) sequentially will be transformed to \( Y \) (fig. 1).

Here \( H(X_1), H(X_2), \ldots, H(X_n) \) – an information quantity concluded in factor \( X \) after first, second, ... last operation; \( H(Y) \) – an information quantity concluded in indication \( Y \); \( I(X_k \Rightarrow Y/X_1, X_2, \ldots, X_{k-1}) \) – an information quantity, transmitted to \( Y \) after working off \( k \) factors.
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The consecutive increment of the information is equal:

\[
\begin{align*}
I(X_1 \rightarrow Y) &= H(Y) - H(Y / X_1) \\
I(X_2 \rightarrow Y / X) &= H(Y / X_1) - H(Y / X_1X_2) \\
&\vdots \\
I(X_n \rightarrow Y / X_1...X_{n-1}) &= H(Y / X_1...X_{n-1}) - H(X...X_n),
\end{align*}
\]

(1)

Here \( H(Y) \) - an information quantity (entropy) about \( Y \); \( H(Y/X_1X_2...) \) - the information quantity (entropy) received as a result of action on \( Y \) of various not considered factors. Since \( H(Y | X_1X_2...X_n) = H(Y, X_1X_2...X_n) - H(X_1X_2...X_n) \), then

\[
\begin{align*}
I(X_1 \rightarrow Y) &= H(X_1) + H(Y) - H(X_1Y) \\
I(X_2 \rightarrow Y | X_1) &= H(X_1X_2) - H(X_1X_2Y) - H(X_1) + H(X_1Y) \\
I(X_3 \rightarrow Y | X_1X_2) &= H(X_1X_2X_3) - H(X_1X_2X_3Y) - H(X_1X_2) + H(X_1X_2Y) \\
&\vdots \\
I(X_n \rightarrow Y | X_1X_2...X_{n-1}) &= H(X_1X_2...X_n) - H(X_1X_2...X_nY) - H(X_1X_2...X_{n-1}Y) + H(X_1X_2...X_{n-1}Y).
\end{align*}
\]

(2)

The level of influence of factor \( X \) on an indication \( Y \) at informational simulation can be evaluated by means of coefficient of informational connection \( q \):

Fig. 1. The Information channel
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\[
\begin{align*}
q(X_1 \rightarrow Y) &= I(X_1 \rightarrow Y) / H(Y) \\
q(X_2 \rightarrow Y) &= I(X_2 \rightarrow Y / X_1) / H/Y) \\
q(X_n \rightarrow Y) &= I(X_n \rightarrow Y / X_1...X_{n-1}) / H(Y)
\end{align*}
\]

The coefficient of informational correlation is equal to unit if the information on an indication is completely defined by the information on factors; it is equal to zero if the indication does not depend on factors; generally the coefficient of informational correlation is concluded between zero and unit.

II. Simulation of simultaneous processes

Let the correlation between three factors-indications X, Y, Z is defined. On the basis of the chart of John Venn (fig. 2) is received:

\[
\begin{align*}
I(X \rightarrow Y) &= H(X) + H(Y) - H(X,Y) \\
I(X \rightarrow Z) &= H(X) + H(Z) - H(X,Z) \\
I(Y \rightarrow Z) &= H(Y) + H(Z) - H(Y,Z) \\
I(XY \rightarrow Z) &= H(X,Y) + H(Z) - H(X,Y,Z) \\
I(XZ \rightarrow Y) &= H(XZ) + H(Y) - H(X,Y,Z) \\
I(YZ \rightarrow X) &= H(YZ) + H(X) - H(X,Y,Z)
\end{align*}
\]

For the quantitative estimation of associations between parameters it is necessary to calculate coefficients of informational connection

\[
\begin{align*}
q(X \rightarrow Y) &= I(X \rightarrow Y) / H(Y) \\
q(X \rightarrow Z) &= I(X \rightarrow Z) / H(Z) \\
q(Y \rightarrow Z) &= I(Y \rightarrow Z) / H(Z) \\
q(XY \rightarrow Z) &= I(XY \rightarrow Z) / H(Z) \\
q(XZ \rightarrow Y) &= I(XZ \rightarrow Y) / H(Y) \\
q(YZ \rightarrow X) &= I(YZ \rightarrow X) / H(X)
\end{align*}
\]
Fig. 2. The chart of informational connection

Generalising the received outcomes on \( n \) parametres, association in between we will express the following formula:

\[
I(X_1X_2\ldots, X_{n-1} \rightarrow X_n) = H(X_1X_2\ldots X_{n-1}) + H(X_n) - H(X_1X_2\ldots X_n). \tag{6}
\]

III. The Analysis of models

At creation of models all theoretical values of entropies in the formulas reduced above are substituted by their estimations:

\[
\hat{H}(X) = \sum_{i=1}^{k} \hat{p}_i \ln \hat{p}_i, \tag{7}
\]

where \( \hat{p}_i = f_i / n \) - empirical probability of hit of an aleatory variable \( X \) in a state number \( i \); \( f_i \) - empirical frequency of hit of values \( X \) in this state; \( n \) - number of experiences.

It is displayed that the estimation of the information \( I(XY) \rightarrow \)to within a constant factor has \( \chi^2 \) allocation (see [2]):

\[
2n\hat{I} = \chi^2_m \tag{8}
\]

Here \( m = (k_1 - 1)(k_2 - 1) \) - number of degree of freedoms; \( k_1, k_2 \) - an amount of intervals of a partition of input and output parametres accordingly.
The information transmitted from one parametre to another, is considered significant, if
\[ 2n\hat{I} \geq \chi^2_{m,\alpha} \]  
(9)

Where \( \chi^2_{m,\alpha} \) - \( \alpha \) - a quantile \( \chi^2 \) - allocations; \( \alpha \) – a confidence level.

Allocation of the Pearson at \( m>25 \) can be substituted Gaussian distribution with a variance \( \sigma^2=2m \) that gives the chance to define a confidence interval for the information:
\[ \hat{I} - \frac{t_{\alpha}\sqrt{2m}}{2n} \leq I \leq \hat{I} + \frac{t_{\alpha}\sqrt{2m}}{2n} \]  
(10)

Value \( t_{\alpha} \) - \( \alpha \)-kvantil of a normal distribution. A confidence interval for coefficient of informational connection \( q \) is:
\[ \hat{q} - \frac{t_{\alpha}\sqrt{2m}}{2nH(Y)} \leq q \leq \hat{q} + \frac{t_{\alpha}\sqrt{2m}}{2nH(Y)} \]  
(11)

The minimum sample size is determined by means of necessary precision of \( \Delta I \) value:
\[ n_{\text{min}} = \frac{t_{\alpha}}{\Delta I} \sqrt{\frac{m}{2}} \]  
(12)

In case of linear model the coefficient of correlation and coefficient of informational connection have a close connection among themselves, defined by statistical equality \( q=r^2 \) [1].

IV. The Example of application of an informational model

It is necessary to research association of labour productivity (\( Y \)) from a salary (\( X \)) (in percentage of basic value) (tab. 1).

The first step – creation of the chart of dispersion (fig. 3.).

Than we build the two-dimensional histogram. It is for this purpose defined the main statistical performances of researched aleatory variables (tab. 2) and we divide ranges of factors \( X \) and \( Y \) into the intervals which breadth is close to an average quadratic deviation.
The third step is an evaluation of entropies $H(X)$, $H(Y)$, $H(X, Y)$.

Table 1.

<table>
<thead>
<tr>
<th>Input datas for model creation</th>
</tr>
</thead>
</table>
| Y

Downloaded from SWorld. Terms of Use http://www.sworld.com.ua/index.php/ru/e-journal/about-journal/terms-of-use
\[
\begin{align*}
H(X) &= -\sum_{i=1}^{k_1} \frac{f_i(x)}{n} \cdot \ln \left( \frac{f_i(x)}{n} \right) = 1,300196 \left( f_i(x) \neq 0 \right) \\
H(Y) &= -\sum_{j=1}^{k_2} \frac{f_j(y)}{n} \cdot \ln \left( \frac{f_j(y)}{n} \right) = 1,396325 \left( f_j(y) \neq 0 \right) \\
H(X,Y) &= -\sum_{i=1}^{k_1} \sum_{j=1}^{k_2} \frac{f_{ij}}{n} \cdot \ln \left( \frac{f_{ij}}{n} \right) = 2,134019 \left( f_{ij} \neq 0 \right)
\end{align*}
\]

Fig. 3. A field of dispersion of the experimental observations of association of labour productivity (Y) from a salary (X) (in percentage of basic value).

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>133,21</td>
<td>102,1</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>20,27154</td>
<td>17,34062</td>
</tr>
<tr>
<td>Sampling variance</td>
<td>410,9353</td>
<td>300,697</td>
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<tr>
<td>Minimum</td>
<td>101</td>
<td>69</td>
</tr>
<tr>
<td>Maxima</td>
<td>180</td>
<td>145</td>
</tr>
</tbody>
</table>

In tab. 3 frequencies of hit of values of a two-dimensional aleatory variable in appropriate intervals are reduced.
The mutual information is equal $I(X\rightarrow Y)=H(X)+H(Y)-H(X,Y)=0,562502$, and coefficient of informational connection $q(X\rightarrow Y)=I(X\rightarrow Y)/H(Y)=0,402844$.

The fourth step. An estimation of significance of the discovered connection by criterion of the Pearson (8). In our case $k_1=4$, $k_2=5$. Calculated value of Pearson criterion of the Pearson is equal to $\chi^2 = 2nI =112,503$. Table value at number of degree of freedoms $m = (4-1)(5-1) =12$ and a fiducial probability $\alpha=0,95$ is equal to $\chi^2_{12,0,95} = 21,02606$. Since a calculated value of Pearson criterion more than table connection between $Y$ and $X$ it is significant.

Thus, in paper the technique of simulation which is based on methods of the information theory is offered and justified. The example of creation of an informational model is reduced.

The bibliographic list
ALTERNATIVE ENERGY SOURCES DEVELOPMENT AS AN INSTRUMENT OF THE ENERGY SECURITY OF UKRAINE

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This report studied the problem of using the alternative energy sources in the national economy, define the most promising areas of alternative energy development in Ukraine and establish its potential and for national energy security.

Key words: alternative energy, energy security, biogas, solar energy, wind energy, energy industry, energy deficiency.

At the beginning of the XXI century widely traced the increasing the role of energy in economic development. The main reason of this is stable industrial production growing and rising the world population, which provokes the consumption of energy resources. According to the Global model of human development “World 3”, designed at Massachusetts Institute of Technology, there is a continuous, steady growth in world consumption of energy resources by an average of 1-2% annually, which in absolute terms is about 200 million tons of fuel. Moreover, according to this model, the part of third countries the process is constantly increasing and in 2020 reached 70% of total consumption.

According to this model in the near future expected a decreasing in production of raw energy. In particular, the most probable scenario of global oil reserves will be
exhausted in the next 39 years, natural gas - in 37 years. Moreover, the term resource depletion was calculated on the assumption that in during decades explored resources will be increased in 5 times than current data by opening new fields [1]. It can be assumed that the future price of energy will be increased in appliance with reduction of production.

The world market increasing of energy resources price is detrimenting the Ukraine economy. It is reflected in increasing the price of imported natural gas, and rising in price of gasoline and diesel fuel in the domestic market. Both of these factors provoke the increasing of costs of nearly all groups of domestic products, reducing their competitiveness and accessibility for consumers.

Overcoming the energy dependence of our country and establishing a database of its energy security is the priority sector of the domestic economy. Ukraine industry agriculture are in unfavorable economic situation, which need to find out the exit and requires innovative improvements according to saving technologies, modern types of energy, using the alternative and renewable energy sources (ARES). Considering the risk of reduction in energy supply of the world market in the long term. The last direction got the special actuality.
The problem of using alternative energy sources extensively shown in domestic and foreign scientific literature. So Meadows [1] works describes the problem of planning the use of natural resources to maintain ecological balance and preserve conditions for further growth. In particular, the author expresses the idea of necessity for a rapid transition from traditional to alternative energy sources to prevent its deficits.

In E. Buzovskoho, V. Skripnichenko, M. Luchnyk [2] researched the practical aspects of planning, organizing, operating and managing innovative development through the use of alternative energy sources and energy efficient technologies. These authors emphasize the exceptional role of energy resources in the world economy.

In B. Fradkins [3] works researched the high potential of alternative energy sources, including geothermal, over the traditional. Also provides specific recommendations of priority use of different energy sources in different geographical areas.

In the works of B. Danylyshyn [4] reveals the essence of the concept of “energy security” and deals with the problems of security in our country. In the works of T.
Ryauzovoi [5] and G. Zabarnnyi [6] also described the practical problems of using different types of alternative energy sources in Ukraine according to geographic and other characteristics of each region. However, the role of alternative energy sources in the energy security of our country is the question that requires research.

For this purpose, we had to identify the most promising areas of alternative energy development in Ukraine and establish its potential and importance for energy security of Ukraine.

In 2003 a group of Ukrainian experts developed the strategy of alternative, renewable and off-balance energy sources as part of the draft Energy Strategy of Ukraine till 2030. According to the project the share of renewable energy sources (RES) in total primary energy consumption in 2030 should reach 17.5% or 35 million tons of fuel. Of these, 7.03 million tons of fuel or 20.06% of the total alternative energy sources accounted for geothermal energy (Table 1).

### Table 1

**Using renewable energy in Ukraine 2001-2030 years [2]**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Production of electricity and heat for years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total million tons of standard fuel</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Solar energy</td>
<td>0,002</td>
</tr>
<tr>
<td>including:</td>
<td></td>
</tr>
<tr>
<td>- electricity</td>
<td>-</td>
</tr>
<tr>
<td>- thermal energy</td>
<td>0,002</td>
</tr>
<tr>
<td>Wind energy</td>
<td>0,01</td>
</tr>
<tr>
<td>Geothermal energy</td>
<td>0,004</td>
</tr>
</tbody>
</table>
Policy analysis of using the alternative and renewable energy sources show that the most promising indicators of potential output of electricity and thermal energy is biomass. That is why this type of energy, mainly produced from agriculture wastes - one of the most developed sectors of the domestic economy.

Analysis of foreign experience proved the high efficiency of this type of energy. Back in 1995, the EU countries the share of biomass accounted for 60% of energy consumption derived from renewable sources (6% of total primary energy consumption). So in some countries, the share of biomass in total energy consumption is much higher than the average European figures: in the U.S. - 3.2%, Denmark - 8%, Austria - 12%, in Sweden - 18%, Finland - 23%. According to the program of ARES in the EU by 2010, the share of biomass in total ARES will be 74%, which is equivalent to 9% of total energy consumption.

Ukraine has great potential of production of bioethanol (based on alcohol and corn) and biodiesel (raw material - rape). The average harvest of rapeseed is 603 thousand tons of crop area - 821 hectares). In addition, the cost of ethanol is constantly decreasing because alcohol is cheaper production [7].

Analyzing global experience determined that for implementation ethanol production in Ukraine is necessary to intense potential raw material culture for processing into bioethanol. After that production start be the effective alternative crop for this is beets, that can directly process the sugar factories in 25% concentrated syrup from further processing into alcohol-factories. To produce 1 ton of 25% nd syrup to recycle 2 tons of sugar beet roots. In a production conditions, can get 166.5 liters of
bioethanol. Cost of raw materials to produce 1 liter of ethanol at the current price of sugar beets 220 UAH/t. (Excluding VAT) will be 2.34 UAH /Liter. [8]. Such the price of biodiesel will be much lower than the price of gasoline, which in 2012 ranged at 11 UAH/Liter. Thus, even this minimal substitution of traditional petroleum fuel will reduce fuel price, reduce transport services costs and the revival the economic activity of enterprises.

The problem of natural gas expensiveness, that is mainly used public utilities, can be solved by using other alternative energy sources such as wind and solar. Ideas of using solar and wind energy had been developed earlier than other types of alternative energy, as humanity has accumulated considerable experience of its application. The capacity of wind turbines increased tenfold by technology development and start to be competitive with other energy types. Its main drawback is season and weather dependence, but modern means of energy storage are given to partially solve this problem.

Nowadays the most promising kinds of solar energy in Ukraine are:

1. direct conversion into low-potential heat without prior concentration flux of solar radiation (for hot water facilities, public utilities and heating process, agriculture necessity);

2. direct conversion into electrical energy by means of direct current solar cells.

Pilot projects, that had been implemented during the recent years, showed that the annual heat energy in Ukraine is 500 - 600 kWh h/m2. Considering the potential of solar collectors using in progressive countries that means 1 m2 per person, annual efficiency of solar installations for Ukraine and hot water supply and heating can be 28 kWh h/m2 heat. Realization of this potential give the possibility to save 3.4 million tons per year.

Talking about solar radiation as base of energy production, the technically permissible potential of solar energy roofs housing Ukraine today is 26 - 37 TWh/year,
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which in monetary terms is (at present the cost of 1 kWh = 0.05 euro): 1.3 - 1.8 billion euro per year [9].

Wind power is absolute effective. In our country, it is possible to build wind farms on the Black sea and the sea of Azov coasts, steppes and mountains in Crimea and the Carpathians. In time of high fuel prices, turbines are competitive in price policy and able to participate in satisfaction of energy necessity.

Ukraine has significant wind resources. In winter amount of wind energy resources is the largest. The average wind speed during season is 3,8-4,1 m/s. On the north territories 2,6-3,0 m/s. at Zakarpatiya 3.8 - 4.9 m/s. in central and increase on eastern and southern Ukraine to 6 m/s. In the regions of the Ukrainian Carpathians, on the Black Sea and Sea of Azov average wind speed reaches 7 - 8 m/s.

Power density of wind energy lowest of Zakarpatiya (Uzhhorod, 21 W/m2) and on north (Zhytomyr, 66 W/m2). Quite significant wind potential inherent at the eastern regions (Donetsk, 452 W/m2). Power density of wind energy in the regions of the Ukrainian Carpathians and the Black Sea and Sea of Azov and the largest is 471-597 W/m2.

The same distribution has a number of potential generated by wind energy. This index is 800 - 1000 MDzh/m2 on the north and central regions with increasing in the east and south to 3500 - 4000 MDzh/m2. In the regions of the Ukrainian Carpathians, this index reaches maximum values (Mzh/m2/sezon 4707, p. Pozhezhevska) [11].

That is why, wind energy is a universal energy source for the entire territory of our country, and particularly has great potential in some regions such as Crimea, Carpathians, Zakarpatiya, Donetsk Upland, Azov and Black Sea lowlands. In these regions, wind energy is a viable alternative thermal power plants (TPP), that is not only consume costly resources, but also bring damage to the environment and pose a threat to surrounding areas.

In the nowadays economy the importance of alternative energy sources increases according to decreasing reserves of traditional energy resources and increasing costs of
its production. There are factors, that determine alternative energy as foreground that traditional:

1. renewable property;
2. environmental safety;
3. relatively uniform accessibility.

Considering this, the increasing of renewable energy sources using will allow to our country to significantly strengthen its energy savety. Using biofuels as a substitute for traditional petroleum products, according to the authors, will enable to reduce Ukraine's dependence on oil prices on international fuel market. At the same time, the construction of new wind and solar generators will significantly reduce the burden on TES and reduce consumption of natural gas and coal.

Implementation of these measures to enhance energy security requires the creation of targeted government programs in this direction, and improve the legislation in order to create more favorable conditions for development of alternative energy sources. Taking to attentive, the now we have got the constant progress and power plants with alternative energy sources, with implementation of mentioned measures, Ukraine has the opportunity to realize significant benefits in the long term.

References:

3. Fradkin V. Energya s dna okeana / V. Fradkin / / Novye istochniki energyi, E resource http://www.dw-world.de/


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Bogatyreva M.R., Hayrtdinova A.A.

SOVERSHENSTVOVANIE MECHANISM ADAPTATION MIGRANT LABOUR MARKET

Bashkir State University

Introduction

With the development of the division of labor, with the emergence of new types and segments of labor and employment, increasing complexity of the economic system
and the dynamics of processes occurring in it is increasing public demand for a change of employment and full mobility of workers. The change of work is "the universal law of social production", which most powerfully manifested only since the great Industrial Revolution. [1]

Migration is one of the main problems of population and is seen not only in terms of a simple mechanical movement of people, but as a complex social process that affects many aspects of social and economic life, which makes updating the issue.

In the modern world, and migration processes are an important factor of our economic, social and cultural spheres. Migration process affects the spatial transformation of social relations. [2]

Thus, migration is a constructive economic and social force causing flow of workers, economic development, cultural enrichment.

Russia, like many other countries in the world, is facing at the end of XX - beginning of XXI century. with a strong stream of migrants caused a new political and socio-cultural situation: the disintegration of the USSR, the intensification of the processes of globalization.

Data on the number of migrants 1997 2009godu presented in Table 1 and Fig. 1. [3]

Table 1

<table>
<thead>
<tr>
<th>International migration (people)</th>
<th>1997</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
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</thead>
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<td>Arriving in Russia</td>
<td>597651</td>
<td>129144</td>
<td>177230</td>
<td>186380</td>
<td>286956</td>
</tr>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from CIS</td>
<td>571903</td>
<td>119661</td>
<td>168598</td>
<td>177657</td>
<td>273872</td>
</tr>
<tr>
<td>from foreign countries</td>
<td>25748</td>
<td>9483</td>
<td>8632</td>
<td>8723</td>
<td>13084</td>
</tr>
<tr>
<td>Emigrants from Russia</td>
<td>232987</td>
<td>94018</td>
<td>69798</td>
<td>54061</td>
<td>47013</td>
</tr>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS countries</td>
<td>146961</td>
<td>46081</td>
<td>36109</td>
<td>35262</td>
<td>31329</td>
</tr>
<tr>
<td>to foreign countries</td>
<td>86026</td>
<td>47937</td>
<td>33689</td>
<td>18799</td>
<td>15684</td>
</tr>
</tbody>
</table>
In the period from 1997 to 2009, the number of migrants who arrived in Russia declined by more than half. During this period, the number of emigrants who left the country, reduced by 80%.

In 2010-2011, there was an increase the size of interregional migration. According to a survey on employment, the number of employees who worked outside of their subject, made in 2011, an average of 1.6 million versus 1.0 million in 2010. In 2010, By reducing the total demand for labor, domestic labor migration decreased to 1.4 million people in an average year. The average for 2010, the number of people working outside their subject was 1.8 million people, or 2.6% of total employment. [4]

The result of massive international migrations are different versions of interactions (interactions) migrants with the host society. This provision is particularly emphasizes the need to consider and describe the problem sotsiokulurnoy adaptation ethnic groups. This type of adaptation can be defined as the process and the result of active adaptation to the conditions of ethnic groups in other social and cultural environment.
There are four basic strategies that are used by migrants in the adaptation process (Tab. 2).

### Table 2

<table>
<thead>
<tr>
<th>Adaptation strategies of migrants</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Passive strategy of autarky</td>
<td>Migrants avoid direct contact with the foreign culture and eliminate the negative symptoms of culture shock. This strategy is typical for members of ethnic minorities (immigrants, refugees) living in large cities, metropolitan areas.</td>
</tr>
<tr>
<td>2. Aggressive strategy of autarky</td>
<td>Another culture sharply criticized and rejected. Workers are actively seeking to move their attributes of culture and stereotypes in a new environment, to impose their own perception of the world environment.</td>
</tr>
<tr>
<td>3. Settlement Strategy</td>
<td>Voluntary or forced abandonment of migrants from their native culture and complete identification of a new ethnic group.</td>
</tr>
<tr>
<td>4. Integration Strategy</td>
<td>The most successful adaptation strategy, which is to maintain etnomenshinstvami commitment to their culture. Increased intercultural dialogue between migrants and the dominant ethnic majority.</td>
</tr>
</tbody>
</table>

The choice of a strategy depends on a number of factors: 1) personal characteristics (age, education, values, motivation). Value orientation - the ratio of the individual to the social values that govern its behavior. [5] 2) the characteristics of the interacting cultures (objectively existing and perceived degree of similarities or differences between cultures).

Adaptation problems have come from the neighboring countries appear most often in the legal field. This issue of legalization of their stay, with the government employment, relevant guarantees and indemnifications.
Current immigration policies are often focused on narrow economic consideration labor migration as a source of labor, or in demographic terms - as a substitute natural population decline. Thus, the lack of focus on the balance between the interests of the state, society, business and the migrants themselves, the lack of developmental work of the institutional and legal mechanisms to exacerbate existing problems.

**Conclusions**

So, the key concerns is the situation in the field of migration on the labor market in the country, are:

- The growing tension in the labor market, the competition for jobs because of the predominance of the current tendency of migrant workers in certain occupations;
- A high proportion of illegal immigrants;
- Inconsistency migration real needs of the labor market. The state's goal is to ensure the arrival of migrants in the region, which actually is a shortage of workers. But in practice, the bulk of the migration is going to force the Central Federal District (about 50% of the total migratory flow, including in Moscow and the Moscow region - more than 30%);
- Inadequacy of the labor market created by the mechanisms of regulation of migration. The country does not enter those experts that there is a need;
- Low-skilled migrant workers;
- The lack of foreign-language adaptation of migrants. Institutions adapt such workers are virtually absent in most regions.

Thus, the major factors affecting the adaptation of migrants are the level of education, language skills, value orientation, marital status, qualifications of the labor force.

In order to improve the adaptation mechanisms for migrants in the labor market is the development of migration policy. Not all migration issues within the competence of the Federal Migration Service, for example, the health of immigrants. The Russian government said that in the long term solution of migration problems should be closely
linked with the integration processes in the EU, and tighter integration in the post-acts as a "real alternative to uncontrolled migration flows."

References:

MARKET INFRASTRUCTURE IN THE CONTEXT OF CAPITALIZATION OF THE ECONOMY OF THE REGION

Lyshchikova Y.V.

National Research University Belgorod State University, Belgorod, Pobedy 85, 308015

In this report the role of market infrastructure in increasing the capitalization of the regional economy is considered, the base and the generalized indicators of the security of regions of Central Black Earth economic region with the objects of market infrastructure are calculated.
Introduction. Market infrastructure (the commodity and stock markets, leasing companies, credit institutions, banking, investment companies and funds, consulting firms) should be also included, in our view, in the list of components of the capitalization of the regional economy, as effective functioning of market mechanisms affects the profitability of production, introduction of high technology, the investment climate and other macro-and microeconomic processes in the region.

The main science research. The relative security of the region with the objects of market infrastructure should be assessed on the basis of the composite indicator (index) of the level of development of market infrastructure.

This indicator integrates in the comparison with the average levels of security of options (per 10 thousand population) enterprises and organizations of the following activities (recorded in annual reporting to the subjects of the Russian Federation):

1) financial activities (sector of credit and insurance services to businesses and the public);

2) real estate, renting and business activities.

The composite indicator of the level of development of market infrastructure in the region is calculated by determining the arithmetic average of the indexes of the comparative number of businesses and organizations of abovementioned economic activities per capita [2].

The diagram in fig. 1 shows the level of the development of financial infrastructure of regions of Central Black Earth economic region in 2006-2010 years, calculated on the basis of the number of enterprises and organizations in credit and insurance markets, per capita relative to the average Russian value.
Fig. 1. The level of the development of financial infrastructure of the regions of Central Black Earth economic region in 2006-2010 years.

The figure shows that the largest and relatively stable value of the basic indicator in this group of regions has Belgorod region (average 0.74). Slight increase in the period demonstrate Voronezh (from 0.36 in 2006 to 0.43 in 2010) and Tambov regions (from 0.21 in 2006 to 0.26 in 2010). In this case the Tambov region is of the least ensured with the financial infrastructure among the regions of Central Black Earth economic region. Indicators calculated for the Kursk and Lipetsk regions during the investigated period are characterized by similar trends and approximately equal values (average 0.47 for the Kursk region and 0.44 for Lipetsk). It should also be noted that the level of provision of financial infrastructure in all regions of Central Black Earth economic region in 2006-2010 years is significantly lower than the average Russian value.

Figure 2 shows the dynamics of the basic indicators of the infrastructure of sphere of operations with real estate, renting and business activities of the regions of Central Black Earth economic region, calculated on the basis on the number of enterprises and organizations engaged in real estate operations, leasing and services per capita in relation to the average Russian value.
Fig. 2. The level of the development of infrastructure in operations with real estate, renting and business activities of the regions of Central Black Earth economic region in 2006-2010 years.

The highest, however, demonstrating a tendency to decrease indicators has Voronezh region (from 0.67 in 2006 to 0.62 in 2010). Other regions of this group show a slight increase and a small spread of values of the basic indicator in the investigated period (group average 0.42). In general, it can be concluded that the level of infrastructure of sphere of operations with real estate, renting and business activities of the regions of Central Black Earth economic region in 2006-2010 year is significantly lower than the average Russian value.

Aggregated indicators of the regions of Central Black Earth economic region market infrastructure, calculated as the average of the values of the basic indicators of the level of security infrastructure and financial infrastructure in the area of operations with real estate, renting and business activities, are presented in figure 3.
Analyzing the results it can be concluded that the greatest potential for performance security infrastructure have Voronezh and Belgorod regions (average generalized indicator 0.60 for both regions). In addition, for the Voronezh region more to the bottom line provides a basic indicator of infrastructure in the area of operations with real estate, renting and business activities, and the Belgorod region benefits from a basic indicator of the financial infrastructure. Kursk and Lipetsk regions are characterized by the same trend and approximately equal values of the generalized indicator of infrastructure capacity (an average of 0.46 and 0.42, respectively). Stable growth, but low rates in this period demonstrates the Tambov region (from 0.31 in 2006 to 0.40 in 2010). In conclusion, it should be noted that the level of the regions of Central Black Earth economic region market infrastructure in 2006-2010 years is significantly lower than the average Russian value [1].

Conclusions and suggestions. Thus, the regions need to develop a set of measures to increase security of regions of Central Black Earth economic region with the objects of market infrastructure, which, in our opinion, it is appropriate to include the following destinations:
• development of transport infrastructure, networks and resources, energy infrastructure;
• the development of business services (advertising, examination, audit, consulting, engineering, etc.);
• development (or creation) of a regional financial and investment infrastructure;
• the development of organizations for the operation of the economic mechanism, financial resource, legal and administrative support for entrepreneurship.

References:


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Galenko V.N.

FEATURES OF DIVERSIFICATION OF AGRICULTURAL SECTOR

Crimean agrotechnological university,
Simferopol, Agrarne, 95492

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In this report we describe the concept of diversification of the agricultural sector, the main features and kinds. We conduct a situational analysis to identify promising directions of diversified development of the agrarian sector of the Crimea. We determine the needs of peninsula in agricultural products and, accordingly, the branches of agricultural sector, which can provide a seamless product sales, and industry with no production.

Key words: «agrarian sector», «diversification», «situation analysis», «agriculture», «manufacturing», «food».

Introduction. The main feature of agriculture is that its effectiveness depends on the climatic conditions and the economical orientation of a particular region. Many economists, such as Lobov O.V., Finogeev B.L., Gorodetskaya N.N. [1] considered in their works problems and prospects of Crimea. A.V. Efremov gave attention to the relevant branches of social and economic dimensions of the region [2].


The main part. Currently, the agricultural sector of Ukraine actively develops in two opposite directions. The first is unification of small enterprises of agrarian sector in agroindustrial formations and thus the unity of the process of production and sales and as a result a liquidation of a small business. Supporters of this trend are A.O. Blinov [3] and V.N.Beletsky [4], who successfully adopted it in practice. This direction can be attributed to the European model of economic development, which was investigated by V. Savchenko [5].

Another direction involves diversification of small farms and the creation of activities unrelated to the main proceedings [6]. Diversification has long used in the Western economic science as an economic term that means penetration into new areas of activity [6]. The diversification is also considered as a way to improve business
efficiency and the distribution of investments among a variety of the activities that are not related to each other directly [7]. A.Striklend and A.Tomson consider diversification as an increase in production versions [8].

S.M. Klimenko and Dubrova A.S. defined the process of diversifying as the allocation of invested funds between various objects directly related to each other [9]. V.V. Lukyanov and Golovach T.V. agree with that definition, but note that the main purpose of diversification - is to reduce the risk of loss of capital or an income [10]. From this goal arises the concept of risk diversification which means an entrepreneurial activity in areas that are exposed to different types of risk [11].

Owen A. notes that diversification is the simultaneous development of unrelated types of production, expanding the range of products [12]. J. Downs believes that the diversification of economic activities is an extension of the activity of large firms and businesses, and even entire industries beyond the core business [13].

There are two main forms of diversification: vertical and horizontal. Horizontal occurs when an enterprise develops new to them the agricultural sector, which operate independently (non-integrated horizontal diversification) or interrelated (horizontally integrated diversification) [6]. Gohan P.A. gives the following definition of horizontal diversification as a diversification through the introduction of new products - analogues to increase demand among the traditional buyers [14].

Vertical diversification is typical for companies that develop non-agricultural sectors, technology related to agriculture (vertically integrated diversification) or not at all related to agriculture (non-integrated vertically) diversification [6]. A.M.Aronov and A.N.Petrov consider that the vertical diversification is diversification of investments in production associated with different stages of processing of the same product [15]. Author Malskaya M.P. leads a similar classification of diversification [7].

The diversification process are objective in nature, and it means that on the one side it is a response to environmental conditions, and on the other - is a catalyst for external
changes[16]. For the right choice to diversify agricultural production in Crimea we should do a detailed analysis of the external and internal environment.

Table 1

Table 1 - SWOT-analysis of the factors that determine the direction of diversified development of the Crimean region.

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>- landscape variety of territory;</td>
<td>- high-energy-and resource-intensive production;</td>
</tr>
<tr>
<td>- climatic resources are favorable for development of an agriculture and</td>
<td>- imperfection-territorial structure of the economical branches;</td>
</tr>
<tr>
<td>and a recreation;</td>
<td>- degradation of products due to the use of backward technologies;</td>
</tr>
<tr>
<td>- development of all types of transport (sea, air, railway and automobile);</td>
<td>- lowest attraction for tourists.</td>
</tr>
<tr>
<td>- favorable geographical positions between the Western Europe and the</td>
<td></td>
</tr>
<tr>
<td>Asian continent;</td>
<td></td>
</tr>
<tr>
<td>- multicultural population of the Crimea.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>- expansion of a network of protected territories and solving of environment problems;</td>
<td>- loss of a regional originality (in resource, landscape, historical and cultural attitudes) and a territorial variety;</td>
</tr>
<tr>
<td>- expansion of organic farming;</td>
<td>- ecological accident.</td>
</tr>
<tr>
<td>- transition to more and more wide use of secondary resources;</td>
<td></td>
</tr>
<tr>
<td>- reduction of urbanization in rural areas;</td>
<td></td>
</tr>
<tr>
<td>- social issues (rural employment, welfare);</td>
<td></td>
</tr>
<tr>
<td>- development of infrastructure in rural areas;</td>
<td></td>
</tr>
<tr>
<td>- revival of national culture, traditions and crafts.</td>
<td></td>
</tr>
</tbody>
</table>

The main role in the situation analysis belongs to SWOT-analysis (Strength, Weaknesses, Opportunities and Threats), by which we can identify the strengths and weak sides of industry, opportunities of development and threats, and turn weaknesses into strengths and threats - into opportunities. The results are shown in Table 1.
Crimea in the current conditions of the market economy can function effectively, if it uses its own potential and environmental conditions that are outside, but favorable for the development.

Choosing the most suitable areas of agricultural production in the Crimea it is necessary to determine the need for each type of agricultural production. Science-based standards of food consumption per person can help to determine the need for agricultural products [17].

**Table 2 – The food consumption in the Crimea, per capita, per year.**

<table>
<thead>
<tr>
<th>Products Category</th>
<th>Rational norm, kg</th>
<th>2000</th>
<th>2005</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011 to norm, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and meat products, kg</td>
<td>53</td>
<td>40,8</td>
<td>46,8</td>
<td>62,4</td>
<td>61,2</td>
<td>62,4</td>
<td>64,8 122,3</td>
</tr>
<tr>
<td>Milk and milk products, kg</td>
<td>125</td>
<td>174</td>
<td>200,4</td>
<td>246</td>
<td>212,4</td>
<td>207,6</td>
<td>200,4 160,3</td>
</tr>
<tr>
<td>Eggs, pieces</td>
<td>220</td>
<td>240</td>
<td>240</td>
<td>240</td>
<td>252</td>
<td>228</td>
<td>240 109,1</td>
</tr>
<tr>
<td>Fish and fish products, kg</td>
<td>13</td>
<td>16,8</td>
<td>19,2</td>
<td>25,2</td>
<td>22,8</td>
<td>19,2</td>
<td>18 138,5</td>
</tr>
<tr>
<td>Sugar, kg</td>
<td>24</td>
<td>45,6</td>
<td>38,4</td>
<td>39,6</td>
<td>38,4</td>
<td>33,6</td>
<td>34,8 145</td>
</tr>
<tr>
<td>Potatoes, kg</td>
<td>95</td>
<td>96</td>
<td>79,2</td>
<td>73,2</td>
<td>67,2</td>
<td>62,4</td>
<td>63,6 66,9</td>
</tr>
<tr>
<td>Vegetables and melons, kg</td>
<td>110</td>
<td>112,8</td>
<td>98,4</td>
<td>115,2</td>
<td>118,8</td>
<td>111,6</td>
<td>122,4 111,3</td>
</tr>
<tr>
<td>Fruits, berries, grapes, kg</td>
<td>64</td>
<td>32,4</td>
<td>34,8</td>
<td>51,6</td>
<td>44,4</td>
<td>45,6</td>
<td>48 75</td>
</tr>
<tr>
<td>Bread and bread products, kg</td>
<td>123,4</td>
<td>139,2</td>
<td>116,4</td>
<td>116,4</td>
<td>114</td>
<td>112,8</td>
<td>111,6 90,4</td>
</tr>
</tbody>
</table>

In the composition of the products, consumed by the population of Crimea, dominate by milk and milk products, eggs, vegetables, meat, fish and sugar. Analyzing Table 2, we can see that the consumption of potatoes, vegetables and grain products is less than the recommended norms by 33%, 25% and 10%. All other products consumes in an amounts more than the recommended norms. This is due to the fact that the
consumer basket was approved 13 years ago in 2000. Actual consumption reflects the condition of supply and demand and suggests of excess in food production. We analyze the size of the surplus of production, taking into account the main channels of sales for agricultural produce.

Knowing the need for basic food per person and the total population, we can calculate the total annual demand for agricultural products. But except for the resident population of the Crimea it is necessary to consider the recreational orientation of the peninsula. The average number of days in for each tourist in 2005 was 12,9 days, in 2000 - 14 days, in 2011 it was 11 days. That is why, each of tourists stay in Crimea for a 0,04 of the year.


Table 3 shows that in 2000 the need of milk and potatoes was satisfied (144,6%, 118,3%) but it was not enough of meat and vegetables (58% and 75,7%) and it was not enough of potatoes, vegetables and fruits (75,2%, 52,3%, 41,2%) in 2005, and the production of milk and eggs exceeded consumption by of 24,9% and 19,1%, as in the following years in 2008 - 33% and 45,3%, 2009 – 36,1% and 60,6%, in 2010 - by 29,3% and 68,7%, in 2011 - by 23% and 65,4%. Starting since 2008, there has also been an overproduction of meat, potatoes and vegetables (in 2011 overproduction reached 127,9%, 225,6% and 180,4%,). However, over the analysing period there is a shortage of fruit (the level of satisfaction of the needs in 2009 is only 55,8%).

The reducing of the areas under perennial plantings connected with different economic and natural factors had a negative impact on the production of fruits and grapes and, as a consequence, in the Crimea increased deficit of fruits (Fig. 1).
Table 3 - Analysis of needs of the Crimea by its own food production,

<table>
<thead>
<tr>
<th>Year</th>
<th>Meet, thousand tons</th>
<th>Milk, thousand tons</th>
<th>Eggs, million units</th>
<th>Potatoes, thousand tons</th>
<th>Vegetables, thousand tons</th>
<th>Fruits, thousand tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>68,5</td>
<td>402,6</td>
<td>447,1</td>
<td>250,2</td>
<td>185,5</td>
<td>133,5</td>
</tr>
<tr>
<td>Needs of population</td>
<td>108,7</td>
<td>256,3</td>
<td>451,2</td>
<td>194,8</td>
<td>225,6</td>
<td>131,2</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>9,3</td>
<td>22,0</td>
<td>38,7</td>
<td>16,7</td>
<td>19,4</td>
<td>11,3</td>
</tr>
<tr>
<td>Total demand</td>
<td>118,0</td>
<td>278,3</td>
<td>489,9</td>
<td>211,5</td>
<td>244,9</td>
<td>142,5</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>58,0</td>
<td>144,6</td>
<td>91,3</td>
<td>118,3</td>
<td>75,7</td>
<td>93,7</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>114,8</td>
<td>346,8</td>
<td>581,9</td>
<td>158,8</td>
<td>127,9</td>
<td>58,6</td>
</tr>
<tr>
<td>Needs of population</td>
<td>105,2</td>
<td>248,2</td>
<td>436,8</td>
<td>188,6</td>
<td>218,4</td>
<td>127,1</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>12,5</td>
<td>29,5</td>
<td>51,9</td>
<td>22,4</td>
<td>26,0</td>
<td>15,1</td>
</tr>
<tr>
<td>Total demand</td>
<td>117,7</td>
<td>277,7</td>
<td>488,7</td>
<td>211,0</td>
<td>244,4</td>
<td>142,2</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>97,5</td>
<td>124,9</td>
<td>119,1</td>
<td>75,2</td>
<td>52,3</td>
<td>41,2</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>137,8</td>
<td>363,4</td>
<td>699,0</td>
<td>349,8</td>
<td>286,1</td>
<td>105,7</td>
</tr>
<tr>
<td>Needs of population</td>
<td>104,0</td>
<td>245,3</td>
<td>431,7</td>
<td>186,4</td>
<td>215,9</td>
<td>125,6</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>11,9</td>
<td>28,0</td>
<td>49,3</td>
<td>21,3</td>
<td>24,6</td>
<td>14,3</td>
</tr>
<tr>
<td>Total demand</td>
<td>115,9</td>
<td>273,3</td>
<td>481,0</td>
<td>207,7</td>
<td>240,5</td>
<td>139,9</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>118,9</td>
<td>133,0</td>
<td>145,3</td>
<td>168,4</td>
<td>119,0</td>
<td>75,5</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>139,0</td>
<td>367,2</td>
<td>762,5</td>
<td>401,4</td>
<td>398,4</td>
<td>77,1</td>
</tr>
<tr>
<td>Needs of population</td>
<td>103,8</td>
<td>244,8</td>
<td>430,9</td>
<td>186,1</td>
<td>215,4</td>
<td>125,3</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>10,6</td>
<td>25,0</td>
<td>44,0</td>
<td>19,0</td>
<td>22,0</td>
<td>12,8</td>
</tr>
<tr>
<td>Total demand</td>
<td>114,4</td>
<td>269,8</td>
<td>474,9</td>
<td>205,1</td>
<td>237,4</td>
<td>138,1</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>121,5</td>
<td>136,1</td>
<td>160,6</td>
<td>195,7</td>
<td>167,8</td>
<td>55,8</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>145,0</td>
<td>352,9</td>
<td>810,7</td>
<td>366,5</td>
<td>398,7</td>
<td>115,6</td>
</tr>
<tr>
<td>Needs of population</td>
<td>103,7</td>
<td>244,6</td>
<td>430,5</td>
<td>185,9</td>
<td>215,2</td>
<td>125,2</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>12,0</td>
<td>28,4</td>
<td>50,0</td>
<td>21,6</td>
<td>25,0</td>
<td>14,5</td>
</tr>
<tr>
<td>Total demand</td>
<td>115,7</td>
<td>273,0</td>
<td>480,4</td>
<td>207,5</td>
<td>240,2</td>
<td>139,8</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>125,3</td>
<td>129,3</td>
<td>168,7</td>
<td>176,7</td>
<td>166,0</td>
<td>82,7</td>
</tr>
<tr>
<td>2011 год</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>147,8</td>
<td>335,2</td>
<td>792,9</td>
<td>467,1</td>
<td>432,5</td>
<td>99,7</td>
</tr>
<tr>
<td>Needs of population</td>
<td>103,6</td>
<td>244,4</td>
<td>430,1</td>
<td>185,7</td>
<td>215,0</td>
<td>125,1</td>
</tr>
<tr>
<td>Consumption of tourists</td>
<td>11,9</td>
<td>28,1</td>
<td>49,5</td>
<td>21,4</td>
<td>24,7</td>
<td>14,4</td>
</tr>
<tr>
<td>Total demand</td>
<td>115,5</td>
<td>272,5</td>
<td>479,5</td>
<td>207,1</td>
<td>239,8</td>
<td>139,5</td>
</tr>
<tr>
<td>Supplying of needs, %</td>
<td>127,9</td>
<td>123,0</td>
<td>165,4</td>
<td>225,6</td>
<td>180,4</td>
<td>71,5</td>
</tr>
</tbody>
</table>
Fig. 1 - The supplying of own production of the resident population and tourists in the Crimea in 2011, %.

**Conclusion.** To choose the right direction for agricultural production of the Crimea necessary to take into the most complete using of the unique natural conditions, bioclimatic potential of the peninsula. The scale of production should provide not only satisfy the needs of people in the Crimea and leisure travelers, but also produce a number of products for sale outside.

Necessary to consider that agriculture is an economic base for the life of the country and the basis for the production of food and raw materials, and rural area is a place for recovery of people with the unique national traditions and culture.

The analysis of food products in the Crimea in per capita terms, and analysis of the needs of the Crimean region from own production shows that the region is provided with food (except fruits and grapes), and the natural processes of diversification of agricultural production in the Crimea has been occurring for quite some time. Within the last 8 years successfully develop and operate enterprises of rural green tourism, oyster farms, ostrich farms and horse farms.
Consequently, diversification provides the opportunity not only to solve economic and social problems in rural areas, but also provide additional sales channels for agricultural products.

Thus, we can determine that the diversification of the agricultural sector is a system of functioning subsectors of agriculture, which combine a variety of directions in the holistic market success factor, which is in line with strategic plans and goals of a business entity.

References:

11. Kunc, P.M. Strategija diversifikacii i uspeh predprijatija // Problemy teorii i praktiki upravlenija, 1994, №1. – S. 99-100


17. Postanova Kabinetu Ministriv Ukrainy vid 14.04.2000 № 656 «Pro zatverzhennja naboriv produktiv harchuvannja, naboriv neprodovol'chih tovariv ta naboriv poslug dlja osnovnih social'nih i demografichnih grup naselennja».


Ren Junen

THE FLUCTUATIONS IN INTERNATIONAL OIL PRICE AT POST-CRISIS ERA AS WELL AS THE FUTURE TREND: A MULTIPLE-EQUILIBRIUM VIEW

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On the basis of making analysis on the long-term and short-term characteristic fact of the fluctuations in international oil price, this article established an international oil price change model from a multiple-equilibrium view, and also forecasted the possible future trend of international oil price during post-financial crisis era. This article believes that, in the next several years, the continuous rise in international oil price is an irreversible trend. Furthermore, affected by the expectation on global economic recovery as well as the increasing supply and demand contradiction of oil resource, the international average oil price will keep shocks in the next several years.

Key words: international oil price, multiple equilibrium mode, short-term fluctuations, long-term tendency.

At the end of the 20th century when a stable transition-period of 20 years has elapsed, "Cheap oil price era" terminates while the world enters "high oil price era" instead. According to the authoritative data released by the Energy Information Administration (EIA), the nominal price of WTI spot oil price was only $27.26 / barrel in January 2000, but reached as high as 54.95 U.S. dollars/barrel in March 2005, with increase rate surpassing 101%. This has exceeded the tolerance capacity of any economist and industrial practitioner. However, in fact the world has unshed in the "third global oil crisis" in history. The international oil price has been soared and hit the historical top price of $147 / barrel price in July 2008, representing dramatic rise of 4-5 times over 10 years ago. Needless to say, this global oil crisis sweeping the world has surpassed the previous two times in terms of shock extent and rising speed, so that the governments of various countries are unprepared and become at a loss how to proceed. On the other hand, the international oil price in fierce fluctuation and rapid rising gives heavy blow on the economy of various countries, covering a dense fog on the road towards economic recovery at post-financial crisis era. The latest research report from World Bank shows that the global economy presented serious declination tendency after the outbreak of previous two times of oil crisis. During 1973-1974, the actual GDP growth rate of global economy dropped from 6.06% to 1.47%; during 1979-1980, the
actual GDP growth rate also dropped from 4.03% to 1.81%. Of course, this oil crisis is no exception. Under the impact of "the third oil crisis", the world economies, OECD as well as emerging economies represented by China as the representative body have shown declination to some extent. The actual GDP growth rate of global economy dropped from 2.03% in 2002 to 1.84% in 2008, and OECE even declined from 1.70% to 0.6%, the lowest level in history. During the same period, China has been maintaining high growth rate of more than 9%. However, under the impact of international financial crisis, the actual economic growth rate of China in 2009 also dropped to 8.7%, the lowest level in the past 6 years (as shown in Fig 1).

Figure 1  The relationship between the tendency of economic growth and the fluctuations in international oil price

Source of data: Obtained according to relevant annual data of Word Bank, “World Development Indicators Data”, “Platt: Oil Spot Crude Prices” and the OECD, “GDP Growth Data” and so on.

Said phenomenon also seemed to imply that there is certain causal relationship between the world economy staying at low level and the international oil price in continuous rising, and the international oil price will also seriously hinder the overall recovery of global economy at the post-crisis era. The global financial crisis broken out in 2008 must be associated with the "the third global oil crisis" when high oil price has been maintained for long-term. The international oil price remaining high level not only
suppressed the industrial impetus for world economic development, but also increased the risk for the in-depth dip of global economy. In particular when the world economy has fallen into recession, if the tendency of high oil price can still not be effectively contained, the real economic resurgence will be out of the question. Now that high oil price as well as the associated third global oil crisis have caused such serious impact on world economy, what factors determine the fluctuation on international oil price? Are they human factors or Market conducts? In addition, where these factors will finally lead international oil price go? The answers to these questions not only relate to the stability in the fluctuation of international oil price, and the extensive research on international oil price also concern about the future trend of global economy and even very important to the future of emerging economy.

II. The stylized facts of the fluctuations of international oil price expected to rise for long-term

The International oil price market has always been in unstable state, frequently representing major rises and falls. The international oil price is not only subject to the supply and demand relation in the market, but is also affected by many external factors such as the investment factors in international money market as well as natural disaster. Although the fluctuations of international oil price is subject to the disturbance of external factors which are difficult to forecast, it is not meant that the fluctuations of international oil price has no certain characteristic rules to follow.

First, the random change in international oil price is not only random walk of statistical significance, but also reflects the dual attributes of oil resource as material asset and monetary asset. On the one hand, the conventional use value of resource endows oil resources with the most basic natural attribute. That is to say, once the any change takes place in the supply and demand structure of global oil market, it is inevitable that the oil price will be subject to adjustment accordingly. On the other hand, the law of price fluctuations in international oil market has been far beyond the decision mechanism of supply and demand, in particular in 2008 when worldwide basis and
financial crisis sequentially broken out, the characteristics of financial product hidden behind the oil price have been gradually realized by the people. Secondly, as can be known by making a general survey on the price fluctuation law of international oil market after World War II, the nominal price of international oil was stably maintained at $ 3/barrel. Subsequently, international oil price showed an inflection point for the first time, and rose to $ 12.21 a barrel in 1974. Soon, international oil price ushered in a significant turn once again, and almost reached $ 35 a barrel in 1981. In 20 years afterwards, the oil price tended to be stable as a whole and only fluctuated around the level of $ 20 / barrel, without showing rapid rise once again. During 2000- 2008, the rising impetus of petroleum price was rapidly released, and the whole world met a new high oil price era. Although the outbreak of economic crisis resulted in the sharp drop of international oil price, from the long run international petroleum price always has the tendency of constant rise.

According to the accumulated historical data of international oil price fluctuations, the long-term trend of international oil price is divided into stages (As shown in Fig 2): The first stage (January 1946 - December 1973), the second phase (January 1974 - December, 1980), the third stage (January 1981 - December 1999), the fourth phase (January 2000- July 2008) and the fifth stage (August 2008 - December 2009).

It is not difficult to find that the real causes for this round of fast recovery of oil price are more complicated and diversified. Any single fundamental analysis on the supply and demand of oil, the capital speculation in financial market as well as the external non-market factors such as geopolitics have been unable to give good interpretation to the overall fluctuation of international oil price (Kes-icki, 2010). From the perspective of political economy, Kilian, Rebucci and Spatafora (2009) stated that the unusual fluctuations and rapid rise in international oil prices are external embodiment of unbalanced international political and economic pattern, and the "Interest game" among various countries resulted in the exceptional frequent fluctuations of international oil price. After making a comprehensive and systematic
study on the price fluctuations in global resource commodity market, they pointed out that, the supply and demand mechanism in traditional significance is still the predominant factor for the rise in resource commodities, and the excess liquidity, heavy speculation and continuous week of US dollar exchange rate within the global scale constitute the fundamental conditions and important impetus for the rise in the price of resource commodities.

Figure 2  The fluctuation tendency of international crude price (unit: dollar \$/per barrel)


III. The short-term characteristics of the international oil price fluctuations in random walk.

In short-term run, the fluctuations of international oil price show certain contingency. In general, the short-term fluctuation characteristics of international oil prices are reflected in the returns ratio series of petroleum price (Panas and Ninni, 2000; Alvarez and Rodriguez, 2008; Lee and Hu, 2010). As shown in Figure 3, the returns ratio series of international crude price is not a group of stable time series, since many Break Points appear in this group of series and the existence of these break points also suggest that frequent fluctuations of international petroleum price have occurred in the
past period. On the other hand, these break points are closely connected with geopolitics, speculative behavior, natural disaster as well as some emergency incidents such as terror attack.

![The dynamic returns ratio series of international oil price](http://www.economagic.com/em-cgi/data.exe/var/west-tex-as-crude-long)

**Figure 3** The dynamic returns ratio series of international oil price


1) According to the traditional research viewpoint on geopolitical events, the geopolitical events (such as war, armed struggle and strike in oil-producing area) were most significant reasons for the dramatic rise of international petroleum price in the past 40 years. In the 1970s, the geopolitical incident from the Middle East directly triggered the considerable rise of international petroleum price for the first time, indirectly caused the outbreak of the "first oil shock" and the "second oil shock” in succession, and thoroughly terminated the low oil price era that had lasted for a half century.

2) OPEC
At present, many scholars believe that the cartel pricing of World Organization of the Petroleum Exporting Countries (OPEC) is the main reason for frequent changes in international oil prices in short term. In the 1960s, the pricing power of international oil market was still mastered by a few of western developed capitalist countries. However, during 1970-1980, OPEC cut down the petroleum output by implementing oil embargo measures, finally retaking the discourse power on international oil price. Now, OPEC has boasted 76% of proved oil reserves in the world, and its petroleum exports also account for 40% of world total output. In this context, OPEC actually has the ability to manipulate the world oil price fluctuations. Since then, whenever OPEC announced plan for reduction of output, the generated supply tightening signal would initiate price fluctuations in the international oil market, and petroleum price would show adaptive rise accordingly. On the contrary, if the rise in international oil price exceeds the price expectation of OPEC, OPEC would tend to implement production increase plan to force the international oil price to be adjusted downwards. After the "second oil crisis", the effective demand of various countries for petroleum has been increasingly declining. In order to keep international oil price at a higher level, during 1981-1985, OPEC implemented strict crude oil output quota system, significantly reduced the petroleum export volume of various member states, and thus tried to keep international oil market in a balance between supply and demand. Affected by the sharp increase in the export volume of non-OPEC oil-producing countries as well as the development of alternative energy, the pricing power of OPEC met enormous challenge. Soon, the Arab oil-producing states represented by Saudi Arab declared that they will recapture the share of oil market at low oil price. In 1986, international oil price plummeted, falling to the lowest level since the two oil crises - $ 12 / barrel. From the beginning of 2000, OPEC still acted as the major "oil supplier" in the world, that is to say, cartel pricing of OPEC still has strong influence on the short-term trend of international oil price. In the just past “the third global oil crisis", the output restriction policy of OPEC plays significant role in promoting the continuous rise of international oil price. XX made in-depth research
Modern scientific research and their practical application. Vol 21317

on Cartel model of OPEC. They pointed out that, as the main body of market supply, OPEC has been the active champion for "stable price". In particular after the year 2004, due to the continuous depreciation of US dollars, these oil exporting countries are confronted with higher domestic inflationary pressure; and the member state in OPEC organization have the motivation to enhance the international petroleum price by reducing output, so as to guarantee the balance of payments of government. What is more important, OPEC's plan for large-scale output reduction forced the petroleum supply curve to bend backwards, produced continuous supply tightening signal to global oil market and thus further promoted the continuous rise of international petroleum price. This also indirectly proved the rationality of multiple equilibrium models.

3) Speculative behavior

Since the collapse of the Bretton Woods, a mutual alternative relevance is gradually reflected between US dollar and petroleum. Song long as US dollar becomes depreciated, international oil price will continuously rise under the large-scale speculation of financial capital. After the year of 2000, the excess liquidity in international capital market has been an indisputable fact; since the breakdown of network IT foam and the drop in the foreign capital intake capacity of some emerging economies including China, great amount of international capital has flown into international energy market, causing great impact on international oil price market. The whopping price in history - $147 a barrel, which was caused by the "third global oil crisis", is a nightmare any country would not be reluctant to recall. Furthermore, such high oil price cannot be interpreted by the traditional theory on the balanced petroleum supply-demand relation. Therefore, scholars started to study the influence of the supervision system for finical capital market and the large-scale capital speculation on the international oil price. On the other hand, some scholars also believe that the influence from the capital speculation in money market on international oil price is limited and short - Although the speculation will cause sharp rise of international oil price in short-term, it cannot determine the long-term trend of international oil price.
Generally speaking, the "Speculation" in the traditional sense means that the speculator only holds commodities in short term, smartly uses financial leverage to hold short-term and long-term positions and purchase hold and sell any valuable monetary assets, so as to seek benefit from price balance. In the short term, the rapid expansion of fund scale in crude oil futures market is an important fact of raising international oil price through speculation. In particular, the fund scale of investment in commodity index suddenly soared from 13 billion US dollars at the end of 2003 to 260 billion US dollars in March, 2008, almost increasing for 30 times. However in the long run, the large-scale capital speculation in financial market cannot determine the long-term tendency and level of international oil price. The research further pointed out that, since the beginning of 21st century, the large-scale speculation of financial capital market to the international energy market directly stimulated the continuous rise of global oil price; Furthermore the sharp rises and falls of oil market occurred much more frequently than all the time prior to the year 2000. In particular in the just passed "the third time of oil crisis", the speculation caused more obvious short-term influence on the international oil price. Of course, in addition to said three categories of factors which may affect the short-term trend, the external non-market factors, including North America hurricane, hiemal climate and terror attack, will also initiate the short-term fierce fluctuations of international oil price. In general, perhaps it is just because the combined effect of these external accidental factors, the international oil price presents the characteristic of random walk in short-term fluctuations, that is to say, the effectiveness and unpredictability in the traditional sense have appeared.

IV. The forecast on the international oil price fluctuations based on the multiple equilibrium model as well as the future trend

In fact, as early as in 2000, when the "third global oil crisis" has not broken out, Krugman, an US economist has forecasted that a new round of international high oil price would come soon. Then, in the special column article "The Energy Crisis Revisited" in New York Times, he pointed out that, oil is an exhaustible resource, the
production of oil is subject to government control; Furthermore, for the major petroleum exporting countries, the additional income resulted from high oil price has only three uses, namely domestic direct investment, investments abroad and reduction in the production of domestic oil reserves. However, domestic direct investment is subject to the restriction by the domestic fund absorption capacity and the progressive decrease in marginal revenue; an investment abroad is not only restricted by returns ratio and is also exposed to political risk to certain extent. Therefore, when oil price runs high, the petroleum exporting countries will use the undeveloped oil reserves as an "investment" and maintain high oil price by reducing the production of prospective oil, in order to obtain greater revenue in the future. In other words, the motivation to reduce oil output will cause the petroleum supply curve to bend backwards and in turn form the dilemma of "high oil price equilibrium". At the same time, following the exhaustible resources model thinking of Hotelling (1931), he also put forward the idea that, when the demand curve generates movement under market impact, it is possible for the demand curve to intersect with the supply curve bending backwards on different position, so that two points of equilibrium will be formed. One point of equilibrium represents low oil price and high output, and another point of equilibrium represents high oil price and low output. Krugman applied this theory to temperate the international energy market once again, and discovered that the stable low oil price equilibrium had completed in the year 1986. Or, the collapse of OPEC meeting in 1986 became the turning point for the transition from low price equilibrium to high price equilibrium. Based on the Krugman's viewpoint on multiple equilibrium models in combination with the short-term and long-term stylized facts of international oil price fluctuations and their influencing factors, this article made the corresponding analysis and forecast on the possible trend of the international oil price fluctuations in the future.

The supply curve and demand curve of international oil market also become very elastic. Because the additional US dollar revenue generated by high oil price will greatly simulate the export power of non OPEC oil-producing countries, and the governments of
various countries are actively developing clean energy resources and carrying out energy saving and emission reduction, these events will change the elasticity coefficient of the supply and demand curves in international oil market. In International Energy Outlook (2009), International Energy Agency (IEA) pointed out that, in the next 20 years, the global energy demand will increase at average speed of 1.5%, with overall growth rate up to 40%. The international petroleum demand will increase at stable rate of 1%, and then the international petroleum demand will increase from 85 million barrels/day in 2008 to 105 million barrels/day in 2030. Moreover, 70% of newly increased global energy needs are mainly from developing countries, in particular the new demand from China accounts for major share. According to the forecast of International Energy Agency, in the year 2020, the minimum petroleum demand of China is estimated to reach 450 million tons, and it is necessary to import 270 million tons. By then, foreign dependence of Chinese oil consumption will reach about 60%, a new high in history. On the other hand, there is no big space for improving the global oil output. According to the present situation, most of member states in OPEC are confronted with insufficient domestic fund investment and backward mining technology, so that the petroleum output almost reaches the peak value in history. In addition, resulted from the need for development of their domestic economy, the petroleum consumption quantity is quickly increasing. What is more rigorous as calculated based on "peak oil theory", the global oil production will reach peak value in 2020 and then decline year by year. To sum up, the supply curve of international oil market will move towards left, while the demand curve of oil will move towards right. It is very obvious that the equilibrium price of international oil market will continue to rise. According to "international energy outlook (2009)" research report published by IEA, the strong petroleum demand in the future will act as the fundamental power and source for the rise of international oil price. Moreover, from the long run, the average price of international oil market will continue to rise sharply.
In the future, international oil price will still continue to rise, and such high oil price will certainly cause many harmful consequences to the world economy. Including: (1) High international oil price will not only initiate a new round of inflation crisis in global macro-economy. In addition, the high cost resulted from high oil price will also throttle the survivability and innovation space of small and medium-sized enterprises. In particular, for the production expectation of petroleum export states and the consumption expectation of petroleum importing countries, the influence of high oil price is even fatal. (2) The high oil price will greatly suppress the consumption of consumers in the other non-energy aspects, which is unfavorable to the rapid economic recovery of various countries. (3) The psychological impact of high oil price on the global investors is not allowed to neglect. If it is difficult to remove the panic emotion of investors resulted from high oil price, the global financial market will show more frequent fluctuations in the future. It is no doubt that, to adjust energy structure and develop low-carbon economy will be an inevitable trend in human social development. Furthermore, since the clean energy resources including water, nuclear, wind and solar energy will quickly account for more share among primary energy resources, the proportion of fossil resources such as petroleum and coal will be further impaired in the future economy development.

References


2. Lin BoJiang, Yao Xin, Liu XiYing, (2010) "Chinese strategic adjustment of energy structure under the restrictions of energy conservation and carbon emission" “Social Sciences in China”, No.1 issue,


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THE CURRENT STATE AND PROBLEMS OF EQUITY FINANCING DEVELOPMENT IN UKRAINE

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The article deals with the essence of equity form of business financing and analyzes dynamics of joint-stock companies’ foundation in Ukraine. Special attention was given
to generating Ukrainian enterprises’ equity capital via IPO in foreign markets. The ways of equity form of financing activization in Ukraine were suggested.

Key words: stock, equity financing, joint-stock company, issue, investing, initial public offering.

In the process of extended public reproduction the contradiction between necessity in capital investments for business development and limited individual financial funds occurs. Inefficient tax and depreciation policy make it impossible to accumulate sufficient internal funds for effective business growth. Bank crediting and corporate bonds issue can have impact only in case of high profitability of investment activities. Under such conditions equity financing is practically the only mechanism of obtaining so essential investment funds needed for upgrading large domestic enterprises. This fact grounds necessity in investigating issues on the role and problems of Ukrainian enterprises’ equity financing.

Attractiveness of equity financing (common stock issue) consists in the fact that the main volume of funds comes at the beginning of activity, i.e. gives opportunity to finance new enterprises without their own funds and property that can be used as loan collateral. In addition, a company is not obliged to repay capital.

Equity form of financing (of, particularly, investment projects) considerably simplifies the process of national economy integration with the system of global economic relationship via attracting foreign investment. Entering global equity capital markets assists national companies in raising additional currency resources for technical development, re-equipment and production base reconstruction.

At the same time, this method of financing has a number of essential restrictions. In particular, a joint-stock company receives investment resources upon completion of stock issue placement that requires time and additional expenses. The procedure of additional stock emission is connected with registering an issue, listing shares, paying services of professional securities market participants (underwriters and investment advisers). Besides, stock issue is not always placed in full. After share emission
company must pay dividends, periodically distribute reports among stockholders, etc. Increase in a company's equity capital as a result of additional share issue may lead to stock dilution and reduction in shareholders’ income.

Despite substantial role in investment financing, equity business form has not become popular in Ukraine. According to official data of the State Department of Statistics of Ukraine, the percentage of joint-stock companies in the total amount of entities being part of the Unified State Register of Enterprises and Organizations of Ukraine (EDRPOU) makes up only 2% or 26 568 entities (tab. 1), in addition, this portion has declined two-fold (from 4,19% to 2,01%) against 2001.

Table 1

Structure of EDRPOU entities according to the form of business organization as of January 1 of the respective year*

<table>
<thead>
<tr>
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<td>100</td>
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<td>100</td>
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<td>farm enterprise</td>
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<td>22,54</td>
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<td>1,56</td>
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<td>1,33</td>
<td>1,27</td>
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</tr>
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<td>2,16</td>
<td>1,82</td>
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<td>- private</td>
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<td>limited liability company</td>
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<tr>
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<td>2,69</td>
<td>2,58</td>
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<tr>
<td>institution (establishment)</td>
<td>8,31</td>
<td>8,02</td>
<td>8,58</td>
<td>8,46</td>
<td>8,63</td>
<td>8,50</td>
<td>8,42</td>
</tr>
</tbody>
</table>

*Composed and calculated by authors independently from the source: [1].

Open and public joint-stock companies having more possibilities to raise funds in domestic and foreign markets also demonstrate negative trend. As we can see from the
total amount of joint-stock companies registered in Ukraine (26,5 thousand), public and open types constitute only 2894 (10,9%) and 4649 (17,5%) entities, respectively (fig. 1).

Fig. 1. Amount of joint-stock companies by types as of January 1 of the respective year*

* Composed and calculated by authors independently from the source: [1].

Thus, domestic enterprises are not capable of raising sufficient funds via equity form of business organization. One of the key reasons consists in underdevelopment of the Ukrainian stock market. After the financial collapse of 1998 it was hardly recovered and during the next few years stagnated. But in 2004 the market suddenly burst and demonstrated enormous growth. In 2007 domestic share market showed the best dynamics in the world [2], but at the same time the following 2008 global financial crisis considerably adjusted indicators of global capital markets, including the Ukrainian one.

Nowadays the Ukrainian stock market is usually referred to as an Emerging market. However, actually, according to Standard & Poor’s official classification, it is still related to as the so called Frontier market [3]. This fact deters investors from investing in its financial instruments. Nevertheless, already in 2011 Ukrainian share market capitalization amounted to USD 25,6 billion (tab. 2) that places it first among European frontier markets.
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Table 2

Dynamics of “share market capitalization to Ukrainian GDP” ratio in 2004-2011*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalization (USD billion)</td>
<td>11,8</td>
<td>25,0</td>
<td>42,9</td>
<td>111,8</td>
<td>24,4</td>
<td>16,8</td>
<td>39,5</td>
<td>25,6</td>
</tr>
<tr>
<td>GDP (by PPP) (USD billion)</td>
<td>247,9</td>
<td>263,0</td>
<td>291,3</td>
<td>323,4</td>
<td>338,2</td>
<td>291,2</td>
<td>306,6</td>
<td>331,4</td>
</tr>
<tr>
<td>Capitalization / GDP</td>
<td>4,8%</td>
<td>9,5%</td>
<td>14,7%</td>
<td>34,6%</td>
<td>7,2%</td>
<td>5,8%</td>
<td>12,9%</td>
<td>7,7%</td>
</tr>
</tbody>
</table>

* Composed and calculated by authors independently from the source: [4; 5].

At the same time, if we compare key stock market indicators of the USA, China, Poland and Ukraine (tab. 3), we can see the huge gap between our state and developed countries.

Table 3

Comparative characteristics of securities markets of the USA, China, Poland and Ukraine as at the end of 2011*

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP (by PPP)</th>
<th>Market capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USD billion</td>
<td>% in Global GDP</td>
</tr>
<tr>
<td>USA</td>
<td>15,1</td>
<td>18,6</td>
</tr>
<tr>
<td>China</td>
<td>11,3</td>
<td>14,0</td>
</tr>
<tr>
<td>Poland</td>
<td>0,77</td>
<td>1,0</td>
</tr>
<tr>
<td>Ukraine</td>
<td>0,33</td>
<td>0,4</td>
</tr>
</tbody>
</table>

* Composed and calculated by authors independently from the sources: [4-9].

Such situation is mainly caused by the fact that the Ukrainian securities market is characterized by poor corporate governance with numerous cases of selling off property right after acquisition and diluting shares of existing stockholders. None the less, it has big potential for growth and will be, particularly, activated when more domestic companies offer their shares in search of new long-term investment funds, including from foreign investors.
While analyzing key trends of raising foreign capital through equity financing one should pay special attention to Initial Public Offering (IPO) that is the public sale of stock in organized market. The first IPO was conducted by Ukrainian enterprises in 2005. As at the end of 2011 they carried out 22 deals and raised over USD 2315 million (tab. 4).

Table 4

List of Ukrainian companies’ IPOs in 2005-2011*

<table>
<thead>
<tr>
<th>№ n/n</th>
<th>Issue year</th>
<th>Issuer name</th>
<th>Sector</th>
<th>Exchange</th>
<th>Batch of shares issued</th>
<th>Capital raised, USD mln</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2005</td>
<td>Ukrproduct Group</td>
<td>Agriculture</td>
<td>AIM</td>
<td>27,2%</td>
<td>11,3</td>
</tr>
<tr>
<td>2</td>
<td>2005</td>
<td>Cardinal Resources</td>
<td>Oil and gas</td>
<td>AIM</td>
<td>36,3%</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>2005</td>
<td>XXI Century</td>
<td>Real estate</td>
<td>AIM</td>
<td>35,7%</td>
<td>138,7</td>
</tr>
<tr>
<td>4</td>
<td>2006</td>
<td>Astarta Holding N.V.</td>
<td>Agriculture</td>
<td>WSE</td>
<td>20%</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>2007</td>
<td>TMM</td>
<td>Real estate</td>
<td>Deutsche Boerse</td>
<td>13,1%</td>
<td>105</td>
</tr>
<tr>
<td>6</td>
<td>2007</td>
<td>Dragon-Ukrainian Properties &amp; Development</td>
<td>Real estate</td>
<td>AIM</td>
<td>100%</td>
<td>208</td>
</tr>
<tr>
<td>7</td>
<td>2007</td>
<td>Ferrexp</td>
<td>Mineral resources</td>
<td>LSE</td>
<td>26%</td>
<td>420</td>
</tr>
<tr>
<td>8</td>
<td>2007</td>
<td>Landkom International PLC</td>
<td>Agriculture</td>
<td>AIM</td>
<td>55%</td>
<td>111</td>
</tr>
<tr>
<td>9</td>
<td>2007</td>
<td>KDD Group</td>
<td>Real estate</td>
<td>AIM</td>
<td>19,7%</td>
<td>130</td>
</tr>
<tr>
<td>10</td>
<td>2007</td>
<td>Kernel Holding S.A.</td>
<td>Agriculture</td>
<td>WSE</td>
<td>33%</td>
<td>218</td>
</tr>
<tr>
<td>11</td>
<td>2008</td>
<td>MHP SA</td>
<td>Agriculture</td>
<td>LSE</td>
<td>19,41%</td>
<td>322</td>
</tr>
<tr>
<td>12</td>
<td>2010</td>
<td>Avangard</td>
<td>Agriculture</td>
<td>LSE</td>
<td>20%</td>
<td>187,5</td>
</tr>
<tr>
<td>13</td>
<td>2010</td>
<td>Agroton</td>
<td>Agriculture</td>
<td>WSE</td>
<td>26,2%</td>
<td>53,7</td>
</tr>
<tr>
<td>14</td>
<td>2010</td>
<td>Milkiland N.V.</td>
<td>Agriculture</td>
<td>WSE</td>
<td>22,4%</td>
<td>78</td>
</tr>
<tr>
<td>15</td>
<td>2010</td>
<td>Sadovaya Group</td>
<td>Mineral resources</td>
<td>WSE</td>
<td>н/д</td>
<td>30,4</td>
</tr>
<tr>
<td>16</td>
<td>2011</td>
<td>Agrolika</td>
<td>Agriculture</td>
<td>WSE (New Connect)</td>
<td>16,67%</td>
<td>1,4</td>
</tr>
<tr>
<td>17</td>
<td>2011</td>
<td>KSG Agro S.A.</td>
<td>Agriculture</td>
<td>WSE</td>
<td>33%</td>
<td>39,6</td>
</tr>
<tr>
<td>18</td>
<td>2011</td>
<td>Industrial Milk Company</td>
<td>Agriculture</td>
<td>WSE</td>
<td>23,9%</td>
<td>29,1</td>
</tr>
<tr>
<td>19</td>
<td>2011</td>
<td>Ovostar Union N.V.</td>
<td>Agriculture</td>
<td>WSE</td>
<td>25%</td>
<td>33,4</td>
</tr>
<tr>
<td>20</td>
<td>2011</td>
<td>Westa ISIC S.A.</td>
<td>Automobile</td>
<td>WSE</td>
<td>н/д</td>
<td>47,6</td>
</tr>
<tr>
<td>21</td>
<td>2011</td>
<td>Coal Energy</td>
<td>Mineral resources</td>
<td>WSE</td>
<td>25%</td>
<td>81,4</td>
</tr>
<tr>
<td>22</td>
<td>2011</td>
<td>Agro-Generation</td>
<td>Agriculture</td>
<td>NYSE Euronext (Alternext)</td>
<td>17,85%</td>
<td>18</td>
</tr>
</tbody>
</table>
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| Total capital raised | 2315,1 |

* Composed and calculated by authors independently from the sources: [8-10].

Sector analysis of Ukrainian IPOs for the period of 2005-2011 indicates the dominance of agricultural companies (59%) (fig. 2). The second spot was captured by real estate issuers (18%), then – mineral resource enterprises (14%), fourth place taken by automobile, as well as oil and gas sectors (4,5% each).

![Sector structure of the Ukrainian IPO market in 2005-2011, %](attachment:image)

**Fig. 2. Sector structure of the Ukrainian IPO market in 2005-2011, %** *  
* Composed and calculated by authors independently from the sources: [9-10].

Since the beginning of 2012 Ukrainian IPO market has been suffering deep recession. Companies planning to go public abroad have delayed this idea until better times.

In addition to global financial crisis, there is a number of other factors preventing Ukrainian enterprises from using equity financing, notably:

- Underdevelopment of domestic securities market and its infrastructure, including corporate law;
- Low level of Ukrainian joint-stock companies’ qualification and transparency;
- Low investment attractiveness of domestic enterprises for foreign investors in connection with social, economic and political instability in Ukraine;

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- informational closure of most issuers, even at the stage of IPO;
- insufficient experience of underwriters in placing domestic shares abroad;
- negative experience of a number of Ukrainian issuers that went public during 2005-2008, etc.

Considering these problems, national companies wishing to conduct IPO should rebuild their corporate structure according to international standards. Publicity will give them an opportunity to raise necessary financial funds and new connections, provide annual growth, quality and development.

At the same time, development of equity financing in Ukraine requires setting up stable and predictable rules of “business to state authority” relations, as well as legislative base for property rights protection. First of all, the point means creating an efficient system of disclosing information on joint-stock companies’ functioning. Its enhancement should be accomplished in the following directions:

- improvement of legal environment for data disclosure system, provision of transparency of Ukrainian issuers whose securities are being publicly traded;
- development of mechanisms of control and supervision of performing requirements on data disclosure, calling to account for breach of such requirements, using modern information technologies for increasing efficiency of gathering, processing, analyzing and disclosing information;
- formation of favorable securities market legal environment that would make share placement efficient for issuers and attractive for investors.

The following requires: providing legal ability for functioning of non-banking financial institutions – investment companies that will fully conduct investment activities (dealership, underwriting, asset management), have privilege in making IPOs, provide investment consulting services, etc.; legally defining brokerage as activity conducted exclusively on the stock exchange and setting strict rules of investment companies’ indirect participation in exchange trade; implementing and providing effective functioning of the institute of initial dealers in the state securities market at al.
Suggested ways of equity financing development in Ukraine will promote generation of financial resources necessary for economic growth and improvement of the country’s investment image.

References:
This article discusses the characteristics and problems in the field of construction work organization auditors. Effective organization, not only facilitates the work of auditors, but also increases their competitiveness in the labor market.

Keywords: organization of work, audit work, the audit activity.

In our country the audit appeared recently: after Russia's transition to a market economy, the need to create a system of financial control. According to the Federal Law "On Auditing", "Audit - independent audit of accounting (financial) statements of the entity in order to express an opinion on these financial statements." [1] This enables users of financial statements with the confidence to use the information available in the financial statements for management decisions. Therefore, in developed countries the audit profession is very important and rapidly growing. Auditor's work - is long working hours, constant travel.

As in any work here is important to the proper organization to make optimal use of human resources.

The organization of the personnel - a certain order in the structure and implementation of the labor process, which is folding is the system of interaction of employees with objects and implements s labor and production people interact with
each other in the labor process. [6]. It was accompanied by labor rights for all historical
periods, becoming more diverse and multifaceted. Work - it is a difficult and complex
phenomenon, which clearly highlighted the social (and it includes more specific
economic, social and institutional aspects) and technical-organizational (it includes a
narrow technical-technological) side of (coordination) of its components. [5]

Auditor's work - the intellectual, it is difficult to determine its performance -
effectiveness is measured not in quantity but in quality of work. The labor process needs
proper organization, which is essential not only for economic benefit, but also for the
development of the worker as a person

The organization of labor in control-audit - Tor process - a system of measures
aimed at improving - GOVERNMENTAL methods and conditions - tial intelligence
work, maintaining the health of employees on the basis of the latest achievements of
science and technology to ensure the highest efficiency at the lowest cost wit - tively
labor. [ 2]

In carrying out its activities the auditor is faced with a lot of documents both in
paper and in electronic media. So one of the ways to improve the work of auditors is the
use of advanced information technologies.

Currently, the market of information technologies has emerged software packages
that enable the use of computers in the work of the auditors and the creation of
comprehensive automation of auditing. The successful operation of complex automation
systems necessary information, technical, mathematical, computer, organizational, legal
and ergonomic support.

Information provision is a collection of data stored on paper and computer media,
in accordance with certain rules of storage. Technical provision involves complex computer and office equipment, and computers.

Represents a collection of mathematical software algorithms for registration and
reporting of indicators.
The software includes the operating system and application packages that implement algorithms for processing.

Organizational maintenance - a set of methods and means of regulating the work of experts, do the work of processing information.

Legal security - a set of documents defining the rights and responsibilities of professionals involved in the process of the system.

Ergonomic software - a complex of measures for comfortable jobs that provide efficiency and comfort in the work of specialists. [7]

Currently, there is software for the automation of internal and external audit, which greatly facilitate the work of the auditors. The use of specialized software allows high-quality work plan specific to the audited company before leaving to check all of the audit team. [4]

In addition to direct audits the auditor also provides audit-related services. When they are executed, and the auditor may use the computer information technology. For example for the restoration and maintenance of accounting auditor may use a variety of programs, such as: "1C", "Turbo-Accountant" and others. For the analysis of the financial condition of the entity it is advisable to use a variety of programs of financial analysis.

Increasing competition in the audit business, forcing companies to find new ways to increase organizational efficiency, increase cost-effectiveness of, and the behavior of managers in shaping and improving the organization of labor and wages requires a comprehensive study of the different sciences: economics, marketing, psychology, sociology, etc [3]. Important role in this will be devoted to finding solutions and improve performance, service quality through the use of specialized software. Effective organization, not only facilitates the work of auditors, but also increases their competitiveness in the labor market.
References:


Muhametlatypov F.U, Maidanik N.A.

REGIONAL SOCIAL POLICY

Bashkir State University

This paper analyzes the state of social policy in the Republic of Bashkortostan, to improve the quality of life of the population, including in respect of: large families, senior citizens and the disabled.

Key words: social policy, social protection, social security.

Social policy-a policy that aims to create a basis for improving the quality and standard of living of the whole population, to reduce conflicts between the participants of the market economy and the modernization and economic growth. The main strategic
objectives of the social policy of the Republic of Bashkortostan are: to provide the highest level of well-being, including comfortable accommodation, quality of services in areas such as education and health care, a decent standard and quality of life for older people, providing necessary social security protection and support for the most vulnerable citizens [4].

The main goal of the state policy in the field of social protection is to increase the financial security of certain categories of the population in need of public support, and include families with children, the disabled, senior citizens, people who find themselves in difficult situations.

At present, work is continuing to increase the size of benefits paid from the budget of the Republic of Bashkortostan. In order to increase social protection for families with children, the monthly child allowance has been indexed as of January 1, 2011 by 5.9% based on a decision of the Government of the Republic of Belarus from 22.09.2010, № 359.

The outcome of the work on translation of the social security system to support low-income families with incomes below the poverty level, as well improve the efficiency of social support with the implementation of the principle of targeting in 2011, received a number of benefits compared to the previous year decreased by nearly 39.0%, spending on benefits totaled 550.6 million, should provide an increase in the size of the benefits due to release funds.

In the Republic of Bashkortostan and January 1, 2011 reduced the standard maximum share of their own citizens to pay for the cost of housing and utility services from 23.0% to 21.0%. In 2011, 85.5 thousand poor families have received grants to pay for housing and utility services for a total of 917.0 million. In a month per family average subsidy was 892.5 rubles. [1]

As of 2011 in the Republic of Bashkortostan 34.0 thousand lives of large families in which children are brought up 113,000.
In 2011, based on the Law of Belarus "On state support of large families in the Republic of Bashkortostan" 45 large families, who have five or more children under the age of 18, provided housing certificates worth $ 100 million. The average size of the payment is made more than 2 million.

Decree of the President of the Republic of Bashkortostan, of 23.12.2011, the installed additional social support large families, in which both had two or more children - providing from 1 January 2012, the monthly child allowance until the children reach three years in the amount of 500 rubles for every child born at the same time. Families in which both had three or more children and who are registered as in need of accommodation, - provision of housing certificate certifying the right to receive social benefits to improve their living conditions.

Another important development in the field of social protection is to support the elderly.

For the realization of the republican target program "The People's University of the Third Age" of the national budget was sent to 2.0 million. As part of the more than 16,000 elderly people were learning the basics of computer literacy, family psychology, physical therapy, in English.

As part of the republican target program for the development of tourism organized social tours for seniors and the disabled. In 2011, about three thousand inhabitants of the Republic of Bashkortostan exercised their right to rest. From the national budget for the program in 2011 allocated 37.0 million rubles. [1] An additional measure of social support in 2011, was to provide a one-time cash compensation senior citizens whose income does not exceed polutorakratnogo living wage, to install meters for water and gas. 480 people received compensation in excess of one million rubles.

In order to create conditions and mechanisms for the conservation, development of older people adopted and successfully implemented departmental target program "Improving the quality of life of older people in the Republic of Bashkortostan" in 2011-
2013. Begin to organize the "social health centers", which will provide a comprehensive catering services for elderly people living in the settlements, a considerable distance from the district center. In general, the implementation of the program will be allocated more than 25 million rubles from the budget of the Republic of Bashkortostan, in 2011 - 6.0 million.[1]

As for social connecting people with disabilities approved program entitled "Accessible Environment" for 2012-2015, with funding of more than 3 billion. In 2011, as part of the program in the districts and cities of the Republic of Bashkortostan actively worked to inventory all of the social and transport infrastructure.

Expanded the reach of social support for dentures - along with senior citizens the right soft dentures provided mothers with five or more children. For these purposes in 2012 as a whole will be allocated 45.0 million rubles.

The social security system of the Republic of Bashkortostan unites 54 national and 6 municipal social service centers, 20 residential institutions for the disabled and the elderly, three rehabilitation centers for children with disabilities, one Republican and two municipal shelter for children under the age of 18, and so a center of comprehensive assistance to persons of no fixed abode. In the system of social services on helping children and adolescents deal with 43 institutions with a total bed capacity 1253-bed hospital. In 2011, social rehabilitation services in social shelters were 3660 juveniles.

In the structure of complex social service centers to families and children in difficult circumstances, is seven departments of social assistance to families and children. In 2011, the named offices handled about 53 thousand people. [1] One of the most important trends of the social security system should be a set of measures to improve the demographic problem, enabling and stimulating the growth of the birth rate, the advancement of large families, including families with children - disabled. In the area of social welfare families need: the creation of social services family, expanding the range of social services, the introduction of new technologies, the
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development of targeted programs to support the family and motherhood, creating national data bank of minors, children in difficult situations. Experience in a number of leading (in industrial relations) regions, including the Republic of Bashkortostan, shows a willingness to implement regional management breakthrough in the development of innovative investment in the regional economy and involving a significant part of the regional population in the creation and development of an effective (for the public) of the economy. Russia needs a new model for the capitalist, working for the good of society. [5]

References:


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UDC 332.146

Orlova A.V.

THREATS OF ECONOMIC SAFETY

National Research University Belgorod State University,

Belgorod, Pobedy 85, 308015
In the given report classification of dangers and threats to interests in economic sphere for the purpose of an estimation of their intensity and the organisation of actions for counteraction are considered by it.

Keywords: region, economic safety, economic nationalism.

Economic safety is a basis of national safety of the country. This concept is used by modern economists and scientists even more often and in connection with increase of factors of risks raises the importance of maintenance of safety in all spheres of ability to live of a society, and especially in economy. The given concept has difficult, many-sided structure which forms the whole system of economic safety.

The system of economic safety characterises social and economic system from the qualitative party. At the same time it is possible to recognise, that the system of economic safety allows to remove in due time internal and external conflicts of interests of the managing subjects which realisation occurs in various conditions and under the influence of various factors. In relation to process of realisation of economic interests these conditions and factors can be both favorable, and adverse. The first promote realisation of interests. The second counteract this realisation, complicating its course or even at all not supposing it. In other words, influence on economic interests of adverse conditions and factors dangerously for realisation of these interests. Therefore it is necessary to protect them. However to protect all economic interests it is practically impossible. But if it is impossible to protect all of them, that, undoubtedly, it is necessary to protect the vital economic interests (VEI) from dangers.

Danger can name threats. Concept definition «safety threat» is given in Law item 3 «About safety»: «safety Threat - set of conditions and the factors creating danger to the vital interests of the person, a society and the state».

First of all, we will notice, that threats in economy sphere have complex character. That them to understand, this set of threats should be ordered by their classification on the basis of certain principles. Such principles of classification of threats to interests in economic sphere are:

1. Generality, that is fuller coverage of all set of threats ЖВЭИ at formation of that
their set which is exposed to classification. Thus unaccounted any threats it is capable to make their classification incomplete, and, hence, and useless as it becomes quite probable a situation at which any of not considered threats will contain the signs which are absent in accepted classification;

2 Completeness of the information, that is the best representation about the maintenance of each of the revealed threats. Without such representation it is impossible to establish enough accurate classification signs of threat and to carry it to any group, and also to define a priority in its liquidation, neutralisation or easing;

3 The practical importance, that is drawing up of the qualifier of threats to their such signs which matter, first of all, for acceptance of measures on liquidation, neutralisation or easing of these threats. It is necessary to remember, that use in the qualifier of any far-fetched, abstract representations about streamlining of the revealed set of threats VEI will lead only to that such qualifier will appear in practice useless;

4 Importance and priority, that is an establishment within the limits of each classification group of degree of importance of each threat which have entered into this group and on this basis of an establishment for each threat of a priority in its liquidation, neutralisation or easing.

Classification of the most probable threats of economic safety is presented in table 1.

Table 1

<table>
<thead>
<tr>
<th>Sign of classification of threats</th>
<th>Kinds of threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>On an orientation</td>
<td>persons</td>
</tr>
<tr>
<td></td>
<td>societies</td>
</tr>
<tr>
<td></td>
<td>states</td>
</tr>
<tr>
<td>On a source</td>
<td>internal</td>
</tr>
<tr>
<td></td>
<td>external</td>
</tr>
<tr>
<td>On probability of realisation</td>
<td>real</td>
</tr>
<tr>
<td></td>
<td>potential</td>
</tr>
<tr>
<td>In relation to human activity</td>
<td>objective</td>
</tr>
<tr>
<td></td>
<td>subjective</td>
</tr>
<tr>
<td>By the occurrence nature</td>
<td>natural</td>
</tr>
<tr>
<td></td>
<td>anthropogenous</td>
</tr>
</tbody>
</table>
On sensibleness

realised
Not realised

On perception degree

overestimated
adequate
underestimated
imaginary

On action scales

federal
regional
local

On the first of the mentioned criteria of threat share on: threats VEI of the person, a society and the state. Such division promotes more accurate explanation of features of influence of threats on realisation of interests depending on the one who is their carrier. So, coincidence of the maintenance of the threats directed on VEI of different objects of economic safety, yet does not mean coincidence of the importance of their influence on corresponding VEI. For example, for the concrete person, aspiring to provide well-being of and the family loss of any source of existence can «pour out» in accident (to it there is no place to take money to pay off with creditors, to pay treatment of the sick child, etc.) . Therefore threat of a lack of money for it is one of the most serious among its all threats VEI. At the same time for the state its such threat VEI is not so important at least because the state has much more possibilities, than its any citizen to compensate loss of one of sources of the incomes.

On the other hand, threats VEI of various objects of the economic safety, coinciding under the maintenance, can coincide and on the importance. So, the destructions caused by military actions in its territory can threaten successful functioning of economic system of the country. In this case this threat will have similar influence on realisation VEI of all layers living in this country and groups of the population, each its separately taken inhabitant.

Division of threats VEI on the basic objects of safety mentioned above is used not in all countries. For example, in China in official sources there is no division into threats to interests of the person, a society and the state. In this country of threat in economic sphere are considered only in relation to the state as interests of the last in essence associate and with interests of the person, and with interests of a society.
From the point of view of possible counteraction to threats division on external and internal in relation to object of their influence is rather important their fixing in a place of a source of threats, that is. About special importance of such division says also that it has found the reflexion in the definition of economic safety. After all from with what threats VEI, internal or external, we deal, the choice of concrete means of counteraction to these threats and strategy of application of these means in many respects depends. So, if to construct to itself the new beautiful and convenient house threatens aspiration of the person only it unrecollection, a disorganisation and laziness (internal threats), the person in a condition to overcome these lines of the character with development of other lines, such as will, persistence, purposefulness, etc. But if realisation of the same interest is threatened with a position of the neighbour applying for the same ground area (external threat), the person, most likely, will try or to convince the neighbour of its wrongfulness, or to resolve their dispute in court.

In need of protection of national economic interests division of threats into the internal and external is taken as a principle the state strategy of maintenance of economic safety. Now in corresponding strategy of the majority of the leading countries of the world the priority is given to counteraction to external threats to national economic interests (NEI). It is caused by that, according to a management of these countries well debugged machinery of government and the developed civil society always have all possibilities that not only effectively to resist to internal threats, but also not to admit at all their occurrence. Possibilities of the given state and a society to neutralise external threats and to influence their sources far not always so exhaustive and are effective, as in relation to internal threats.

Such point of view on counteraction to threats to the national economic interests the government of the USA adhere, to Japan, the country of the European Union. Moreover, in the USA and Japan threats in economic sphere in practice associate only with external threats. At maintenance of economic safety the priority, on the contrary, is given to Russia to counteraction to internal threats. It speaks, mainly, features of reforming of the Russian economy in the conditions of the hardest crisis 1992-1998 and incomplete overcoming of its consequences till now.
As to classification of threats by their degree сформированности now uniform representation about it does not exist. So, in the countries of the West increase of this characteristic prefer to express various concepts. It is «call» (challenge), «danger» (danger) and actually «threat» (threat). The call is understood as set of the circumstances, not necessarily particularly menacing character, but, certainly, demanding to react to them. The fatal probability of drawing of harm of realisation of the given interest is accepted to danger quite realised, but not. And, at last, under the threat the most concrete and direct form of danger to the given interest which is capable to break its realisation in full or in part is understood. In particular, proceeding from this classification, the management of the United States on all economic space outside of the country perceives any changes as calls to national economic interests of the USA. And actions of foreign countries and their managing subjects, not consistent with the American representations about a world economic order, are considered precisely the actions dangerous to national economic interests of the USA.

In our country in a similar case it is accepted to divide threats VEI on potential and real. Potential threat should be considered as occurrence of preconditions for counteraction of realisation of data VEI, and real threat - as completely generated phenomenon or the process, already ready to counteract realisation of data VEI. An example of potential threat VEI of one of manufacturers of any production the aspiration of its competitor to hide carrying out of some developmental workings out can serve by it. The exit of its competitor on the market with advertising of the new production possessing the best consumer properties, than production which is let out by this businessman becomes an example of real threat VEI of this businessman in this case.

On the character, that is in relation to that, how much presence of this or that threat depends on will of people, it is possible to allocate two groups of threats - threats of objective and subjective character.

The establishment of objectivity or subjectivity of threats has not only and not so much theoretical, how many especially practical value. The matter is that threat reference to number objective or at least an establishment of its any objective roots testifies that, despite any
counteraction to this threat, it in this or that kind and to some intensity will revive. Therefore it is necessary to take into consideration impossibility of its definitive liquidation. Action of such threat can be weakened to some extent for some time only. So, for example, threat of the termination of its maintenance constantly threatening to the Japanese economy by import raw materials and fuel has for this country objective character at least for two reasons:

1. Practically full absence in the Japan some considerable mineral deposits and fuel;
2. Impossibility to provide delivery from abroad mineral raw materials necessary for the Japanese economy and fuel differently, as soon as by their purchases on import.

Therefore Japanese can weaken only the given threat to the national economic interests, having provided steady supply import raw materials and fuel by:

1. Diversification foreign sources of their acquisition;
2. Creations of considerable strategic stocks of raw materials and fuel;
3. Active introduction in industrial and household sectors of economy modern fuel - and raw material saving technologies.

Concrete threat of subjective character can be liquidated definitively. So, become now rather serious threat of food safety of Russia has developed owing to:

1. Spontaneous, absolutely not prepared transition of agrarian sector of the Russian economy from kolhozno – state –f arm managing for a market way. It has been caused by actual self-elimination of the state from economically proved regulation of such transition. As a result in the weight and without that backward Russian agricultural producers have been weakened so, that were not able to sustain a price competition with import producers even in the Russian market;
2. Suspension for a long time (up to January, 2003) for the Russian peasant of a question of the landed property of the agricultural purpose which is not allowing our landowners to realise long-term plans for development and messages an economy are more effective than the core.

On the origin of threat VEI are subdivided into threats of a natural and anthropogenous origin.
Feature of such division are possible difficulties with an establishment of a true origin of this or that threat. We will explain this thought on an example of threat NEI of Russia, Kazakhstan, Uzbekistan, Turkmenia and other countries, caused by drying of Aral sea.

It would seem, drying of Aral sea (just as periodic lifting and decrease in level of Caspian sea) is the grandiose natural cataclysm causing, mainly, in the adaptation of activity located round economic complexes to again developing prirodno-climatic conditions. However at more careful studying of the reasons of this cataclysm it is found out, that the basic and direct negative influence on water mode Арала was rendered spent in the Soviet time in Central Asia and southern Kazakhstan by the grandiose meliorative works led to almost full tap of waters of the rivers of Amu Darya and Syr-Darya on irrigated fields. As a result the current of these rivers which are in essence unique sources of replenishment of waters of Aral sea, has so weakened, that has ceased to reach this sea, being lost in deserts Karakum and Кзылкум.

Thus, there is obvious especially anthropogenous origin of drying Арала which are a consequence of the thoughtless relation of a management of the former USSR to the nature. And the threat to economic interests created by hands of the person, demands already absolutely other measures of counteraction.

In case of an establishment of an anthropogenous origin of threats VEI the great value has division of threats on degree of their sensibleness subjects of these threats.

In the majority of those cases when one economic interests resist to another and turn, thus, to mutual threats, such threats to economic interests, as a rule, are among realised by their subjects. For example, any businessman, throwing out on the market new production and, thereby, realising the business interest, quite realises that this action he creates threat VEI of the competitors.

But among threats VEI can appear and threats not realised or not quite realised by their subjects. After all, if the secretary has casually mixed time of a meeting of the chief with its important business partner, it she, that not wishing, has probably created threat VEI of that enterprise on which works.
Threats VEI of any objects of economic safety can be classified and on degree of subjectivity of their perception people. Thus overestimated or underestimated threat VEI is understood as such threat, at which real sizes of its any parameters accordingly more low or above the same sizes, but developed in human consciousness. Adequate threat VEI shows that case when real sizes of parameters of this threat precisely correspond to our representation about them. And as alleged danger VEI it is understood false, decided or it is artificial the generated threat which does not have the real bases (preconditions) for the existence.

Representation about overestimated, adequacy, underestimated or ostensibilities of this or that threat VEI rather volatile also is defined by concrete conditions in which this threat arises and shown. So, for example, in the spring and summer of 1998 active building by the Russian state of financial «pyramids» on the basis of issue of federal loan bond and state credit obligations represented for the majority of Russians quite adequate threat to their financial interests and in general to their well-being. And, proceeding from modern Russian economic realities, such threat followed to recognise as overestimated, and even imaginary.

For our huge country representing greatest in the world the state federation, it is rather important to classify threats to economic interests on scale of their possible influence. From this point of view they can be subdivided into threats federal, that is shown in scales of all Russian Federation, regional, staticized in scales of one or several regions of Russia - subjects of Federation, and local, important only within municipal unions.

Classifying threats, thus, it is necessary to consider not only features of their influence, but also an originality of their perception on each of three levels of managing. For example, now there is such federal threat of the state VEI as economic separatism of some subjects of Federation. At various times as sources of this threat Moscow, Tatarstan, Bashkiria, Yakutia, Kalmykia, Krasnoyarsk and seaside edges, Sverdlovsk and Kaliningrad areas were called. But the mentioned subjects of Federation hardly sometime will agree with it as they of in such quality, for quite clear reasons, do not see.

At the same time, those or other regions of Russia can test such threats to the VEI which at federal level will appear absolutely imperceptible or nearly so imperceptible. So, in a number...
of republics of the North Caucasus already more than 10 years in all branches of an economy exist threat of loss of the most qualified (basically Russian-speaking) the shots leaving from here because of growth of unemployment, an aggravation of international relations and an astable sociopolitical situation. This threat is actual now not only for the Chechen Republic, but also for Ingushetia, Dagestan and Karachaevo - Circassia. The compelled migrations of able-bodied population on local scales are rather essential. However in scales of Russia they are not so great and consequently as similar threat of economic safety of all country are not perceived.

As a whole, built to the signs considered above and the classification of threats verified on the basis of mentioned principles to interests in economic sphere helps to open the reasons of origin of such threats, to understand their maintenance and to estimate their intensity, promotes the organisation of more effective counteraction to them.

References:


A NECESSITY OF INTRODUCTION OF THE FINANCIAL CHECKING SYSTEM IN THE ENTERPRISE

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In this report we describe the essence of financial control, principles of construction of the financial checking system and necessity of financial control, is examined on an enterprise.

Keywords: financial control, controlling the system.

Lack of leadership, timely, complete and accurate information, not only about the future but about the present financial condition of the company is one of the causes of the financial crisis of companies. Implementation of the system of financial control in the enterprise can detect deviations of actual performance against targets and time to make corrections.

The purpose of the article is theoretical generalization is necessary implementing financial control systems in the enterprise.

Internal financial control - is now organized review process execution and ensure the implementation of management decisions in financial management in order to achieve strategic objectives and prevention of crisis situations that can lead to bankruptcy [2, p.102].

In practice of countries the new progressive complex internal checking that is used in large companies with the ramified network or in holding companies system purchased with the developed market economy of considerable distribution, that is named "controlling". One of his basic blocks is distinguished in the general system of controlling - financial conrolling. Financial conrolling is the supervisory system that provides the concentration of the control acting on basic directions of financial activity of enterprise, timely exposure of rejections of actual indexes from a
The construction of the system of financial controlling is based on such basic principles:

1) orientation of the system of financial controlling is on the achievement of financial strategy of enterprise;

2) multifunctionness of financial controlling;

3) oriented of financial controlling is to the quantitative indexes;

4) accordances of methods to the financial controlling specific of methods of financial analysis and financial planning;

5) timeliness, simplicity and flexibility of construction of the system of financial controlling;

6) economic efficiency of input of financial controlling on an enterprise[8, p. 19].

An input on the enterprise of the system of financial controlling gives an opportunity considerably to promote efficiency of all process of management financial activity. In the general system of conrolling, organized on an enterprise, one of his central blocks is distinguished - financial controlling. The leading aim of financial controlling is an orientation of administrative process on maximization of income and cost of capital of proprietors during minimization of risk and maintenance of liquidity and solvency of enterprise. Realization of the tasks fixed on financial controlling is arrived at during implementation services of controlling of the functions and use of specific methods. Depending on executable functions and methodological support financial controlling divide into strategic and operative.

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central blocks is distinguished - financial controlling. The leading aim of financial controlling is an orientation of administrative process on maximization of income and cost of capital of proprietors during minimization of risk and maintenance of liquidity and solvency of enterprise. Realization of the tasks fixed on financial controlling is arrived at during implementation services of controlling of the functions and use of specific methods. Depending on executable functions and methodological support financial controlling divide into strategic and operative.

Thus, the executed work allows to draw conclusion that financial control provides the concentration of the control operating on the most priority directions of financial activity of enterprise, allows in good time to educe deviation of her actual results from envisaged and accept operative administrative decisions, for her normalization.

References:


8. Petrenko S.M. Controlling in Business Management / Commerce and
INTERNATIONAL STRATEGIES FOR PUBLIC - PRIVATE PARTNERSHIP IN TRANSPORT INDUSTRY

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This report describes to the main advantageous and problems associated with the organization of public-private partnership for realization of significant project in transport industry. Experience of developed and Eastern countries is considered. Existing public-private project in transport in Ukraine are analyzed.

Key words: public-private partnership, efficiency assessment of projects, economic efficiency, social efficiency, risk sharing, compensation, concession.

Introduction: Ukraine required the crucial changes in approaches to finance the good and services provided by the society and goverment. This is determined by the requirement to improve the efficiency of limited government budget under constant increment of demands and expectations within the society, as for social benefits and for
infrastructure development. One of the solution is to build up a new system of goals and resources for its provision, within which the core is the specific consumer of the services or benefits. In different countries, it is heavily developing the new approached for government and private sectors interaction to speed up and increase the quality of implementing new projects and competitiveness enhancement. A part of it belongs to public-private partnership. There are a lot of different researches dedicated to this problem.

The most popular private–public partnership (PPP) became in and transport industry. The latest industry is the most attractive for implementation of various project via PPP. The main reasons are in respect to other industries: less time to achieve break even point of the project, requires big volumes of investment, which attracts banks and has a significant social effect via infrastructure development and increase employment.

Available international theoretical and practical experience would be very helpful for Ukraine to minimize the short cuts during preparation and implementation of the projects within PPP.

Actuality.

The term intensive Public–Private Partnership came to us from developed countries along with the concept for cooperation among government or public sector and private entrepreneurs for implementation of project valuable for the whole society. There are multiple definitions of PPP. Harvard Law Review refers to the Stephen Lieder works, define PPP as institutional agreement, which represent the cooperation between public and private sector, under which the common company is created where the government has one or more private partner [1].

Department of transport of the USA in his paper to Congress defines the PPP as “contractual agreement among public and private partners, which allows to attract more then regular involvement of private sector into the project [2]. Greater involvement of private sector in comparison to the other types of cooperation is the main reason of success of PPP in the world. National council of PPP defines such partnership as joining
of skills and assets of each of the partner to provide services to the public [3]. In the same time partners share both risks and profit from the project. As a result, it is suggested to define Public-Private Partnership as joining of skills, abilities and assets of public and private institutions to provide required services to the society, when partners make agreement how to share profits and risks from the project.

Private investor is attracted to PPP model by the guarantees issued by the government within the project implementation. Model of PPP made various projects attractive for more conservative investors, who are interested in minimization of their risks more then to get high profits. Another important reason for PPP development is institutional changes, which happens during last 10 years in the industries, which previously were owned or managed by the government (electricity, roads maintenance, railroads, pipelines, etc.)

In transport infrastructure the added value could be created in different cases:

• When partnership allows to implement high priority project quicker then without it;
• When private partner can provide specific skills to manage highly complex projects;
• When private partner can invest his own technology in to the project;
• When skills of private partner can provide wider options to finance the project;
• When project can stimulate private interest in the infrastructure development [4].
Some projects can satisfy one or multiple conditions mentioned above. In any case PPP must provide the wider range of instruments for project realization. Advantages of PPP over ‘traditional’ financing of project with government budget is not limited to cutting costs of project, via different financial instruments, PPP increase a number of projects, which can be either delayed or cancelled otherwise.

The general principles of PPP project management are collected and issued by UN commission. They are the following:

1. Participation - collaboration of all interested parties
2. Rules are implemented without harming to the society
3. Transparency of the decision making process
4. Responsibilities and reliability of the politicians for they actions and words
5. Fairness - wide spreading of rules, which are the same for all members of society
6. Efficiency – utilization of limited human and financial resources without extra losses, delays and not at the expense of future generations.

The goal of efficient management of PPP, considering the principles mentioned above, is defined through fair and transparent partners selection procedures, provision of guarantees of value added receiving (reasons for expenses); increment of social services quality (first of all for the most vulnerable social groups) and provision of proper training for people, who involved into the new forms of cooperation; fair means for stimulation and guarantees for covering costs for those, who take the risks and responsibilities to achieve the commercial success; reasonable dispute solution, which allow to continue production activity and prevent the project to fail or extra social costs; enhancement of abilities to take the new challenges and threats to make the provided by the participant’s services more reliable.
International experience of PPP efficiency evaluation allows identifying economic, social and ecological parts.

All participants of the project must assess economic efficiency of PPP projects from the point of achievement of their economic goals.

The advantageous for the government as a participant of such project are:

- Maximum return on investments;
- Quality upgrade in infrastructure management;
- Remove the project from the budget balance;
- Replacement of significant investment with the periodical (annual) payments from budget to support infrastructure (share of financial pressure on the government budget within the timeframe);
- Concentration of investments in the core project in public sector;
- Share risks with private sector;
- Speed up the implementation of infrastructure projects via attracting private assets;
- Utilization of best practices from private sector and optimization of management structure;
- Stimulation of innovation via competition.

Advantageous for companies from the participation in PPP projects are the following:

- Access to the ‘closed’ sectors of economy (transport infrastructure, housing services, etc.);
- Increase of credit opportunities for the project among national and international sources due to government guarantees;
- Enhancement of cooperation between government authorities and business, including the process of licensing, permissions issuing, etc. through the participation in PPP project;
Increase of the status of the project via government participation;
Positive image of the company;

Advantageous for the society are the following:
Increase of efficiency of the governmental anti crisis programs (increase of the employment rate, support of demand, stimulation of investment demand);
Creation of environment of trust and openness;
Upgrade of companies potential and their influence on the size and quality of human capital, regions and territories;
Increase of quality of services to the public, including transport infrastructure, which provide connections among regions, enhance the security in transportation, including safety of road utilization;
Decrease of tax pressure;
Creation of positive economic spillovers as a result of infrastructure development;
Decrease of consumption of fuel;
Compliance of created objects to ecological, architecture, radiation and other norms and requirements.

There are many classifications of Public-Private Partnerships models. World Bank distinguish 4 main groups:

1. **Management and Lease Contracts.** Private partner run the project but government remains the owner and sole investor:
   - Management contract - government pays to the private partner for management services. Operational risk remains at the government;
   - Lease contract - government lease to the private partner project for benefits. Operational risks transferred to the private partner.

2. **Concessions.** Private partner took responsibilities for the management of public project for agreed period. Investment risk transferred to the the private partner:
- **Rehabilitate, operate, and transfer (ROT).** Private partner rehabilitate the existing object, then manage and support it at own expenses and risk till the end of the contract;
- **Rehabilitate, lease or rent, and transfer (RLT).** Private partner rehabilitate the existing object, then lease it or rent and manage the project till the end of the contract;
- **Build, rehabilitate, operate, and transfer (BROT).** Private partner finishes construction of the existing object, then manage and support it at own expenses and risk till the end of the contract.

3. **Greenfield Projects.** Private partner or joint with government company construct and manage the object during the period of the contract:
- **Build, lease, and transfer (BLT).** Private investor construct the object at his own risk, transfer the ownership rights to the government, then lease it and manage till the end of the contract. Government can provide guarantees of long term capital inflows through guarantee of minimal loading of the object (used for toll roads) or through contracts with main consumers (energy sector);
- **Build, operate, and transfer (BOT).** Private investor construct the object at his own risk, manage it at his own risk and transfer the ownership rights to the public sector at the end of the contract term. During the contract the ownership rights can be transferred to the government or remained at the private investor. Government can provide guarantees of long term capital inflows through guarantee of minimal loading of the object or through contracts with main consumers;
- **Build, own, and operate (BOO).** Private investor construct and own the object at his own risk. Government can provide guarantees of long term capital inflows through guarantee of minimal loading of the object or through contracts with main consumers;
- **Merchant.** Private investor construct the object at the free market and government does not issue any guarantees to return investments, Private partner took
risks of construction, management and market risks (for example, private electric power generator);

- **Rental.** Government can rent an object from the private investor for certain periods of time (for example, electric power generator station). In the same time private investor construct a new one at his own risk and manages it during contractual period. Government can provide guarantees of short term money inflows through the contracts of main consumers.

4. **Divestitures.** Private partner buys the share of the object from the government either directly, or public offer or privatization. There are total and partial divestiture:

- Total - private partner buys 100% from the government;
- Partial - private partner buys the share of the governmental enterprise, management may remain within the government.

Such classification applicable for infrastructural projects, which accounts most of the PPP projects. Along with the significant benefits of PPP we need to highlight some risks, which arise while implementing such projects. We can divide the models of PPP by the level of risk sharing among partners:

1. **Service Construct.** Private partner is involved into some services provision within project, designed for short terms and leave coordination and responsibilities for investments at the public sector;

2. **Management Contracts.** Similar to the service contract by the duration: usually last from 3 to 5 years. Responsibilities for management and support of the project are transferred to the private partner but investments remains within the public sector.

3. **Lease.** The private partner takes most of commercial risks. His revenue depends on how effectively he used obtained resources;

4. **Joint company.** Created with the participation of the government and interest of partners are related to the ownership of the company;
5. BOT Contracts. Private investor run the construction and management of the object, but the ownership rights transferred to the government, while under BOO ownership rights remains at investor (Build Operate Transfer / Build Operate Own)

6. Contracts DBOF. Private partner run the design, building, and management and financing of the project, investments are returned via payments from the government. At the end of the contract the ownership rights are transferred to the government. In most cases the government leave the ownership and other rights on all assets, which transferred to the government after the expiration of validity term of the contract, which is usually 10 to 50 years.

There are a lot of different forms of PPP, which can be differentiated with the goals, volumes of the services, legislation structure and level of solidarity in risk sharing. Risk aversion issue, which was one of the most important reason of PPP appearing still remains quite crucial and requires a lot of attention for each specific project. Under implementation of each project risks can be divided into avoidable and non-avoidable.

Tanja Pohle, Gerhard Girmscheid identify the following stages of the risk lifecycle:

- Identification. Identification is the process of identification of all risks associated with the project.
- Evaluation. Evaluation is the process of calculation of probability that risk and its consequences will take place.
- Sharing. Sharing is the process of risk sharing among parties of PPP and take actions for diminishing the risks, including legislative.
- Aversion. This is the process of planning of action to averse the risks or minimizes its impact in case if it happens.
- Monitoring. Monitoring is the process of observation on risk matrix under project implementation.
According to this method, three instruments of risk identification are: standardization of risk catalogue, ranging of project risks and creating of risk matrix, which must describe the reason and impact of the risk. Matrix must be created based on the risks categories (project risk, financial risk, operational, market, technological, force major, etc.), contain the risk description, its results and responsible party. Matrix is widely used in Europe for risk evaluation of PPP in road construction, where the primary type of partnership is concession, and the credit is paid back via the consumer’s payments. In this case matrix can evaluate and describe the risk level, which is invoked by the reduction in the demand for road services, which also can cause reduction of revenues of concessioner, which is responsible for project’s investments returns.

During 1990 to 2001 private sector took risk in construction and management of 2500 infrastructural projects and attract 750 mln USD of investments.

The most of PPP agreements in developing countries are made in transport infrastructure sector. The least popular form of cooperation between government and private partners were management and lease contracts. Management contracts are more popular in more developed countries. The figured vary from 21% in the total amount of PPP in poor countries to over 50%.

In geographical perspective the leader among countries invested in PPP is Brazil in 00-th. During 2000-2007 Brazil implemented 203 PPP, with total value of 135.4 bln USD, which is 18,6% of the total investment in PPP projects in developing countries. The best positive dynamic was observed in India, who increased its share by 8.2% and Russia, who took the 3rd pace with the share of 7.5%. Total international trend is spreading the geography of PPP mechanisms, which is witnessed by the reduction of the common share of 10 leaders from 70.7% to 58.6%. Such trend is also supported the decrease of concentration index value: in 1990th 10 leaders attracted 98% of all private investments in PPP, but in 2000th they accounted only 67%.

If we divide developing countries by the GDP per capita into 3 groups, then the richest receive 60% of total investments into PPP aimed into infrastructure, the mid
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Group received 29% of investments into PPP and the 64 countries belong to the poorest group obtained only 11% of capital. However, this data does not consider ‘small size’ project, which can contribute to better performance of the 3rd group.

During 1990-2001 only 48 contracts were cancelled, which accounted 1.9% out of 2500 infrastructure projects. They costs 24.2 bln USD or 3.2% of investments in all infrastructure projects (754 bln USD). In most of cases the projects were stopped after 4.5 years after the PPP is sign off. One third of all unsuccessful projects were related to the Mexican program of toll roads construction. If we exclude such projects, then the share of cancelled projects would be less then 1% and investment in such projects would be only 1.9% of total amount of investments. 19 of failed projects of toll road construction accounted 5.8% of all projects in the sector. Transport is the ‘leader’ in the cancelled projects, based on the volume of investments (135.3 bln USD) and by the number.

We need to mention that the share of cancelled projects significantly increased from 2001 to 2007. According to World Bank data 6.1% of PPP were cancelled within the mentioned period, particularly remarkable were Latin America and South-Eastern Asia, were the share of cancelled projects was 10.3% and 9.7% respectively. Some of the reasons, which led to the project cancellation, were specific for the each case. However, there are a number of factors, which are common for projects in the specific sector. For example, in the toll road sectors most of projects were cancelled due to the calculated traffic was too much optimistic, but the real one could not generate the sufficient for the private partner cash inflows. In most of cases such situation was due to unwillingness of consumers to pay for the roads if there is a free alternative road exist. For example, most of Mexican traffic on toll roads was not more then 50% of expected, and the M1/M15 in Bulgaria during the first year did not get 60% of planned value. In some cases the readiness of the government to take the risk of expected demand, caused that the private partner was not very careful about the quality of the prognosis. A lot of
project also had problems at the auction phase. About half of the 48 cancelled projects got negative publicity due to lack of transparency.

We must highlight that not all ‘problematic’ projects were cancelled. In most of the cases the terms of contract were revised to allow them to continue. Small share of cancelled projects let us to make a conclusion that the government consider private sector as effective partner in such projects.

Factors that lead to problems of PPP projects in the years 1990-2001, showed the complexity of the transition infrastructure sectors to private management. But in cases where projects achieved transparency and consensus among the partners of private partner does not lead to social and political resistance, and increased the efficiency of the project. In the sectors of energy and water tariffs has historically been lower than the cost. After the 1998 crisis, the development of PPP in the world characterized by a decrease in investment activity of the private sector in developing countries. In terms of organizational and legal measures to which the country resorted to organize private investment in infrastructure, it should be noted that approval of the majority of laws and regulations governing the PPP began after 1990. Another area of improvement is the emergence of special departments PPP government structures rounds general rules and procedures, management, consulting and expert evaluation of potential projects. At present these departments operate in virtually all countries.

The main factors that influenced the active application of PPP in projects can be defined:

- Global economic and financial crisis;
- The need to enhance and promote competition in the market;
- The use of more efficient technologies;
- More motivating private sector efficiency and effectiveness of projects than is typical in the public sector.

Suffice it to say that PPP projects successfully implemented in most European countries, such as Holland, Bulgaria, Scotland, Italy, Germany and others. The main
constraints to the development of PPP Europeans call: insufficient development of legislation in this area; political interference, slow process of standardization, insufficient staff training public sector [7].

Currently in the world there are 25 million kilometers of roads, including 240 thousand km of trunk, from which 150 sq. km is paid for users. Paid travel is usually introduced on high-speed highways, bridges, and overpasses. In Europe, the length of highways is over 50 sq. km, of which toll - 61% of their total length. This year the length of toll roads increases (table 1)

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<tr>
<th>Country</th>
<th>Total length of auto roads, km</th>
<th>Length of highways, km</th>
<th>Including toll roads, km</th>
<th>Share of consession roads in the total length, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1 890 000</td>
<td>42000</td>
<td>34000</td>
<td>81</td>
</tr>
<tr>
<td>France</td>
<td>960000</td>
<td>11000</td>
<td>8530</td>
<td>78</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>378000</td>
<td>8200</td>
<td>340</td>
<td>4</td>
</tr>
<tr>
<td>Spain</td>
<td>347000</td>
<td>8200</td>
<td>3250</td>
<td>40</td>
</tr>
<tr>
<td>Italy</td>
<td>320000</td>
<td>6700</td>
<td>5690</td>
<td>85</td>
</tr>
<tr>
<td>Austria</td>
<td>140000</td>
<td>2200</td>
<td>2100</td>
<td>96</td>
</tr>
<tr>
<td>Greece</td>
<td>118000</td>
<td>890</td>
<td>467</td>
<td>53</td>
</tr>
<tr>
<td>Norway</td>
<td>90000</td>
<td>1200</td>
<td>550</td>
<td>46</td>
</tr>
<tr>
<td>South Korea</td>
<td>77000</td>
<td>1940</td>
<td>1940</td>
<td>100</td>
</tr>
<tr>
<td>Switherland</td>
<td>72000</td>
<td>2190</td>
<td>1950</td>
<td>89</td>
</tr>
<tr>
<td>Portugal</td>
<td>69000</td>
<td>1200</td>
<td>900</td>
<td>75</td>
</tr>
</tbody>
</table>
Pay roads operating in 30 countries and 17 European countries joined the European Association of toll road concessionaires and facilities (ASECAP). In these states, operates more than 100 companies in the management of which there are more than 24 thousand kilometers of toll roads.

For more than 50 years of the most profitable toll roads are in Italy, Spain, Norway and France.

The total length of highways UK is 378 sq. km, including 8.2 million km - motorway.

In order to control and optimize the traffic in the UK under the PPP created National Center for Traffic Management, who handles public roads and trunk length and 7 thousand miles under the Ministry of Transport UK. Its main task is to monitor, control and redistribution of traffic flow and optimize the time spent in transit vehicles. Center examines the events that last more than 15 minutes. Information for participants of traffic coming through special displays, located on motorways, radio, Internet messages to mobile phones.

In Britain in the construction of highways implemented the following projects PPP toll roads and tunnels premium tunnel across the Thames in the south, toll-M 6, Highway M 25, M 40, and 1M.

Project toll-M 6

Project construction and operation of toll-M 6 is one of the most successful in the UK. Daily revenue from toll highway is 200 thousand pounds.

The road runs north of London and is the northeastern bypass of Birmingham. Length of paid sites M 06 - 43 km. Concession contract for the construction and
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Total project cost is 900 million pounds, including construction - 485 million pounds. Fare entire highway in one direction depending on the time of day for cars is 3.5 pounds for trucks - 7 pounds. Alternative free roads are existing roads M 6 and A 5. Actual traffic toll section M 06 is 40 thousand vehicles per day, of which 92% of passenger transport. Every year, traffic increased by 5%. To free the road M 6 daily drives 160 thousand cars.

PPP projects on reconstruction and exploitation ring road around London M 25

This project is one of the largest in Europe PPP projects. It involves the reconstruction of individual sections of the road length of 67 km, construction of tunnel under the Thames and operation of ring road 25 m total length of 220 km.

Total project cost 9 billion, including construction - 6.2 billion euros. Treaty concluded in 2008 with the consortium «Connect Plus», which includes 5 private companies. For the financial closure of the project in 2009 attracted external funding worth 1.7 billion euros. Term - 30 years. The intensity of traffic on M 25 is more than 200 thousand cars a day.

Payment for access roads. It is a consortium of Government during the term of the contract. For users, regardless of the type of vehicle, the road is free.

For PPP experience in the construction and operation in countries South Eastern Europe, consider the experience of Hungary. At present, the total length of roads in Hungary is 30 thousand km, including 1.2 thousand kilometers - motorway, of which more than one thousand miles are paid. You must also pay for the use of bridges across the Danube, but unlike roads, alternative travel there.

With a significant budget deficit in 90 years, the Government has started to attract private capital for the construction of highways under concession. Already in 2002, was built about 500 km of motorways.
The construction project toll-M 1 / M 15

Concession contract to build and operate toll highways plot M 01 (Budapest - Western border, Vienna direction), length 42 km and land speed road M 15 length 15 km concluded in 1993, according to the Hungarian law "On Concessions" on 13.05.1991.

Concessionaire - JSC "First Hungarian highway concession company." The main shareholders of the concession companies were Hungarian banks with foreign (Austrian) capital.

Lots of highways M 1 and M 15buly built in a short time - in 1996.

Concession agreement did not provide for the concessionaire restrictions on construction costs and the maximum amount of fees for users. Therefore, the cost of construction of 1 km of road has reached more than 8 million. Given the high investment costs and short-term concession (15 years), the concessionaire was set record for Europe tariffs for highway: fare 1 km was: for cars - $ 0.15; truck 0.45 - U.S. $.

Due to the high price to pay for the use of much of the traffic flow enjoyed alternative ways, thus reducing the income concession company to increase revenue resorted to another tariff increase fares. In the first year of operation of toll motorways actual traffic was only 50% of predicted.

Negotiations between representatives of the Hungarian government and the concession company did not succeed, and in 2000 the latter went bankrupt. During bankruptcy constructed area highways (42 and 15 km) acquired by the state and is currently managed by the State Joint Stock Company Management highways.

The construction project toll-M 05

Concession contract to build and operate two plots toll-M 5 (Budapest - Kishkunfeledhaza, Belgrade direction), length of 80 km and 33 km concluded in 1993, according to the Hungarian law "On Concessions" on 13.05.1991. Term concession for 15 years.
In 1995 the contract was amended whereby the Hungarian government agreed to guarantee a minimum income for the concessionaire of the project 14%.

Concessionaire - Stock Company "Alfeld highway concession." The main shareholders of the concession companies were French investors led by Buyih grass Pyublik (France).

Lots of highways (80 and 33 km) were built in 1998. Forecasts on the level of traffic were optimistic and therefore set the fare was too high. In the alternative roads were not provided with proper traffic conditions, which led the introduction of toll roads to guide land mass actions of public protest.

As a result of long negotiations in February 2004 signed a memorandum of understanding between the parties, which included the following:

- Inclusion highway M 05 to nationwide single matrix system;
- abolition of fees for the use of specified areas of highway and application of a new financial model in which the state pays the concessionaire "payments for the operational readiness of the road";
- included in the concession agreement construction of another section of highway stretching 35 km from the city Kishkunfeledhaza to Szeged;
- acquisition of 38.9% stake in the state concessionaire;
- transfer of rights for the formation of tariffs and to collect fees for the use of the new Highway 35 km section of the state;
- Extension of the concession to 27 years.
In September 2004, the Parliament of Hungary adopted a new format of the concession agreement, which in addition to the above innovations, contained provisions for an annual allocation from the state budget specific appropriations in the amount of 92.5 million euros to cover the concessionaire - payments for the operational readiness of the road.

In these circumstances, the concessionaire in December 2004 attracted new funding of $ 0.7 billion and completed the construction of 35 km of new motorway section.

*The construction project toll-M 06*

The project with the design, financing, construction and operation of concession road section M 6 in Hungary was successfully completed in December 2004. Length of the site - 56 km. Total project cost 400 million euros. Term concession - 20 years. Concessionaire according to the signed agreement, investment returns due payments for the operational readiness of the road, the state paid for the concession. The mechanism for calculating such payments is universal, but may include features depending on the specific project and the estimated payback.

The current state of development of toll motorways in Hungary

Since 2007, introduced tolls on short sections of major highways as well as major transport interchanges. Thus, the entire transit transport has to pay toll roads in the country.

Users of toll motorways in Hungary are primarily a transit cargo transportation. Its share is 86%, local transport - 14%. Payment is made through the purchase and activation of vignettes for a certain period of time: 1 day - only for trucks, 4 days - only for cars and motorcycles, 1 week - valid for 10 calendar days for all vehicles, 1 month - for 30 days, - 13 months for all vehicles. Cost vignettes for different vehicles are in Table 2.

Таблиця 2
Price of vignettes in Hungary

<table>
<thead>
<tr>
<th>Duration</th>
<th>Cost vignettes for different vehicles including VAT, euro</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Motocycle, cars, mini vans</td>
</tr>
<tr>
<td>1 day</td>
<td>–</td>
</tr>
<tr>
<td>4 days</td>
<td>4,3/5,63</td>
</tr>
<tr>
<td>Week</td>
<td>9,38</td>
</tr>
<tr>
<td>Month</td>
<td>15,45</td>
</tr>
<tr>
<td>Year</td>
<td>136,8</td>
</tr>
</tbody>
</table>

Today in Hungary there are two types of toll motorways: state and concession. Collecting tolls on state highways paid by the State Joint Stock Company to manage highways, established August 29, 2000. She also is responsible for the operational maintenance highway network (696 km), major roads (209 km), service facilities (125 units) and 1267 sections of bridges.

On toll roads, constructed under the concession agreements, collecting tolls perform the concession company. Control over payment of fare paid by all highways under the law of 1988 is public transport service. Additionally, since 2005 the state toll highways control is also carried out using the electronic system collecting tolls, based on the automatic recognition system and photographing rooms vehicles. Only two percent of people evading payment. This foreign passenger transport. According to the survey, 70% of users are willing to pay for travel-improved roadways with high levels of service. Freight transport for 1 year passes such highways 150 thousand km and passenger - 30 thousand miles.

Over the past 16 years fare roads in Hungary has become an additional source of income for the development of new roads. The Government is currently discussing the possibility of transfer of payment for a period of time (vignette) to pay for each
kilometer of travel. According to Hungarian professionals, revenues from passenger transportation in going to pay for mileage increased by 25%.

At present, the total length of roads in Poland is 250 thousand km, including about one thousand miles - highways, of which some sections of motorway A1, A2, A4 are paid.

Development Program national road network by 2013 in Poland provides a broad introduction of project-based PPP. Also planned to use PPP on the railroad, public health, utilities and energy sectors. For this purpose a separate department infrastructure funding as part of the Polish government, which is responsible for developing the legal framework for PPP provides information and makes an examination of PPP projects.

Project A 1 motorway Gdansk - Torun (area 152 km)

Highway A 1 (Gdansk - Warsaw - border with the Czech Republic) has a total length of 582 km. Getting concession tender - August 25, 1997.

Concession contract for the construction and operation of the highway section length of 152 km signed in Gdansk transport company Aug. 31, 2004. Term concession - 42 years. Shareholders Gdansk Transport Company is: Skanska ID - 30%; John Laing Infrastructure - 29,69%; NDI Autostrada - 25,31%; Intertoll ID - 15%. The structure of project financing: own funds 5%, 20% commercial loans, and the loan of the European Investment Bank - 75%. Concessionaire investment returns due payments for the operational readiness of the roads that are paid by the state during the concession period.

Construction of a highway A 1 was divided into two phases.

Phase 1 - includes 90 km stretch of road between the towns Rusocin and Nowe Marzy (near Gdansk), which opened in 2010 and introduced a motion tolls, which provides concessionary fee and deposit state. The financial model, which agreed with the Polish Government to phase 1, a return concessionaire investment through payments for the operational readiness of the road. Revenues from tolls to the state budget.
Characteristics of phase 1: the cost of 675 million euros, intersections at two levels - 6 pcs.; Collection points tolls - 6 pcs.; Service points - 6 pcs., Highway maintenance items - 2 pcs.; Engineering structures - 86 pc.

Fees for travel 1-mile stretch of road 90 km: passenger - 0.56 USD; loading - 0.98 UAH. The intensity of the movement - 15 thousand cars / day. Composition traffic: 75% - passenger transport, 25% - cargo.

Phase 2 - includes 62 km stretch of road between the cities of Nowe Marzy and Czerniewice (near Torun). The construction area 51.7 km, 10.7 km reconstructed section and completed the construction of two bridges.

Characteristics of phase 2: the cost of 1110 million; intersections at two levels - 6 pcs.; Collection points tolls - 6 pcs.; Service points - 6 pcs., Highway maintenance items - 2 pcs.; Engineering structures - 46., bridge crossings Vistula - 2 pcs.

Project motorway A 2 Sviyesko - Konin area 255 km

Motorway A 2 unites Germany and Belarus and through Warsaw was provided in the PPP concession consortium of companies consisting of: «Autostrada» (Italy), «Strabag» (Austria), «NCC» (Sweden), «Kulczyk» (Poland) and «EGIS» (France). The project is carried out by individual plots.

The first section Konin - New Tomyshl length of 150 km

Funding for 17 years organized by banks «Calyon» and «Commerzbank. Total project cost 875 million euros, including the cost of the work of design and construction - 637.5 million.

Government advisors were «Deutsche Bank» and Law Firms «Baker McKenzie» and «Allen & Overy».

Structure and phases of the project are presented in Appendices B and C respectively. The structure and implementation stages of the project is relatively standard and meet the practice prevailing in the EU, both in terms of structuring and tendering procedures to implement the selection of the private partner. However, as
shown in the diagrams, tender procedures were quite long, which means that the complexity of the process of selecting a private partner and negotiation.

The current state of development of toll roads in Poland

In Poland, some travel sites motorways A 1, A 2, A 4, A 8 is paid. The fare will be charged in two ways:

- The collection points, located directly on the highways, while the amount of payment depends on the type of vehicle (similar vignettes);
- At the end of travel away from the highway, depending on the distance and type of vehicle (payments for each kilometer of travel).

On July 1, 2011 in Poland for all vehicles gross weight exceeding 3.5 tones and buses with a seating capacity of more than 9 introduces new electronic system for collecting tolls - «via TOLL».

In the second stage (before January 1, 2012) will be introduced collect tolls for cars with the maximum permissible weight of less than 3.5 tones per state toll roads and highways on existing concession.

Electronic toll will operate the toll roads, high-speed roads and some roads of national significance. All proceeds of payment for the use of «via TOLL», will be channeled to the State Road Fund and subsequently invested in the development and modernization of road network in Poland.

Implementation of the electronic system for collecting fares, including for cars, will be launched with two existing sections of toll motorways A2 (Konin - Shtrykov) and A 4 (Wroclaw - Katowice). Users of these highways will be able to choose the method of payment manually on special paid sites or in electronic form, by joining the system «via TOLL».

Size toll motorway sections in Poland is: for cars - 0.033 - 0.05 Euro per 1 km for trucks and heavy - 0.2 - 0.5 Euro per 1 km.

In Ukraine, according to foreign experts is very progressive legislation that regulates attract private investors to build infrastructure projects, including highways:
1) 1999: The Law of Ukraine «On Concessions" and "On concession to build and operate highways" - it was the first step towards creating the legal framework for the implementation of the first projects (concession). However, as Ukraine was generally unprepared for this new type of contacts as well as through general unreformed economy and the absence at the time of the latest budget and tax laws - the laws could not fully provide real projects on the basis of concessions;

2) 2009 amends the Law of Ukraine "On concession to build and operate highways" that extended warranty, which can provide power potential concessionaires, and the mechanisms of compensation parties;

3) In 2010, the Law of Ukraine "On public-private partnership" - this law is a framework and now quite sufficient for implementation of projects based on PPP, as it clearly defines the concepts, principles and forms cooperation provides investors with the openness and transparency of tender procedures and possible return on investment. And while many politicians and experts believe the law flawed, in our opinion, it is sufficient to start the implementation of PPP projects, and its improvement should be carried out later, the results of several projects in different areas to test in practice;

4) in 2011, approved by the Cabinet of Ministers of Ukraine "On Approval of the Procedure of the private partner of the partner information that contracts under PPP» № 81 of February 9, 2011;

5) also in 2011, the Cabinet of Ministers of Ukraine "On approval of the state support the implementation of public-private partnership» № 279 of March 17, 2011;

6) last year approved by the Cabinet of Ministers of Ukraine "Some aspects of the implementation of public-private partnership» № 384 of 11 April 2011 (hereinafter - the Resolution № 384).

According to many European experts, legal and regulatory framework for PPPs in Ukraine on average satisfies standards of PPP. In particular, according to experts of the U.S. Agency for International Development: "Ukraine has not yet been found areas that need to be changed to improve the regulation and promotion of projects based on PPP.
However, numerous changes to the Cabinet of Ministers of Ukraine "On approval of the list of public property that can be conceded" were adopted in 2006. Recent changes were adopted March 15, 2006. Law of the PPP in its present form clearly defines the scope of its application. It was recommended to develop a new law or, as the regulations clearer and more detail to determine the competitive procedures (with the principles of transparency, non-discrimination, proportionality and efficiency, precise adjustment procedure pre-selection and review procedures). Identification and cooperation between the various government agencies could also be improved.

Regulations governing the contract of PPP provide a more or less clear guidance on the main issues that need to cover, and they are flexible enough to parties could freely discuss his condition (the existence of a typical PPP contract, the use of which is optional).

The main legislative acts of Ukraine on PPP mention two laws relating to PPPs in the transport sector:

1. The main provisions of the Law of Ukraine "On concession to build and operate highways" of 15.01.2009 № 891-VI:
   - Providing the non-compensation of actual traffic project value;
   - The possibility of granting a license for renovation, repair and separately for operational maintenance of the road;
   - Introduction of additional models concession (fares, charges the operational readiness of the road, subsidies and compensation);
   - No restrictions on the use in the construction of roads of local materials and labor;
   - Commitment concession designer to ensure permanence purpose of land under concession object;
   - Provision of state guarantees for the obligations under concession designer [6];

2. The main provisions of the Law of Ukraine "On Public-Private Partnership" from 01.07.2010 № 2404-VI:
- Commitments detailed draft PPP;
- Equality of rights of foreign business entities and entities Ukraine to participate in competitions;
- The obligation of the public partner to provide land allocation;
- Equitable distribution of risks between the parties;
- Public support for the implementation of PPP projects as co-financing for the budget, state guarantees;
- Guarantees of private partners related to the implementation of PPP contracts [7].

There are general rules for strategy development of PPP in a particular country, so Ukraine should adopt a realistic and coherent strategy PPP, based on the specific situation and their needs. Publicly declared Ukraine support private sector participation in PPP projects must meet three objectives:

- To convince private investors and lenders that the government is interested in PPP projects;
- Disseminate information about private sector involvement in infrastructure projects and support to achieve this by the population;
- Provide support to stakeholders in Ukraine for private sector involvement in areas traditionally considered public.

Moreover, it is important to inform private investors and their lenders not only that the Government of Ukraine is interested in private sector participation in infrastructure projects as part of an overall strategy, but that the government has significant reason to support PPP projects and will not terminate such support, to delay projects or abandon their commitments. Thus any reason, financial or technical nature should be clearly explained, and for Ukraine should focus issue tenders (tenders) to attract private partners.
It is important to remember that unlike conventional investment projects for PPP projects set special tender process. According to the Law on PPP private partner should be selected on a competitive basis, unless otherwise provided by law.

A significant drawback of institutional mechanism of partnership is the lack of a clear definition of public policy on the relationships that develop between the state and the entities that do not allow to create conditions for improving the competitiveness of the public sector through more efficient use of public property, investment in the economy of Ukraine modernization of industrial and social infrastructure.

According to the cognitive aspect of PPP is directly connected with the institutions of public confidence and social responsibility, which are the integral part of the mechanism of social partnership. The development of social partnership in Ukraine requires the formation of the ideology of partnership, in which the leading role belongs to the state, a system serving nonprofit organizations that coordinate and facilitate the functioning of both responsible institutions and all social and economic spheres (fundraising organizations, consulting companies, enterprise asset management facilities, accounting firms, rating and monitoring of others).

From a small, but unfortunately, unsuccessful Ukrainian experience in the transportation industry is worth noting that in the field of road construction was signed two concession agreements for the construction and operation of highways Lions - Krakovets and Lions - Brody. Also in 2003 and 2005 were concession tenders for the construction and operation of highways Vinnitsa - Kyiv (146 km) and Scherbacivka - Kharkiv (49 km). But winners are not defined.

The main reason - no guarantees revenue for concessionaires in concession contracts, relies on outdated at the conclusion of agreements, legislation on concessions. Given the inability of the concessionaire, in autumn 2010 was terminated concession agreement Lviv Krakovets. The second agreement Lviv-Brody was revived with the new capabilities of the Law on concessions for the construction and maintenance of
highways. Concessionaire began his design work in 2011. But now any successful project based on PPP in the transport industry of Ukraine is not implemented.

Conclusions. Analysis of the effectiveness of projects under PPP and concession suggests that their success is primarily dependent on state support in the first years of operation of highways. However, in the later years of the concession agreement the state will receive concession fees, which will lead to the realization of other projects.

Modern operating conditions for Ukraine's economy characterized by crisis, intensive development of the global financial crisis. Negative external effects only exacerbated macroeconomic and social disparities inherent in the Ukrainian society.

Problems of development of national economy are mainly associated with inefficient system of state regulation: lack of coordination between government exercised its inconsistent macroeconomic policies and the lack of systemic anti-crisis policy, unbalanced budget, and social policy, opacity monetary mechanisms regulating economic conditions; haphazard investment State policies, lack of functional unity and heavy politicization of public authorities; permanent political instability, high levels of corruption, inefficient judicial system, underdeveloped civil society and others.

Thus, the task of increasing the controllability of the national economy, civil society as a mechanism of social control of government and ensuring sustainable competitive development of Ukraine can not be resolved without creating environmental partnership between the government and the private sector.

Given this experience and the new opportunities that the "framework" legislation on PPPs, to start practical implementation of PPP projects is important to choose a small volume investment project with the highest likely payback and minimal problems associated with social factors. The latest - a possible rejection of innovations population, problems with land acquisition and resettlement, the risk of loss of jobs, etc.. In the proposed version of the pilot project, all these factors into account, but the investment offer well structured and supported by appropriate calculations.
For the investor, the most important is the financial and economic feasibility of the project, loyalty made calculations and valuation of risks associated with the project. Most of negotiations with potential private sector partner (usually he also acts as an investor) are reduced to the financial justification, guarantees, etc. Because of the training project depends on the success of its further implementation.

**LITERATURE**

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Sytnik O. E.

ACCOUNTING PROBLEMS DISCUSSION REFLECT THE COSTS ATTRIBUTABLE TO FUTURE PERIODS


Introduction. Despite the place in recent years in the balance Russian legislation changes, still remains an important question about the category of accounting as a "prepaid expenses".

On the one hand it is considered that the term "prepaid expenses" came as a result of an incorrect translation from English «prepaid expenses» (prepaid expense). On the other hand believe that the phenomenon was born in accounting as a result of the accrual. With the cash method, no such costs can not be, because the expense is
recognized at the time of payment of the cash. But accrual caused the appearance of the same kind. It is connected with the problem of the accrual - income and expenses are recognized, regardless of the receipt of funds. Definition of the method suggests that it does not have to recognize income and expenses, but, unfortunately, the definition of a word does not say how to recognize income and expenses. That is, the phrase "recognized in the period to which it relates" is very controversial, philosophical discussion - one expert believes that these costs relate to the same period, another may consider other relevant period. Changes in the regulatory framework for accounting in recent years related, including the revision of the approaches to the ratio of expenses or income to a particular accounting period. These changes are not only in the Russian standards, but also to IFRS.

Returning to the subject should be noted that the financial statements contain two groups of indicators, each of which can be clearly identified - or he is identified as of this time, or it is identified for the time period. That is, every indicator shows or snapshot in time - this is the reporting date, or he describes the changes that have occurred over a period of time. Without going into a detailed presentation to the financial statements, the figures as of the time stated in the balance sheet. And if we talk about the figures for the period of time, the basic form of a Statement of Financial Performance. Thus, any measure can be designated either point or interval. But prepaid expenses are an intermediate category that is difficult unambiguously attributed to or from there. In fact, the flow rate - a measure of the Report on the financial results, that is a measure of the reduction in economic benefits during the period of time. On the other hand, if we try to find the prepaid expenses in the financial statements, we did not find. Previously, he was placed on the balance sheet, and in the asset. Thus, like a decrease in economic benefits during the period into a resource that will bring economic benefits in the future. There is a substitution of concepts. It turns out that the figure for the amount of time falls in the balance and become an indicator of the date. This is just shifting costs to future periods. Ie Now the organization has carried some cost, paid the money, there
was a debt to pay cash and then accountant believes, for whatever reason, that these costs are not related to the reporting period, they refer to the foregoing.

It turns out that in the current period, it is impossible to recognize. It can be recognized in future periods. But how can it be transferred to future periods? Just so defer for future anything. The only way by which the accountant can move consumption in the future, the recognition of an asset. If something affects 97 "Deferred expenses" account, then, in the end, remains to this account until the turn of the balance sheet as assets. But the asset is not called. And this is precisely the main problem. Because of the financial statements should present fairly the financial position as at the balance sheet date and the income statement. Before assets are recognized and reflected in the balance sheet, it is necessary to classify it. User accounts must understand what kind of asset. If such a problem did not exist, we could all assets in the aggregate together in one place to be called "prepaid expenses". Because any asset in the long run is deferred expenses. This is a cost that the organization has already incurred, but which can bring economic benefits in the future. For example, if we classify an asset as the primary means, it follows that tells the user that the organization is not just a resource, and long-term resource material, which is used in some way for the production of products (works, services) or for administrative purposes and can bring economic benefits over the useful life.

Prepaid expenses, in fact, is not an identified asset. We have already noted that, in principle, the cost of organizing focus for future periods. But the key point is it is creating a resource that provides an inflow of economic benefits in the future. For example, advertising. Yes, we assume that the advertising campaign is to bring economic benefits in the future. But we cannot recognize the cost of her asset, because the organization does not get control of the resource, which brings economic benefits. And, therefore, these costs in current practice is always to be recognized in the current period.
In forming the accounting policy should pay attention to the precautionary principle - the organization must be prepared to a greater recognition of expenses or liabilities than income and assets. This precautionary principle is implemented through the requirements of accounting standards by the so-called presumption of consumption - the costs are considered to flow until it is proven that the organization is an asset. Therefore, the organization must strictly follow the requirements of standards for the implementation of the criteria for recognition of assets. In view of the "inheritance tax" in accounting is it that such a criterion for recognition of the asset, but on the other hand there is also a criterion for the recognition of expenses. There PBU 10/99 on the recognition of expenses. This is the only standard in the Russian system of standards, which has no international equivalent. Due to various problems faced by the accounting records, the Russian accounting standards without the expenditure can not do. And if you cancel the benefit of spending, such spending will automatically appear as an expense in future periods. Must be clearly understood that in allocating costs to the costs of future periods we make recognition of the asset. But without a recognized asset classification. It is this current practice and trying to change the law. And the whole point of the amendment that was made to the Regulations on accounting and financial reporting, is to take a step on the way of getting rid of this category. Says that "the costs incurred in the current period but relating to future periods are recognized in accordance with the recognition criteria of assets."

Inference. Thus, in accounting relating to the foregoing matters only if the organization has come under the control of resources, providing economic benefits. If such a resource does not appear, no hope for the future periods not confirm the cost-to the future.

If you meet the criteria for recognizing assets, it is possible to consider the costs as deferred expenses. But the question is not so much on what they consider the bill as what they are in the financial statements. And it is necessary to pay special attention.
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Literature:


J21317-035

Rudinskaya T.S.

SEASONALITY OF MILK PRODUCTION AND ITS CONSEQUENCES IN THE REPUBLIC OF KAZAKHSTAN

Czech University of Life Sciences, Prague, Kamycka, 129, 165 21

The analysis of the seasonality of milk production in the Republic of Kazakhstan on the basis of monthly gross milk yield for the period from 1 January 2007 to 30 September 2012 was provided in this paper. Seasonal and trend component was isolated using the Seasonal Decomposition (Census I Method). The forecast of milk production for the next 12 months was compiled using Exponential Smoothing Method. In order to identify the relationship between the gross milk production and prices of milk a correlation analysis was conducted.

Key Words: Milk Production, Seasonality, Correlation analysis, Kazakhstan.
Introduction

Livestock production has been a key economic activity in Kazakhstan for centuries and continues to be a major source of employment, food and income for the rural population. Kazakhstan’s vast grasslands provide an important production base and opportunities for livestock development.

But there are a lot of problems in livestock of the Republic of Kazakhstan. One of them is seasonality. Seasonality is the phenomenon that causes product prices to behave in a relatively predictable manner, year in and year out. Agricultural production is driven by climatic seasons and biological factors that result in supplies changing over the year.

The goal of this paper is to analyse a seasonality of milk yield and to evaluate the relationship between milk production and milk prices.

Materials and methods

The milk production of the Republic of Kazakhstan was chosen for this analysis. The gross milk yield was tested on seasonality using autocorrelation function.

For the interpretation of economic statistics it is important to recognize the presence of seasonal components and to remove them so as not to confuse them with long-term trends. This process is known as seasonal adjustment [1].

In the additive model, the observed time series \( x_t \) is considered to be the sum of four independent components.

\[
x_t = m_t + s_t + c_t + I_t
\]

where \( m_t \) is a slowly changing function known as a trend component, \( s_t \) is a function with known period \( t \) referred to as a seasonal component, \( c_t \) is a cyclical component, and \( I_t \) is a random noise component [2]. The difference between a cyclical and seasonal component is that the latter occurs at regular (seasonal) intervals, while cyclical factors have usually a longer duration that varies from cycle to cycle [2].

The Census I method was used for the purpose of this article to distinguish seasonal and trend component.
The forecast of row milk production was conducted by the Exponential Smoothing. It is a simple and pragmatic model for a time series would be to consider each observation as consisting of a constant (b) and an error component ε, that is \( x_t = b + \varepsilon_t \). The constant b is relatively stable in each segment of the series, but may change slowly over time. Is to compute a kind of moving average, where the current and immediately preceding observations are assigned greater weight than the respective older observations. The specific formula for simple exponential smoothing is [3]:

\[
s_t = \alpha x_t + (1 - \alpha)s_{t-1}
\]

(2)

The seasonality in milk yield can lead to seasonality in milk prices. The correlation coefficient was calculated to determine the relation between volume of milk production and indexes of milk prices.

The correlation coefficient of X and Y, denoted \( p(X,Y) \), is given by [4]:

\[
p(X,Y) = \frac{\text{Cov}(X,Y)}{\sigma_X \sigma_Y}
\]

(3)

where \( \text{Cov}(X,Y) \) is the covariance of X and Y, \( \sigma_X \) and \( \sigma_Y \) - standard deviation of X and Y.

The data set has 69 monthly observations of milk production (from January 1, 2007 to September 30, 2012) and 60 monthly observations of milk price indexes (January 1, 2007 to December 31, 2011) in total. The data set was obtained from publications of the Agency of Statistics of the Republic of Kazakhstan. STATISTICA software, version 10, was used for the analysis.

**Results and discussion**

The first step in this analysis is to plot the data. As we can see in the graph, milk production has significant seasonal trend.
Figure 1. Monthly milk yields in the Republic of Kazakhstan

Source: own calculation, the data of the Agency of Statistics of the Republic of Kazakhstan

Seasonality refers to fluctuations in output and sales related to the season of the year. As we can see in the figure, the volume of raw milk production in Kazakhstan is changing over the years, so we can assume that it exhibits seasonal trend. The volume of milk production decreases in winter and increases in summer period. This tendency is connected to the fact that the maximum number of calving in the farms are in the spring and summer, and the highest efficiency of cows observed in the first months of lactation.

Seasonal patterns of time series can be examined via correlograms. The correlogram (autocorrelogram) displays graphically and numerically the autocorrelation function, that is, serial correlation coefficients (and their standard errors) for consecutive lags in a specified range of lags [5].
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Autocorrelation Function
Cow milk, thsd. tones
(Standard errors are white-noise estimates)

<table>
<thead>
<tr>
<th>Lag</th>
<th>Corr. S.E.</th>
<th>Q</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+,779 .1178</td>
<td></td>
<td>43,72  ,0000</td>
</tr>
<tr>
<td>2</td>
<td>+,411 .1169</td>
<td></td>
<td>56,07  ,0000</td>
</tr>
<tr>
<td>3</td>
<td>-0,021 .1161</td>
<td></td>
<td>56,10  ,0000</td>
</tr>
<tr>
<td>4</td>
<td>-,471 .1152</td>
<td></td>
<td>72,80  ,0000</td>
</tr>
<tr>
<td>5</td>
<td>-,750 .1143</td>
<td></td>
<td>115,9  ,0000</td>
</tr>
<tr>
<td>6</td>
<td>-,800 .1134</td>
<td></td>
<td>165,7  ,0000</td>
</tr>
<tr>
<td>7</td>
<td>-,706 .1125</td>
<td></td>
<td>205,1  ,0000</td>
</tr>
<tr>
<td>8</td>
<td>-,421 .1116</td>
<td></td>
<td>219,4  ,0000</td>
</tr>
<tr>
<td>9</td>
<td>+,007 .1107</td>
<td></td>
<td>219,4  ,0000</td>
</tr>
<tr>
<td>10</td>
<td>+,376 .1097</td>
<td></td>
<td>231,1  ,0000</td>
</tr>
<tr>
<td>11</td>
<td>+,675 .1088</td>
<td></td>
<td>269,7  ,0000</td>
</tr>
<tr>
<td>12</td>
<td>+,840 .1079</td>
<td></td>
<td>330,3  ,0000</td>
</tr>
<tr>
<td>13</td>
<td>+,647 .1069</td>
<td></td>
<td>367,0  ,0000</td>
</tr>
<tr>
<td>14</td>
<td>+,334 .1060</td>
<td></td>
<td>376,9  ,0000</td>
</tr>
<tr>
<td>15</td>
<td>+,032 .1050</td>
<td></td>
<td>377,0  ,0000</td>
</tr>
</tbody>
</table>

Figure 2. Sample autocorrelation function for milk production
Source: own calculation

We can see that there is a strong correlation of order 1, 5, 6, 7, 11, 12, and 13. Correlation coefficients are significantly higher than the "white noise." According to the schedule of autocorrelation there is a clear seasonal trend.

The data exhibit a seasonal as well as a general trend. To distinguish seasonal and trend component the Seasonal Decomposition of data was used in this paper.

The general idea of seasonal decomposition is straightforward. In general, a time series consist of four different components: a seasonal component, a trend component, a cyclical component, and a random error. In the Census I method, the trend and cyclical components are customarily combined into a trend-cycle component [3].

The trend component is depicted in the Figure 3. It shows that the milk product in Kazakhstan has decreasing trend in the last year.
Figure 3. Seasonal and trend component of milk production
Source: own calculation

Simple exponential smoothing was used to get forecast of milk production for the next twelve months.

Figure 4. Forecast of milk production
Source: own calculation

As we can see in the graph, the forecast data of the gross milk production is almost entirely correspond to the actual data. Mean error is -0.424, mean percentage error is -0.213.

The forecast of milk production is represented in the Table 1.
Milk production seasonality has long been recognized as an important and serious problem facing the dairy industry. Uneven monthly supplies of raw milk between the spring and the fall raises handlers’ operating costs and reduces their level of efficiency [6].

One issue in the debate on dairy production is seasonal price trends. Farmers historically receive the lowest milk price for milk sold during the six months following spring pasture flush. Conversely, the season's highest price is received during the period of October to January.
Source: own calculation, the data of the Agency of Statistics of the Republic of Kazakhstan

As we can see in the Figure 5, price of milk depends on the volume of its production. Gross milk yield increases from January to July. This is due to the fact that the maximum number of calving in the farms is observed in the spring and summer, and the highest efficiency of cows observed in the first months of lactation. Then from August to December, a decrease in milk production takes place. With the growth of the milk production in the summer period, the price of milk is reduced.

To examine the dependence of prices on milk production the correlation analysis was provided.

Table 2

Statistics of correlation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple $R$</td>
<td>0,795</td>
</tr>
<tr>
<td>Multiple $R^2$</td>
<td>0,631</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0,625</td>
</tr>
<tr>
<td>$F$ (1,58)</td>
<td>0,625</td>
</tr>
<tr>
<td>$P$-value</td>
<td>0,000</td>
</tr>
</tbody>
</table>

Source: own calculation

In regression, the $R^2$ coefficient of determination shows that the regression line approximates the real data points at 63.1%. The correlation coefficient is -0,795, that indicates a negative strong relationship between the milk prices and yield.

$F$-value is greater than the critical level statistics and $p$-value is near to 0 indicate the significance of the regression.

**The consequences of seasonality**

The seasonality in of milk production causes several problems in livestock of Kazakhstan.

Seasonal fluctuations of milk productions creates fluctuation of milk prices in the market, as for consumers as for producers. This process is quite difficult adjustable by the state since 80% of total amount of milk is produced by small-scale individual farms.
Due to the Customs Union milk prices in Kazakhstan remained relatively accessible to the population. The prices of row milk rose by 30% over the last year, the prices of packaged milk rose only by 8%. Import of dairy products is only 18% of the capacity of the market, but this is enough to restrain the rise in prices [7].

But the Customs Union of Russia, Kazakhstan and Belarus is a threat for Kazakh producers. Kazakhstan production is uncompetitive in comparison with former states. The high coefficient of seasonality is a weak point of Kazakhstan milk production.

In Kazakhstan the production of reconstituted milk is an objective necessity. Belarus and Russia use this technology much less. According to the experts, the adoption of technical regulations "Milk and milk products" in its current form adversely affect the dairy industry in Kazakhstan [8].

Thus far in the country raw milk is one of the most expensive in the world. Milk prices, as raw materials, comparable to prices in Japan and South Korea, which, of course, adversely affects the competitiveness of domestic dairy products within the market and beyond [8].

**Conclusion**

The analysis exposed a strong seasonal component of gross milk production in the Republic of Kazakhstan. The milk yield in the winter months is 3 times less than in the summer months. This creates a number of problems. Seasonality of milk production leads to the seasonal changes in prices that decline with the growth of milk production. Seasonality of the milk production is difficult regulated by the state due to the fact that over 80% of animal products are produced by peasant (private) farms, and due to the lack of an appropriate system of milk collection from small-scale producers.

Distinguished trend component showed a slight decline of milk production in the last year analysed. Seasonal factors is a significant problem for Kazakh dairy producers especially in Customs Union conditions, since Russia and Belarus have a more developed animal husbandry, and Customs Union provides the single economic space
for Union’s Member States. Thus, the shortfall of own dairy products will be in greater extent offset by cheaper import.

References:


In this report we describe the method for assessing the socio-economic benefits of integrated business organizations operating in the Stavropol Territory.

Keywords: factor variables, the index display, the bifurcation point, the matrix problem identification

Integration of agricultural business organizations has two main objectives: first, economic, aimed at improving the functioning of organizations, and secondly, social, involves ensuring decent work and the satisfaction of social needs in agricultural products. These goals are to some extent contradictory, so urgent is the problem of establishing and maintaining the balance of the values of these criteria. Necessary to ensure appropriate processes is the construction of certain indicators [5].

Since each of the economic and social components characterized by a large number and variety of indicators, the use of multivariate statistical analysis methods appropriate because the factor analysis will allow to construct the generalized indicators, and the method of canonical correlation to determine the relationship between the studied components.

To carry out the factor analysis were used 15 integrated business organizations operating in the Stavropol region [1]. The initial factor analysis of the variables defined to the following list:

- X1 - the number of staff people.
- X2 - the average wage, rub.
- X3 - the value of assets, th.
- X4 - proceeds from the sale of products, th.
X5 - net profit for the period, thous.
X6 - cost of goods sold, services, thous.
X7 - the ratio of the average wage in the integrated education of the average wage in the agricultural enterprises of the Stavropol Territory, %.
X8 - labor productivity, thous. / person. hour.

This resulted in the common factor variables:

$$F_1 = 0.87 X3 + 0.90 X4 + 0.92 X6,$$
$$F_2 = 0.91 X2 + 0.93 X7 + 0.80 X8.$$

Where $F_1$ is a production economy ($55.7\%$ of the total variation), and $F_2$ – social work ($24.9\%$), the indicator of development of integrated units of the Stavropol Territory [2].

Implementation of the method of canonical correlation, yielded the following canonical variables:

$$Y = 0.88 X2 + 0.89 X7 + 0.99 X8,$$
$$X = -0.44 X1 + 0.56 X3 + 0.79 X4-0, 11X5 + 0.81 X6$$

From (3) that the variation in productivity to a greater extent affect the changing values of effective variables (particularly revenue from product sales and cost of goods sold and services), indicating that some of its prevalence over the contribution of indicators of the absolute and relative value of wages board.

The increase in the number of employees and the excessive desire to increase profitability in the end leads to lower economic performance, demonstrated by the negative values of the coefficients of the relevant variables in the equation (4) [2].

To determine the sustainability of the integrated system, introduced a new index - the index indicating the socio-economic benefits of integrated units, based on the calculation, which are relative indicators - growth rate of fixed assets (ROGmf), the
growth rate of labor productivity \((ROG_{lp})\) and wage growth \((ROG_{hrc})\) \[3\]:

\[
I_i = ROG_{mf} \times \frac{ROG_{lp}}{ROG_{hrc}} \geq 1
\]

The value of the index \(I_i = 1\) is taken as the point of bifurcation \((I_b)\), as is the lower boundary of the critical exponent, which determines reduced resistance integrable system. If the value of \(I_i > 1\), then this is evidence of positive trends. If the value of \(I_i < 1\), this leads to the conclusion about the critical state of the enterprise in terms of the resulting operation of the social and economic effect. Therefore, you must either take urgent action to improve the performance of the integrated structure, or to consider the reorganization.

Analysis of the dynamics of production and economic and social and labor development indicators integrated business organizations operating in the Stavropol region, allowed to group companies in terms of socio-economic development. Were identified 4 main groups of companies with different dynamics of social and economic factors (table 1).

The first group includes companies with relatively stable trends in the development of production and economic, social and employment factors. Here, between the economic and social components, there is a significant gap, but both components have a positive trend.

The second includes companies whose social factor behind the industrial and economic. The second group has two subgroups: the first subgroup is characterized by positive trends in production and economic, social and employment factors. In this subgroup, the economic and social component tends to increase due to increasing production volumes and higher wages, but the social component is negative and between the two components, there is a significant gap, the second sub-integrated formation differ increasing social and labor factor and the reduction of production and economic.
Between both components, there is a significant gap, with economic component has positive momentum and growth trends, and the social component is a negative trend and decreasing [4].

Table 1

Types of enterprises, depending on the level and dynamics of economic ($F_1$) and social ($F_2$) components of

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relatively stable trends (entity reference)</td>
<td>The lag of the social factor of production and economic</td>
<td>The imbalance between the $F_1$ and $F_2$ with negative growth of the economy and economic growth unconditional social factor</td>
<td>Negative trends in the enterprise for both components $F_1$ and $F_2$</td>
</tr>
<tr>
<td></td>
<td>Positive growth trends $F_1$ and $F_2$</td>
<td>Growth and reduced $F_1$ $F_2$</td>
<td></td>
</tr>
<tr>
<td>JSC &quot;Stavropol Broiler&quot;</td>
<td>LLC &quot;Guardiya&quot;; LLC &quot;Kugulta&quot;; LLC &quot;Agrofirma&quot; village Voroshilova &quot;</td>
<td>LLC &quot;Agroskhleboprod uct&quot;; LLC &quot;Novoaleksandrov skyi elevator&quot;; LLC &quot;Rainbow&quot;; LLC &quot;Kolkhoz Sturm&quot;</td>
<td>JSC &quot;Russ&quot; LLC &quot;Temizhbeksky elevator&quot;; LLC &quot;Don&quot;; JSC &quot;Piatigorskyi Bakery&quot;</td>
</tr>
<tr>
<td>LLC &quot;Victory&quot;; LLC &quot;Khleborob&quot;; LLC &quot;Golden Field&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The third group is represented by companies with a large imbalance between the production and the economic, social and employment factors with negative economic dynamics and economic growth unconditional social factor. Here the economic component is negative and tends to decrease, and the social is positive and increasing all the time.

The fourth group includes enterprises with negative trends of the components. For this group of companies characterized by the reduction of economic and social components and negative dynamics.

The analysis and systematization of integrated units, depending on the level and dynamics of social, labor and production and economic factors identified key issues that
are specific to each of these groups of integrated organizations (figure 1).

<table>
<thead>
<tr>
<th>group I</th>
<th>group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>– outstripping wage growth compared with its performance;</td>
<td>– the prevalence of economic activity over the social component;</td>
</tr>
<tr>
<td>– a relatively high rate of increase in the cost of production;</td>
<td>– reduction in staff;</td>
</tr>
<tr>
<td>– lack of own funds for expanded reproduction-properties;</td>
<td>– relatively low wages;</td>
</tr>
<tr>
<td>– increasing the main production funds</td>
<td>– a relatively low level of productivity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>group III</th>
<th>group IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>– the prevalence of the social component of the economic activity of the NTA;</td>
<td>– reducing the social and economically component;</td>
</tr>
<tr>
<td>– a relatively high growth rate of wages;</td>
<td>– the relatively low level of wages;</td>
</tr>
<tr>
<td>– a relatively low level of productivity;</td>
<td>– the growth rate of labor productivity are insignificant;</td>
</tr>
<tr>
<td>– capacity of fixed assets from borrowed funds</td>
<td>– reduction in staff;</td>
</tr>
<tr>
<td></td>
<td>– implementation of production process due credit</td>
</tr>
</tbody>
</table>

Figure. 1. Matrix identifying problems of integrated structures

To develop management solutions that address identified weaknesses in each group of integrated business structures, determine trends and increase their social and economic benefits have been calculated and determined the index indicating the bifurcation point. For the study we selected four companies belonging to different groups (table 2).

The group of companies with the index indicating the index is greater than one was assigned JSC "Stavropol Broiler", for which, however, is characterized by the decrease in I, 2011 and 1.0. This finding suggests the company at the bifurcation point and the need for urgent stabilization measures.

The second group included integrated formation, which is growing at a faster pace of production and economic indicator of development, and social and labor behind.
However, the value of the index for this group indicating greater than one. Therefore, the proposed common to the first and second sets of activities. The third group with negative growth of production and economic indicators and positive social and labor included LLC "Agroskhleboproduct". This company index display in 2011 increased to 1.46, which indicates an increase in socio-economic efficiency of the integrated structure.

Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Business name</th>
<th>ROGₚₜ</th>
<th>ROGₚₜ</th>
<th>ROGₚₜ</th>
<th>Iᵢ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>JSC &quot;Stavropol Broiler&quot;</td>
<td>1,03</td>
<td>1,36</td>
<td>1,07</td>
<td>1,41</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>0,99</td>
<td>1,22</td>
<td>1,29</td>
<td>1,59</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>1,20</td>
<td>1,16</td>
<td>1,05</td>
<td>1,02</td>
</tr>
<tr>
<td>2009</td>
<td>LLC Company &quot;Victory&quot;</td>
<td>1,25</td>
<td>0,88</td>
<td>1,88</td>
<td>1,32</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>0,99</td>
<td>0,88</td>
<td>1,42</td>
<td>1,26</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>1,11</td>
<td>1,66</td>
<td>0,88</td>
<td>1,32</td>
</tr>
<tr>
<td>2009</td>
<td>LLC &quot;Agroskhleboproduct&quot;</td>
<td>1,38</td>
<td>1,66</td>
<td>1,06</td>
<td>1,28</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>1,15</td>
<td>0,97</td>
<td>0,68</td>
<td>0,57</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>1,26</td>
<td>1,01</td>
<td>1,82</td>
<td>1,46</td>
</tr>
<tr>
<td>2009</td>
<td>JSC &quot;Piatigorskyi Bakery&quot;</td>
<td>1,28</td>
<td>1,19</td>
<td>1,05</td>
<td>0,98</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>0,94</td>
<td>0,59</td>
<td>1,52</td>
<td>0,95</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>1,04</td>
<td>0,89</td>
<td>1,00</td>
<td>0,86</td>
</tr>
</tbody>
</table>

In the fourth group of the negative trends became JSC "Piatigorskyi Bakery". Index display during the whole period was not only below 1.0, but also continued to decline.

Thus, for a group of integrated units with the index of the index is greater than one indication is necessary to keep the positive trends of economic development of innovation policy, the implementation of social programs [6]. For businesses with an
index of less than one useful indication for urgent anti-crisis measures. If carried out
diagnostic socio-economic status indicates the presence of a bifurcation point, then,
urgent stabilization measures aimed at addressing both economic and social problems of
the organization. For each value of the index indicating the complex of measures aimed
at improving the socio-economic benefits of integrated business structures (table 3).

### Table 3

**A system of measures that define the vector of socio-economic development of integration formations**

<table>
<thead>
<tr>
<th>Quantitative characteristic of $I_i$</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A$</td>
<td>$1$</td>
</tr>
<tr>
<td>$I_i &lt; 1$</td>
<td>− in the event of failure of the reorganization (liquidation) of forming an integrated development of a package of anti-crisis measures.</td>
</tr>
<tr>
<td>$I_i &gt; 1$</td>
<td>− an active innovation policy; − the implementation of social development programs of the personnel; − the use of advanced systems of payment, etc.</td>
</tr>
<tr>
<td>$I_i = I_b = 1$</td>
<td>− creating the conditions for increased productivity; − greater involvement of partners in the integration of resources; − diversification of production; − preservation of staff at the existing level of wages; − improvement of material and moral incentives for staff; − suspension of building fixed assets, etc.</td>
</tr>
</tbody>
</table>

The proposed method is universal. Its main goal is the comprehensive solution to improve the efficiency of functioning of integrated business structures in Russia and in the Stavropol region. The presented algorithm can obtain economic analysis necessary for decision-making to improve the composition of the integrated structure and create a
practical tool that includes a variety of methods and means of enhancing the effectiveness of the integration of interactions at the level of the region, and also allows you to identify the strengths and weaknesses of the integration process at the regional level, on this basis to identify priority areas for its regulation and use of competitive advantage within the socio-economic development of rural areas.

References:


Arhipova N.A., Soldatova E.V.

PREREQUISITE TO THE STRATEGIC PARTNERSHIPS BY RESEARCH UNIVERSITY

Ogarev Mordovia State University, Russia, Saransk

The article describes the prerequisites to the strategic partnerships by national research universities; the necessity of the concepts of partner relationship management is substantiated.

Key words: national research university, strategic partnerships, relationships, innovation, knowledge economy.

The role of science and higher education is changing in the knowledge-based economy. Modern universities are becoming like innovation corporations regarding intellectual property and transfer of technology. The relevance of the university's strategic partnerships increases because status of university changes from classical type to research one.

Since 2009 the Government of the Russian Federation has been implementing the project "national research university" (NRU). The category "national research university" is established to universities on a competition basis. The establishment of this category to the university translates its focus from an educational function to fundamental and applied research [1]. In 2009 110 universities applied for the category, the Commission determined by voting the 12 winners as a result. The second wave of competition held in 2010 attracted 128 university’s applications; another 15 universities were selected as a result. The main evaluation criteria of universities were present status and dynamics of the University, potential of its human resources, the infrastructure of an educational process and scientific research, the effectiveness of educational and
innovation activity, international and national recognition, feasibility and expected performance of the program submitted by the university to the commission’s approval.

The implementing the university’s program is impossible without the building relationships between the university and business partners. This is explained the following prerequisites:

1) The limited resources of a university (particularly of regional universities). Increasing the intensity of competition between universities for limited resources is important factor in environmental. Reducing is observed in all types of resources:
   – Reducing the contingent of school graduates because of demographic problem
   – Upgrade of scientist’s competencies lag behind dynamics of the environment.

According to the Higher School of Economics annual report, a steady trend to lower number of explorers is detected for the last 15 years (Fig. 1).

![Figure 1 - Dynamics of scientist’s number in Russia](image1.png)

In 2010 the number of R&D personnel decreased by 13% compared to 2000 and by 1.5 times compared to 1995.

– Investment in education has been reduced because of implementing housing reform, declining real incomes, cutting social programs and amounts of its funding.

The dynamics of change in household spending for education in total consumer spending is shown in Figure 2.

![Figure 2 – Dynamics of public investment for education in Russia](image2.png)
2) Commercialization of the fundamental and applied research, R&D results is low (Fig. 3).

![Figure 3 – The share of innovative products and services in the total in the Russian Federation [3]](http://www.sworld.com.ua/e-journal/J21316.pdf)

Nowadays a big gap between the research sectors and the production is detected. University partnerships with companies will make R&D activities possible and provide implementing its results in the real economy.

3) Improving the academic mobility of teachers and students is necessary. Continuous improvement of university competencies demands of excellence in the world's research and education centers.

4) Competition among educational institutions demands a high reputation and image of the developing university, including through the building partnerships with businesses, leading academic institutions and foreign universities.

The category "national research university" was established to Ogarev Mordovia State University in May 2010, that affected the increasing its rating (the university took place 41-45 in the 2009; it had risen to 23-24 in 2011).

5) Challenges of the environment make the educational institutions to diversify their activities. "University-Enterprise" and "university-factories" appear that integrate several activities and up its own market flexibility and adaptability.

Building partnerships between research universities and scientific centers provides increasing in efficiency of their joint activities, outrunning scientific research and education programs, speed-up to implementation of R&D results in the real economy, the achievement of positive social effects.
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References:

1. Decree of the Russian Federation of July 13, 2009 N 550 "On the competitive selection of programs for the development of universities, for which the category national research university "- URL: http://base.garant.ru/195901/


J21317-038

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СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ АСПЕКТЫ ПРОМЫШЛЕННОГО ОСВОЕНИЯ В РЕСПУБЛИКЕ САХА (ЯКУТИЯ)

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Abstract

The Republic of Sakha (Yakutia) is located in the extreme northern part of Eurasia. Over 40% of its territory lies within the Arctic Circle. The republic plays an important role in the Russian economy because of its tremendous mineral resources. Therefore, its economy was formed under the predominant influence of the extractive industries, which makes it dependent on the external market; resource demands along with energy needs strongly influence the patterns and rates of resource extraction in the Republic Sakha (Yakutia). For aboriginal people in Yakutia the prospects of large-scale projects may be controversial. These projects may raise perspectives on the future of northern territories, its people and the environment.

Key words: natural resources exploitation, Arctic development, sustainable development, indigenous people

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Introduction

International interest in the North and Arctic region has intensified today not only among northern, but also non-arctic countries. The reasons are evident: the potential to resource development, the opening of shipment routes and the growing impact of climate change. The Arctic is a region which is both rich and vulnerable – rich because it stands out among the few regions remaining untapped natural resources, and vulnerable since these resources are getting increasingly attractive to industry, consumers and decision-makers located far outside the Arctic.

Moreover, in contrast to promising opportunities brought by the extraction of new resources, the Arctic is “generally vulnerable to oil spills due to increased environmental persistence of petroleum hydrocarbons, slow recovery, highly sensitive ecosystems, and the difficulty to clean up in remote regions” [2]. In this regard, there are certain challenges in natural resources extraction in the Arctic. Climate change enhances prospects for intensive natural resources exploitation in the Arctic with all the opportunities and challenges that it implies.

This paper discusses some of the major issues related to the large-scale industrial development focusing in particular on the impact of these activities on indigenous people. It then offers a set of policy issues, relating to Arctic resource development and sustainable development in regard to the indigenous population.

Natural resources exploitation and large-scale projects in the Republic Sakha (Yakutia)

Resource exploitation is already creating environmental hot spots in the Arctic as it faces reduction of its wilderness area by 50 percent over the next fifty years if strong action is not taken to protect it. Global climate change warms this region at a rate twice the world average, melting sea ice, interrupting the food chain, and threatening wildlife on which some indigenous populations depend on for food, medicine, and clothing [13]. Long distance air pollution emanating from main industrial areas of the world is poisoning the entire food chain from micro-organisms to human beings.
As noted in the final report of the Arctic Climate Impact Assessment, today, the Arctic is home to a large number of indigenous peoples with distinct cultures, languages, traditions, and ways of interacting with their environment. They have in common a close connection to their surroundings, an intimate understanding of their environment, complex relationships with national and sub-national governments and non-indigenous migrants to the Arctic [1].

Compared with other zones of Arctic, Russian Arctic, Sakha Republic in particular, is characterized by low population density and intensive natural resources exploitation. The current research relating to socio-economic situation in the region can be summarized by the following issues: mega-project development and resource dependence.

According to the Ministry of Natural Resources and Ecology of the Russian Federation only in Yakutia reserve balance is estimated to 78 billion dollars. The base is - oil, coal, uranium, rare earth elements, ferrous and nonferrous metals, diamonds. With more than 18% of the territory of the Russian Federation, the Republic is a leading supplier of rough diamonds (more than 90% of the total production of Russia).

The combined effects of climate change and intensive industrial development are of considerable concern to residents of the North due to the potential consequences to traditional lifestyles, resource development and conservation. It is inherent for the Sakha Republic (Yakutia), where over 40% of the territory lies within the Arctic Circle. The republic is, on the one hand, the most remote and largest region of Russia with richest raw material base; on the other hand it is the habitat of indigenous people –Evenki, Even, Yukagirs and Dolgans. They lead traditional way of life and have deep ties into the land and environment.

Today large-scale projects on development of mineral resources, the laying of oil and gas pipelines and the deployment of railway and power networks are the priorities of republic’s socio-economic development. The prospects of these projects may be divided into potential economic benefits of new local industries and potential harm to the
environment and to traditional lifestyles. There are concerns, for example, that the ESPO (Eastern Siberia-Pacific Ocean) pipeline will fragment crucial wildlife habitats and migration corridors, and, in turn, affect the way of life of many aboriginal residents.

Local pollution from industrial activities, such as mining and oil and gas development, can negatively affect the environments surrounding these developments. Mining and oil and gas industries may undermine traditional land use patterns and contaminate soil, water and traditional foods. It is therefore important to achieve stability and balance between the environment and the economy, considering the interests and traditional lifestyle of local population.

**The Eastern Siberia Pacific Ocean Pipeline and indigenous concerns**

The ESPO pipeline is one of the large-scale projects which will facilitate the exporting of oil from eastern Siberia (Irkutsk province, Sakha Republic) to the Asia-Pacific markets. The ESPO pipeline's capacity is a projected 80 million tons per year. All of the pipeline's projected routes have run mostly through Evenki homelands [6]. In Yakutia, ESPO passes through Aldan, Olekminsk and Neryungri districts, with almost 4,000 Evenki population. The Evenki are the most widely scattered indigenous group. Traditionally herders, they mainly depend on subsistence activities such as hunting and gathering. Whereas pipelines dissect reindeer pastures, affect the movement of wild game and can hinder access of humans to hunting and herding ground, the construction of the ESPO pipeline is of major concern for them.

In this respect, Association of indigenous peoples in Yakutia appealed to the Russian government to change the route of the pipeline: «For the sake of 49 billion rubles, construction of a gas pipeline passes through the territory of traditional land use of Evenki and protected area Cheruoda» [9] Evenki groups are extremely concerned about potential impacts of the construction on their trades, specifically on migration of wild animals; impacts on vegetation and water resources; risk of poaching and fires associated with newly constructed access roads. Evenki groups anticipate that changes in the natural environment will lead to a reduction in hunting of animals for food and sale and impact
their income [11]. “We can not be silent on the point that the industrial development significantly reduced the possibilities of Evenki’s traditional way of life, reindeer pastures and hunting grounds, polluted rivers and lead to distinction of fish, animals and, as a consequence, to social evils such as alcoholism, rampant unemployment among the population, poverty, assimilation etc.” - says the head of Tyanskii community of Olekminsk district Arsenti Nikolaev.

Unfortunately, there is still no comprehensive assessment on how the pipeline will impact hunting practices of Evenki herders, their source of livelihood and thus it is difficult to determine an adequate compensation for the potential harm. The industry’s impact on Evenki traditional lifestyle goes far beyond potential loss of income and is associated with psychological trauma and loss of culture and identity as industrial activities affect their natural resource use practices. Indigenous communities are not fully involved in project planning due to lack of rights to their lands. Extensive Russian legislation on protecting the rights of indigenous peoples fails to secure a stronger role in decision-making over their traditional lands and natural resources provide significant compensation for damage to their activities. Clearly, clarifying legal entitlements and rights for traditional territories for indigenous people and granting land property rights would enable them to protect their territories and empower them in interactions with developers [11].

Conclusion

With the priorities of socio-economic development of the Sakha Republic, the extraction of natural resources is an objective necessity. The basic requirements for a balanced development of the territory are as follows [7]:

- Extraction of only necessary minerals with a possible reduction of production output or interruption of some minerals’ extraction;
Focus on those sectors of economy, which use renewable biological resources, and promotion of their development;

Preservation of customs, traditions, ways of life of indigenous people of the North, preservation of the tundra and taiga culture;

Empowerment of the republic as a region of recreation and tourism;

Solving social and economic problems without necessarily linking with industrial development;

Restructuring of the national economy with a focus on technology-intensive, resource-saving, waste-free technologies.

One of the top priorities is to ensure that the socio-economic development potential is realized in a sustainable way and that northern communities participate in and benefit from development. That means to adjust human activities in such a way as to preserve the ecosystem, maintain the flow of goods and services, and enhance the resilience of arctic ecosystems. The first step is to identify and to protect particularly resilient and vulnerable habitat types, species, and populations/stocks. The best defenses against significant impacts will require comprehensive strategies that involve local residents and ecosystem-based management.

WWF promotes the Conservation First principle, which was designed to balance nature conservation and industrial development. Conservation First means there should be no new or expanded large-scale industrial development in the Arctic until areas of high conservation value are identified and protected. This will safeguard important cultural and wildlife areas from industrial development for the long term [12].

An effective social dialogue between stakeholders – corporations and representatives of indigenous people – is one of the possible solutions. The Sakha Republic is one of the first among federal subjects to adopt the law on ethnological expertise, which means the implementation of methods of industrial impact assessment and in the future will serve to estimate adequate compensations.
In this regard, mining policies and regulations must make a shift toward principles of sustainable development and more inclusive processes. Whether indigenous rights to lands are officially recognized, they are practically ignored when undertaking such projects. Indigenous people inhabiting the territories of project development must be included in decision making and their interests and concerns should be considered.

References


2. Arctic Monitoring and Assessment Programme (AMAP), Arctic Oil and Gas 2007, (2008).

3. Climate Change and Arctic Sustainable Development Scientific, Social, Cultural and Educational Challenges.2009. UNESCO.


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MOBILITY OF YOUNG PROFESSIONALS

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The article noted the characteristics of the mobility of young professionals in the labor market. Labor mobility is an integral part of the modern world, because it is the mobility of staff provides a stable development of the enterprise.

Keywords: labor mobility, a young professional, and personnel.

In the system of economic relations, the labor market has an important place. In this market, the conflicting interests of working-age people and employers who are state, municipal, public and private organizations. Relations developing in the labor market have a distinct socio-economic in nature. They affect the most pressing needs of the population. [1]
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Experience in a number of leading (in industrial relations) regions, including the Republic of Bashkortostan, shows a willingness to implement regional management breakthrough in the development of innovative investment in the regional economy and involving a significant part of the regional population in the creation and development of an effective (for the public) of the economy. [4]. Important point to address it - young professional career, the most important human resource in any enterprise.

Labor mobility is an integral part of the modern world, because it is the mobility of staff provides a stable development of the enterprise. But should also be noted that mobility is an inherent characteristic of the employee, the employee is a measure of flexibility. It is the ability to adapt to new employee working conditions, which implies not only the development of new technology or changing positions as well and changes in lifestyle in general, if required by the new job. [3]

Professional mobility is an integral part of the entire working life. Professional mobility is associated with the presence of additional workers or allied professions, the degree of development of the trade, a good basic theoretical training as a condition for rapid development of new features, motivation, aimed at changing the work.

The rapid development of information and communication technologies, rapidly changing conditions of life in the information society, continuously updated knowledge workers require a mobile response skills in their professional activities to the ever-changing needs of society. New technology, continuous innovation: all require the employee mobility, readiness to work in a permanent change. Of course, a modern young professional growing in one project, but it often is considering new proposals and is always ready to take drastic decisions to change professions. Graduates have a fast career growth, which leads to better offers competitors or his own company, and this proposal involves changing the place of residence, the development of new knowledge. Many move to other cities, changing lifestyles, develop new skills, gain additional education.
Feature of the modern young professional reflected in the fact that in the first place for it is in the interest of work, wages and career (these requirements no longer exist on the principle of "either-or", the boundaries are washed away). Not being met, it is ready to move on, not staying in one place - this is the cause of mobility. [2]

As for the older generation, the situation is different. Such workers are less mobile. This is primarily due to family circumstances. But you can not talk about it so categorically. Some people may be enhanced labor mobility in 40 years, when, due to the crisis of middle age man seeks a change of scenery, a habitual way of life and to realize themselves in other areas.

A small number of graduates has labor mobility. Currently rare young professionals ready to start his career with small positions (professionals, assistant) and learn a profession baseman. Most of them have very high ambitions, they feel that they have enough knowledge and experience to work in leading positions, and after a while (up to a year or two) and in management.

The mobility of an employee to a large extent depends on the personality. There are two "types" of people: reach (that is, those who are making the results of continuous work, the work on the other) and absorbing (the ones that are waiting for them to offer what they want, they are focused on the extended benefits package, benefits, easy problems and high salary). The first type is just inherent in labor mobility, because they are motivated to actively develop the profession, to achieve the heights, and have internal reference, and believe that everything in life is in their hands. [5]

Labor mobility depends not only on age but also on the nature of man and his upbringing. There are people focused on success. They are constantly working on the result, work on yourself. It - so-called reaching people. Absorbing people expect that everything will be done for them, and they will offer complete solutions. They want to get the job easier and the pay - high, and reach more people-oriented benefits and extended benefits package. Labor mobility is inherent in reaching the people because
they want as much as possible to learn the profession and to achieve the best result. These people believe that their success - in their hands.

In turn, young professionals need to plan for the future in accordance with their needs, the prevailing socio-economic conditions. He needs to get more information about the prospects of their career development and training opportunities within the organization, and on the terms that he must do this. If the specialist does not know this information, the motivation of his behavior becomes weak, the person is not working at full strength, not seeking to improve skills and considers the organization as a place to wait out for a while before moving on to a new job, more promising.

References:


2. Votyakova IV Competencies and staff mobility in terms of innovative development of human resources / organization / management staff. 2008. - № 4.

3. Dudin OI Career development and adaptation of young professionals / / frame company. 2007 - № 12. - S. 69


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RESERVES GROWTH OF LABOR

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This article examines the potential for growth in labor productivity. To increase business productivity is essential as a factor to increase output, reduce costs and increase the mass and rate of return, increasing the competitiveness of the company, the well-being of employees, for the country - as the determining factor for economic growth and improved living standards.

Keywords: labor productivity, potential for growth, the quality of products.

In the system of economic relations, the labor market has an important place. In this market, the conflicting interests of working-age people and employers who are state, municipal, public and private organizations. [1] Labor productivity is almost the main economic indicator. It needs to be improved. This is one of the economic laws inherent in every economic system. Thanks to the development of the productive forces, the company reduces the socially necessary labor for the production of various products for personal or public use.[2]

Experience in a number of leading (in industrial relations) regions, including the Republic of Bashkortostan, shows a willingness to implement regional management breakthrough in the development of innovative investment in the regional economy and involving a significant part of the regional population in the creation and development of an effective (for the public) of the economy. The most important task in the planning of labor productivity is the identification and use of reserves growth.

Reserves of growth of labor productivity - is the possibility of saving of social labor, which are identified but not used for various reasons. The interaction of factors and reserves is that if the factors are driving forces, or causes a change in its level, the use of reserves - is directly the implementation of the various factors. The degree of use of reserves determines the level of productivity. It is above all the cost savings of labor (working hours) in the manufacture of a product unit or additional amount of output per unit of time. Rapid productivity growth causes lower costs, and profit, necessary for
production. Consequently, the growth of labor productivity increases wages and incomes of workers.[5]

In other words, the potential for growth - is untapped potential in productivity due to the action of certain factors.

To increase business productivity is essential as a factor to increase output, reduce costs and increase the mass and rate of return, increasing the competitiveness of the company, the well-being of employees, for the country - as the determining factor for economic growth and improved living standards.

A huge role in increasing productivity is given the scientific and technological progress, has a significant impact on the structure of the workforce. The labor collective has to be mobile, capable of continuously develop new technology to produce new products, to create a positive atmosphere within the team between. Indicator of social reproduction process is employment. However, the imbalance between supply and demand of labor in the labor market is a consequence of the emergence of unemployment. The number of unemployed depends on the pace of economic growth and efficiency. [3]

So, the increase in labor productivity for the advancement of mankind, there is a growth of material production, the arts, science, culture, etc. Further rise in labor productivity and the efficiency of production requires an incremental raise the comprehensive mechanization and automation of production at each stage, depending on the process of individual features. This will be the highest level of mechanization of labor.

Relevant and important at this stage is the quality of our products and services.

Process automation exempt the employee from performing the functions of mechanical, routine work, increasing the problem of comprehension, of information processing. Become important maintenance tasks and setting up equipment, to ensure continuity of units, etc. [4]

Mechanization, automation and computerization of production technology can transmit not only physical, but also sophisticated intelligence operation, leaving the
worker creative activities. All this increases the intellectual content of the work, the requirements for the degree of responsibility and skill level of workers.

In any case, whatever the position of the company was engaged in the market environment, a key to their survival and competitiveness is productivity growth. That higher productivity has always provided, and provides benefits, and ultimately a victory not only for individual enterprises and their associations, industries, and countries.

References:


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In this report examines the key issues of the notion of the franchise. The main differences between the legal construction of the Russian and foreign commercial concession.

Key words: franchising, commercial concession.

In the Russian legislation franchizing questions practically aren't worked and are regulated by the Civil Code of the Russian Federation Chapter 54 "Commercial concession" though by definition it is rather different things [1]. At concession activity on behalf of the owner is carried out, and at franchizing – under the trademark of the owner. However now the government already considers questions of legislative base of franchizing.

N. V. Mesyashnaya, comparing a design of the Russian and foreign commercial concession and foreign franchizing, comes to a conclusion that "the contents of Chapter 54 of Civil Code coincide with the content of the concept "franchising" as concepts of complex use of its form" [2]. When comparing a design of foreign franchizing with the Russian contract of commercial concession, O. A. Orlova also comes to a conclusion that the franchizing contract in many respects coincides with the Russian contract of commercial concession [3].

E.A.Kozina takes an opposite position, claiming that "the content of some standards of the Civil Code of the Russian Federation coincides only with separate lines of franchizing … At the same time the content of separate standards of the Civil code of the Russian Federation is in an obvious contradiction with franchizing signs" [4]. Thus, considering all aforesaid, it is necessary to agree with V.V.Vitryanskim. Which considers the Russian term "commercial concession" as identical concept to the English term "franchising".
The International Association of Franchising refers to the following definition of franchizing: "contract relationship between the franchiser and the enterprise operator within which the franchiser offers or undertakes to support such areas of functioning of the enterprise, as a know-how and training; thus the operator runs business, using the general trademark and the technology which owner is the franchiser, he and supervises them; and thus the operator invests an essential share of the capital of the enterprise at the expense of own means" [5].

But in our opinion in this definition I didn't receive reflection one key question – single and periodic payments (royalty) which the franchisee according to terms of the contract undertakes to pay to the franchiser.

Let's consider franchizing definition by the Russian economists.

Authors Bychenko N. L. and Shulus A.A. define franchizing as system of the contractual relations between major company "franchiser" and her small partner ("franchisee") in cooperation in the field of sale (and sometimes and productions), goods and services [6]. Economist Maslennikov V. V. considers that the essence of the franchising relations consists in transfer by the franchiser of the right of business in the sphere of sale of goods or services to the party of the franchisee [7].

Author Fulop K. in the definition notes that the term franchizing covers various business relationship and licensing [8] is often used in parallel with the term. According to Zemlyakov D. N. and Makashev M. O. the franchizing is possibility of use of all business system including advertizing policy, production of goods, their advance on the market, and also use of technologies of business [9].

But in our opinion economists Mayler A.Z. and Kulikov S. A. most fully open essence of franchizing. They define franchizing as a form of transfer of rights to other person by means of which the owner of goods or services provides the organization and expansion of a network of sale of the specified goods and/or services. Goods and/or services are identified with a name (trademark) of the franchiser, and process of their sale is supervised by it. The franchiser provides the franchisee the qualified help in
personnel training, in purchases of accessories, materials, the equipment, etc., in rent of rooms and the equipment, in market researches and etc." [10].

The comparative analysis of the given definitions allowed us to formulate the following definition of franchizing.

Franchizing – the organized form of business at which one party (franchiser/owner) transfers the contract license for business (production, sale, use of a know-how or rendering services) to other party (franchisee/right user). Thus the franchiser undertakes to provide with information, to render technical assistance and to exercise control, and the franchisee, in turn – to pay to the owner compensation (royalty) which size is provided by conditions of the contract signed between the parties.

The president of the Russian Federation signed on July 18, 2011 the Federal law N 216-FZ "About modification of Part the second the Civil Code of the Russian Federation". New edition of Art. 1036 of the Civil code will allow to resolve many key issues in the organization of franchising business systems in Russia.

**Literature:**


6. Shulus A., Byshenco N. Franchise business forms (objective foundations, the
contradictions, the principles of support) // Russian economic journal. - 1998. - №1. - p. 44-47.


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INCREASE OF INVESTMENT APPEAL OF RUSSIA ON THE BASIS OF USE OF MODELS OF OUTSOURCING TECHNOLOGIES

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In this report topical issue of increase of investment appeal of Russia by means of use of various models of production outsourcing technologies is considered.

Keywords: production outsourcing, outsourcing technologies, outsourcing model, investment appeal, economy of Russia, hi-tech productions, competitiveness, manufacturing industry.

One of the most important aspects of effective development of economy of Russia is to increase of investment appeal of the country. Interest increasing in recent years from foreign investors to implementation of investment projects in manufacturing industry, causes development of this sector of economy.
During the period from 2007 to 2011 the share falling on investment projects in the sphere of the industry made 51%, is created new workplaces – 92%. High rates are characteristic for automobile area (the number of projects made 90), in production of cars and the equipment – 62. At the same time, lack of investment from the state in modernization of real sector of economy demands search of the new models based on outsourcing technologies. After all the production outsourcing representing transfer on the party of performance of part either completely technological process, or other, directly related process acts as base of the listed above investment projects (for example, research and development).

Let's consider possible options of models on the basis of outsourcing technologies in the production sphere.

The first model is the research outsourcing technology for which realization it is necessary to recreate the research centers, institutes. Main objective – rendering services research and development both on world, and in domestic market that will promote innovative development of economy of Russia (fig. 1). It is possible to distinguish rather small expenses from advantages in comparison with modernization of all industrial sector of economy, and also existence of "the scientific potential". Among shortcomings - risk of weak interest from outer side in this connection, lack of further financing of the centers is possible. Besides, activity in the sphere of research outsourcing isn't regulated now by the legislation that increases risk of refusal in placement of orders to Russia taking into account possible leakage of commercial information.
In the second model it is possible to offer technology of partial production outsourcing for what it is necessary to organize assembly productions of the known foreign companies (fig. 2) on the basis of existing Russian manufacturing enterprises. The special attention should be paid to the hi-tech sphere. The purpose - rendering production outsourcing services to the foreign companies. Sector of automobile outsourcing actively developing in Russia is a striking example. Advantages of this technology are:

1. Small financial expenses from the state.
2. It is not necessary to re-equip completely the enterprise.
3. Decrease in a net cost of production.
5. Increase of a skill level of workers.
6. Absence at foreign investors of problems on the organization of independent assembly productions.
7. Attractive low salary in Russia.
Among the negative moments are: the risk of a rupture of the contract relations owing to low level of output quality control, and also lack of legislative base.

The third model can be presented in the form of strategy of the "competitive" production outsourcing which essence consists in the organization on the basis of existing manufacturing enterprises of own assembly productions by partial or full replacement of technological process with delivery from the foreign companies outsources of ready accessories, knots, details, etc. for the purpose of products improvement of quality to world level and reduction in cost of its prime cost (fig. 3).

By this option already there are machine-building enterprises. Their goal is to obtain greater profits. This strategy is wrong and will reduce the demand for low-quality goods, and therefore, in the long term will lead to a decrease in production.
List the advantages:

1. Increase of competitiveness of products at the expense of replacement of accessories, details, knots on corresponding to the world quality, arriving from the company outsources.

2. Decrease in prime cost of products at the expense of reduction in production.

3. Value added in the future will contribute to the accumulation of funds for its own modernization and acquisition of modern technology.

Lacks: reduction of number of workers, as well as absence of qualified workers on a labour market.

And last version is the model of hi-tech outsourcing in the form of creation of the new hi-tech manufactures rendering services to world manufacturers. Among advantages:

1. A fast recoupment.


3. An actual possibility of use of own innovative progress and their fast introduction in manufacture.

4. Technological growth of the country.

Shortcomings:

1. Probably low competitiveness of outsourcing services at the expense of the high cost that will entail decrease in orders and, respectively, will result in not payback of the project.

2. Lack of legislative base on regulation of production outsourcing that increases risk of refusal in placement of orders to Russia taking into account possible leakage of commercial information.

Fig. 4. Model of hi-tech outsourcing

On the basis of the set forth above models probably use and other versions.

References:

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Gromova N.V.
MODERNIZATION OF EDUCATION SYSTEM AS A FACTOR OF INNOVATIVE DEVELOPMENT OF THE RUSSIAN ECONOMY

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Natalia V. Gromova – Ph.D. in Economics, associate professor, Department of Human Resources Management at the Moscow University of Industry and Finance «Synergy».
The article describes the role of modernization of the Russian system of education in the development of a knowledge-based economy. We focus on one of the main directions of this process: improvement of the quality of personnel training.

Key words: innovative economy, labor market, professional education, labor productivity, knowledge-based economy.

Nowadays the development of the Russian system of professional education, the quality and availability of educational services is one of the most important factors of economic growth, which affects such important macroeconomic indicators as employment, labor productivity and general welfare of the population. The need to improve the quality of professional education provided by HEI is defined by the tasks of building a Russian knowledge-based economy and ensuring its stable growth.

Hardly ever has a concept introduced by evolutionary economists been more successful in the political discourse than the one of a «knowledge-based economy». This assumption of a qualitative transition in the economic conditions has become commonplace among policy-makers and mainstream economists. The abbreviation «KBE» has even become a standard to the extent that it is often used without further explanation.

For example, the European Summit on 23-24 March 2000 in Lisbon was specifically held to agree a new strategic goal for the Union in order to strengthen employment, economic reform and social cohesion as part of a knowledge-based economy. The conclusion of the meeting was, among other things, that the shift to a digital, knowledge-based economy, prompted by new goods and services, will be a powerful engine for growth, competitiveness and jobs. In addition, it will be capable of improving citizens quality of life and the environment.

In an ever changing and dynamic world the requirements to staff are continuously increasing, both for new and already existing professions. In this connection modernization of the national education system should take into account not only current but also prospective needs of domestic and global labor market. Having joined the
World Trade Organization, the Russian Federation assumed specific obligations on optimal control and regulation of the national labor market, as a condition for release of services and products to the international market is a compliance of the staff quality of enterprises and organizations with international standards.

Improving the functioning of the national education system should be seen as an essential component in the structure of national public priorities. This is reflected in the Concept of Socio-Economic Development of the Russian Federation until 2020 [2]. The development of human potential is considered as one of the priority directions of the transition of the Russian economy from the export of raw materials to innovative model of growth and formation of a new mechanism of social development.

In the innovation economy education is the main source of innovation. It is the first link in the innovation chain «education - research - venture projects - mass development of innovation» [7]. So it can be concluded that the efficiency of the education system, the result of which is the qualified personnel, which is able to ensure the realization of all stages of the innovation process, serves as a basis for the innovation economy.

Despite the crisis in the global and domestic economy in 2008-2009, Russia continues its economic development, but its pace has slowed down considerably. If before the crisis the economic growth rate was just over 7%, now it dropped to 4%. One of the ways out of this situation is to increase labor productivity in all sectors of the economy that will become the basis for sustainable economic growth.

«Now we are far behind the leading countries by the indicator of labor productivity, - said Vladimir Putin. - Over the coming decade, it is necessary for us to increase labor productivity at least two times, and in the main sectors of the Russian economy - three or four times. We need to modernize production, to move to new technologies, to train personnel, to change qualitatively the structure of the labor market, creating high-tech and well-paid jobs» [1]. The main theses of this speech were legislatively approved by Presidential Decree of 07.05.2012 N 596: «...The Russian government must take
measures to meet the following indicators: to increase the labor productivity by 2018 at least 1.5 times compared to the level of 2011…» [5].

A key factor of the low level of labor productivity is inefficient organization of the personnel in modern organizations and insufficient level of staff skills. This factor causes from 30 to 80% of the lag in labor productivity depending on the sector of the economy. At the last enlarged meeting of Government of the Russian Federation 31 January 2013 Vladimir Putin has set the task to increase labor productivity in Russia as soon as possible. Speaking on the state of the labor market, he noted that «the situation is complicated by the lack of qualified personnel and that this problem is one of the sharpest in the country according to employers» [3].

The President's speech and the current situation in the domestic labor market illustrate the negative trend of human resource development in Russia. This inevitably leads to a lack of labor productivity and staffing deficit in some sectors and regions. This becomes complicated by the continued decrease in working age population.

The shortage of qualified personnel is explained, on the one hand, by the fact that in Russia a number of specialties became in demand recently and on the other hand by the fact that until recently the professional training was conducted on the base of outdated educational programs. In Russia professional educational programs in all areas of training were massively updated only in 2010, when the state educational standards of higher education and vocational training of the third generation came into force (these standards were approved a few years later than planned).

However at present one of the main structure elements of the labor and the education markets represented by government directed vector of development towards improving the quality of professional training.

Russian President has identified the actual tasks for the public policy improvement in the sphere of research and professional education and training taking into account the demands of the innovation economy [4]. Undoubtedly, these tasks will provide the
necessary quality assurance of education, which will lead to an increase in the quality of personnel training.

Highly qualified and competitive staff is a pledge of labor productivity growth in the country which contributes to the increase of the economic competitiveness and of the standard of living in Russia.

References:

1. Speech by Prime Minister of Russia Vladimir Putin in the State Duma with the report of the activities the Government of the Russian Federation for 2010, 20 April. 2009. URL: http://президент.рф


4. Presidential Decree of 7 May 2012 № 599 «On measures for implementation of the state policy in the field of education and science». URL: http://президент.рф

5. Presidential Decree of 07.05.2012 N 596 «On the long-term national economic policy». URL: http://президент.рф


THEORETICAL AND METHODOLOGICAL BASIS STAFFING RESORT AND TOURIST REGIONS: THE NATURE, STRUCTURE, FEATURES

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In this report we describe the reviews of the theoretical and methodological foundations of the term «Staffing of the tourists in the region» and determine its place in the socio-economic development of territorial formations.

Key words: the peopleware, the resort-tourist region, the shots, socio-economic development, tourism product.

The Introduction.

National working potential still remains one of the greatest competitive advantages of the Ukrainian economy and should be considered as one of the key factors of dynamic resumption of the economical increase. Therefore peopleware has a great value and should be learnt carefully.

The complexity of the contemporary tourism development in the Ukraine is that many theoretical aspects concerned the main point of the occurrence and its leading categories, economical and social content are not solved.

The image of the appropriate modern resort-tourist complex management system on the regional level is based on works of Balabanov, Bowen, Durovitsch, Zorin, Ilina, Kabushkin, Kirillov, Kotler, Papiryan, Senin, Shtchekin etc.

The aim of our issue is to learn the theoretical and methodological basis staffing resort, its nature structure and features.
Problems of the issue: to analyze the point of resort-tourist region peopleware, to examine its structure, to determine its specialties and its role in social and economic territorial formations development.

The research of the concept of “peopleware” shows that it should be known as a many-sided and multilevel phenomenon and as the whole system of different processes connected with each other and conditioned by the manpower policy directions [7, c. 187].

As a rule, the resort-tourist product can’t be divided from the area of the rendering of services [3, c. 29]. That is the specialty. Besides, the resort-tourist product has a complex character and is formed by the great amount of elements, which are peculiar to the specific territories. This specialty determines the urgency of our work.

Peopleware resort-tourist region is a part of the regional social and economic development management, which is directed to providing the resort-tourist product with qualified staff.

The content of peopleware as a whole system should be studied with the help of its elements, which are the peopleware mechanism and process.

The peopleware aim is the full effective resort-tourist region functioning. The working out peopleware strategic aim, from our point of view, is providing a labour-market with the optimal amount of high-qualificated staff.

Among the peopleware principles we can obviously see common and special [2, c.25]. So, the common principles should be determined as equality, legality, scientifity, system, control and humanism. Common principles are natural for all the peopleware aspects.

The second group of principles should be determined as professionalism, competence, hierarchy, responsibility etc.

The functional peopleware structure is determined by the regional manpower policy. When we use the word “functions” we mean different directions of working with staff. These functions are:
Making conditions for providing with high-qualified staff;
- Providing with new methods and forms of working with staff;
- Assistance in a job placement;
- The labour-market monitoring
- The solving of social and domestic problems of workers, exemption etc.

Conclusion.

The above research shows that peopleware is a complicated phenomenon of the economic life, which influences the tourist brunch functioning.

The effectiveness of the enterprises activity is determined by the quality of the staff working. And that is the specialty. That is why the peopleware problems are becoming more and more important and demand the immediate monitoring and solving.

**Literature:**

PECULIARITIES AND TENDENCIES OF THE DEVELOPMENT OF MODERN CHINA

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Annotation

Specific peculiarities of development of modern China are disclosed in the report. Besides, the internal contradictions within the current economic model are studied.

Key words: China, features of the development, the contradictions of the development, prospects, expansion.

China has many faces. Everyone sees in China what he wants and can see. Those who come to China firstly, visit Beijing, Shanghai, Guangzhou, Shenzhen and Hong Kong. They see China through modern cities, beautiful hotels, good infrastructure, high life, which is not much different from what you can see in Tokyo, London and Paris. Others visit Henan, Shanxi, Shexi, and Xinjiang, Dongbei. They come and live in the county towns. They see China as a middle-income country. The others had the opportunity to work in China a definite period of time and to compile quite full notion about Chinese countryside. They were in Gansu, Guizhou, Qinghai, Inner Mongolia, and met with the villages and towns of those places. From their point of view, China is still a backward developing country. We can not judge China through Beijing or some other large centres, as well as through the villages and rural settlements, while half of the population lives in rural areas.

Perhaps a major problem of humanity is that it does not understand what a present-day China is and what trends of its development are.

Western approach to China, on the one hand, is a blissful idealism of those who expect that China will integrate quietly, peacefully and obediently into the existing
economic and political system created by the West, continuing in an idyllic way to stamp sneakers and laptops for wages, at best, $100 per month for western consumer.

On the other hand - a fanatical ideological narrow-mindedness of those who see all the problems of China in the lack of a Western-style democracy. China will soon collapse because there is no democracy or firstly attack at all countries, and then collapse, because of it.

Though there are those who understand if there is introduced a Western-style democracy in China, it will crash instantly.

Russia's view on China generally is a strange mixture of hidden horror and hope on a "strategic partnership" against the United States of America.

Meanwhile modern China has a number of specific features.

1. The combination of one of the largest economies in the world, displaying the highest growth rates in the world and which has high technological capabilities with social and economic problems, typical to underdeveloped countries.

2. A huge number of population, which exceeds the capabilities of the environment. A maximum allowable level of the Chinese population to its territory and resources is 700-800 million. As you know, the real number has already exceeded 1.3 billion, what is more, in spite of all the limitations, the growth still continues. Moreover, 94% of the population lives on 46% of its territory.

3. The world's highest differentiation between urban and rural areas and between regions.

The difference between city and village is so high that the whole socio-economic statistics is given separately for the village and for the city, as if it is different countries. In fact, there are several absolutely different societies in the country, from traditional agrarian to post-industrial. This society is not just with totally different level of life, but with a completely different mentality as well. And the gap has a tendency to increase, not to decrease.
4. The world's highest rate of population aging and gender imbalances in the young age groups.

The number of old age groups is growing twice than the general population. It mainly repeats tendencies, typical to the West, but the process of population aging there, was much slower and began, with GDP per capita of was 5 – 10 thousand dollars (in China it is less than 2 thousand dollars).

The duty of caring of elderly in China formally lay upon the family. Pension is the only source of income for the sixth of elder people, while the social support for the elderly in the village is completely absent, i.e. peasants are not paid pension, although the income itself is less than in the city.

For the providing of parents both officially, and in accordance with tradition, sons, who are the successors of the family and heirs, bear responsibility. According to the norm in China 102-107:100 the ratio of newborn boys and girls is, at least, 117:100, in some provinces is 130:100, and in the village comes to 152:100 [].

In the coming years, the age of marriage will join the generation in which about 20 million of young people will not find brides, because of their deficiency.

This phenomenon, apparently, has no analog in the history of mankind, so it is quite difficult to predict its social consequences and to develop the solutions of the problem.

If current tendency keeps, there may be a situation where a bride becomes a commodity. Considering the change in the mental attitudes of urban residents, for whom marriage may be now less important than career, urban men will seek to marry women living in villages, and many rural men generally remain without opportunity to marry.

In this case, the conflict between town and village, between developed and backward regions can take antagonistic way.

5. The high inertia of the system, due to its size, the complexity and high degree of social conservatism.
Economic growth, based on an extensive labor-intensive model, continues to break all records, all production plans are surpassed. And along with them, plans of the consumption of resources and environmental pollution are also surpassed.

Instead of the planned reduction of energy capacity goes on its growth. Instead of reducing harmful emissions goes on its rise. Annually all predictions about China's consumption of oil are broken down, practice turns out much worse than expected.

6. The contradiction of development, the removal of which is not possible within the current economic model in China.

Much has been written about their individual components of development contradictions, but they have never considered in total.

- The contradiction between the need to maintain high rates of economic growth based on labor-intensive sectors with the aim to ensure a growing population with the work and the need to reduce the rate of growth and the transition from extensive to intensive production because of resource and environmental issues.

- The contradiction between the growing demands and needs of the population, and the inability to satisfy them on account of the resources not only of China, but the planet Earth as a whole.

- The contradiction between the need of further following of the policy of "one family - one child" due to overcrowding and the need to reduce the country's demographic restrictions for reasons of social nature.

- The contradiction between the policy of relying on the population as the main economic resource and competitive advantage, and overcrowding of the country as its major problem.

During the reforms, China has used its huge unpretentious hardworking population as the basic resource. Mankind agreed happily with it, turning China into the "world assembly plant". Huge surplus of labor force and, therefore, a very high level of competition on the labor market permit to maintain low wages and, thus, the price of Chinese products.
However, unemployment is useful only if it does not exceed a certain limit, otherwise it will create a real threat to social stability.

At the same time, the labor force continues to grow, it must be utilized. The best way of utilization is a further increase of the production of mass consumption; all the more it brings huge foreign exchange earnings to the country. But it also requires a huge amount of raw materials, which China itself is not provided with, and leads to progressive destruction of the environment, which can assume unprecedented environmental catastrophe in the history of mankind.

These factors begin to "eat" this economic growth, the consequence of which they turn out.

The transition from a predominantly extensive and time-consuming to a predominantly intensive and high-technology nature of production, firstly, requires an investment of huge funds (in particular to improve a very low level of education of the population), and secondly, will lead to an explosive increase of unemployment, what can create a serious threat to social stability.

Obviously, the Chinese society in total is objectively interested in finding the exit from the present situation in China.

In this case, however, the vast majority of the representatives of social groups is interested in the preservation of the current model of reform.

It naturally applies to those social groups which benefited from the reforms (the bureaucracy, entrepreneurs, qualified workers, managers, etc.). However, other social groups, including those who lose from reform, are not interested in the change of the model, as it will only worse their situation by increasing the number of landless peasants and unemployed.

Thus, a clash of long-term and short-term interests takes place for the vast majority of the Chinese society. A person usually decides in favor to short-term interests in such clashes, i.e. in favor of maintaining the current model of development.
West is also interested in its preservation. It will tell a lot and interesting to itself about the delights of post-industrial society. In this case the fact is ignored, that the inhabitants of this earthy paradise should eat a lot and deliciously, put on shoes and dress, beautifully and well, drive good cars and use wonderful computers (What information society it is then?). And all this must be done with hands and preferably in a cheap way.

That’s why, Chinese does with hands a lot and cheap.

Mankind carefully closes its eyes on the fact of further growing of China - even if the concept of "peaceful rise", officially promoted by the authorities of China, is not propaganda but the truth.

West will talk long about "sustainable development" and reduce of disparities in living standards between developed and developing countries. But everyone understands that the vast majority of developing countries will not nearly come to the level of developed ones, because if these countries are given "fish", it will eat a hyper-corrupted "elite", and then ask for more "fish". But, if you give a "trap" to developing countries, they will simply break it, because of the inability of its using.

China is among a few exceptions. It will not refuse the "fish" and master the "trap" successfully, and if you try to take away (or not to give), it can take them by force.

The population of Nigeria will never, under any circumstances, live as the population of Sweden. China's population could theoretically try to get to that level. We must just understand that the resources of the planet are not enough for ensuring such a standard of living only to China. It will not have neither food nor oil or other equally useful things. And nothing will be left for other countries.

So we can only believe that China (the country with the largest population in the world, the most powerful army and huge ambitions) will always stamp stoically consumer goods for the rich foreigners at the expense of own poverty.
And the worst thing in this situation is the lack of adequate alternative model, which removes contradictions and methodological foundation for the development of such a model.

To sum up, I want to say, that it is absolutely impossible to understand how China can get along without external expansion in all its forms (economic, political, demographic, military). It's just not viable in its present borders. Either it will become much more or it will have to become much smaller.

Therefore, the matter is not in an aggressiveness of China, but that the expansion for it is the only way to survive.

References:


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IMPROVEMENT of ACTIVITY of ASSOCIATIVE UNITIES

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In this paper the ways of solution of problems in competitive agroindustrial production forming are examined through creation of national associations of producers of concrete agricultural commodities. Expedience of application of mechanism of cluster
integration of independent subjects in menage with forming of self-governing economic associations have been grounded. Scope positions of activity of self-governing economic associations in an agroproductive sphere have been formulated.

Key words: association, competitive agroindustrial production, cooperatively associative unities, privately state partnership, association of cluster type.

Introduction. A necessary condition of construction of an independent nation-state of Ukraine is the becoming and development of its economy. Because of that Ukraine has an enormous production and technological potential of production from many kinds of agricultural produce, it can occupy one of the leading positions in Europe. At the modern stage of its development its economy is at a state of severe crisis. An important role is played by organization of production and sale, and above all things because they do not need any substantial capital and labour costs and it is a way of integration and the use of all the factors of the economical growth.

An agricultural sector is traditionally a priority industry in Ukraine. However in present terms agriculture faces some problems which must be solved by the increase of competitiveness of agricultural produce. It is worth mentioning that small farms undergo substantial difficulties concerning entering foreign markets.

The effective solution of these problems would be a creation of national associations of producers of concrete agricultural commodities which represent the interests of these producers. Such associations are to solve the following tasks:

- lobbying of interests in legislative, executive state and also in international and other structures;
- coordination of activity of producers
- providing producers with current and prognosed information about the state of affairs in domestic, regional and world markets
- providing producers with the information about advanced technologies of growing of croppers and agricultural zoons in different agroclimatic, landscape and other conditions near to the proper regions in Ukraine;
an assistance to producers is at the purchase of the fixed and circulating assets of production;

an assistance to producers is in realization of products at local and overseas markets;

organization of exhibitions, trainings, seminars, bilateral business tours, useful to the members of association;

bringing in of domestic and foreign specialists and scientists of the proper areas etc(1).

Analysis of the latest researches and publications. The question of activity of associative associations in Ukraine and abroad are in the works of A. Drabovskiy, M. Kropivko, L. Moldova, Yu. Nesterchuk, M. Pavlichenko, V. Cimbal, L. Chepurda, E. Shirinzade etc.

Raising of a problem. Despite a lot of works and publications, the problem of increase of competitiveness of agriculture production can not be considered as a solved one because at present scientific works in our view the ways of its solution are not enough presented.

According to our viewpoint a lot of theoretical, methodological and methodical problems remain scantily explored and needs subsequent and substantional development, especially in relation to an afterreform period which is characterized by a wide development in agriculture in the personal farms, perspective of development of which as forms of management is limited. At the same time the personal farms are the potential participants of forming of the associated forms of agrarian business.

Main part. At the modern stage of development economy organization of production plays a big role. Development of engineering and increase of level of the technical rigging of enterprises creates the conditions and simultaneously requires the improvement in the organization of production and management.

For achievement of high efficiency of process of production it is not enough to have modern instruments and articles of labour, it is also necessary to have a certain
system of organizational connections which combine the personal and financial factors of production and make them go. Such a system presents an organization of production and sale of agricultural produce.

So at a voluntary basis economies can conclude contracts on the sale of the products with state, cooperative and public enterprises, establishments and organizations which carry out a purveyance and processing of agricultural produce. They have a right freely to realize the products and to any other users (including to the citizens), to sell it on markets.

Farmers are constantly accompanied by difficulties through a present situation in Ukraine: insufficient support of agriculture by the state, monopolization of such spheres of activity as processing, realization, supply and services by large economies. Hereupon farmers have very many problems, related to their insolvency to resist impossibility to conduct the extended production.

For the effective functioning of farms there is a demand in investments, which is impossible to overcome independently that is why it is necessary to involve all possible forms of investing, including both lent and the attracted sources of investing of farms.

In modern terms it will be correct to take advantage of experience of other countries, which proves that even those agricultural commodity producers which have insignificant economic potential uniting in cooperative stores, create influential economic force which is able to solve them general issues. Cooperation became the basic sign of agroindustrial complex in many countries of the world.

In the developed countries, except for official structures, different groups there are of interest of public organizations. For example, in European Union among such it is possible especially to select Committee of organization of agricultural producers, which unite farmers of different countries and the Confederation of branches that produces food and drinks in European Union countries that present the interests of food industry. Users are presented by the European bureau of consumer unions. There are also numerous associations of producers [2].
In France and Skandinavian countries nine out of ten farmers are the members of attendant cooperative stores. A high level of participation of farmers in cooperative stores is also observed in the Netherlands, Germany, Ireland, Japan, USA, Canada and many other countries.

In Sweden, Denmark, Norway, Finland cooperative stores occupy up to 85 % of the sale of farmer products and up to 60 % supply to the farmers of capital goods.

In France farmers through cooperative stores redo and realize 52 % of milk, 67 % of grains, 45 % of fruit, many of them collect their own grain, and also execute other agricultural operations all by a technique which is in their cooperative store on its general use (3).

Agricultural cooperative stores come forward presently as a mean for a solution or general overcoming of problems, whatever agricultural producers cannot solve alone.

It is caused that at existent tendencies in providing a technique and investment resources farms are doomed for the extensive type, and the general use of technique will allow them substantially to decrease the size of charges on payment of labour of mechanization experts, fuel, repair, and consequently – and unit cost at providing of necessary level of technological discipline of production.

In accordance with the Economic code of Ukraine an association is a contractual association, created with the purpose of permanent coordination of economic activity of enterprises which united, by centralization of one or a few production and administrative functions, development of specialization, cooperations of production, organization of joint productions, on the basis of association of financial and financial resources participants for satisfaction of mainly economic necessities of participants of association 4.

The higher organ of management of association are gatherings of its founders, which asserts regulation of association and makes alteration to it, solves questions about acceptance to the association of new participants and expelling of participants, forms the executive branch of association in accordance with regulation or constituent agreement,
solves financial and other questions in accordance with the constituent documents of economic association.

An association has no right to interfere in economic activity of enterprises-participants of association. According to the decision of participants an association can get plenary powers to present their interests in relationships with the organs of authority, other enterprises and organizations [5, p. 14].

At the level of primary link of public production associative associations in agriculture show up in the form of agroindustrial enterprises, unities, associations, agrofirms. Next to the basilar agroindustrial formings regional agroindustrial complexes function within the limits of separate areas, areas and districts.

They engulf agriculture of separate region and industries, which provide this complex capital goods, carry out the grant of production services and redo, keep and deliver products to the users.

Basic normative acts which regulate activity of associations, there is Law of Ukraine «On the association of citizens» from June, 16, 1992 № 2460-II, Economic code of Ukraine from 16.01.2003 year № 436-IV, (that replaced the law of Ukraine «On enterprises in Ukraine» from 27.03.1991 year № 887-II, which lost its action) and also Law of Ukraine «On organizations of employers» from 24.05.2001 year № 2436-III.

Another normative act requirements of which are obligatory at creation of association of enterprises is a sheet of the Antimonopoly committee of Ukraine «About principles of providing of accordance the antitrust legislation of creation and activity of associations of businessmen» from 20.12.1995 year №5/03. Some of its positions are supported by professional and particular branch associations in their aspiration and possibilities of collaboration with the state for defence of interests of the participants.

This document specifies possibilities of activity of associations from implementation of the regulation obligations without creation of monopoly, monopolization of markets, and without limitation of competition. Among the principles of providing of creation of Association of enterprises in accordance with a current
antimonopoly legislation there are «providing of terms, which allow to create Association without limitation of amount of participants in its composition» [6].

Thus, associations have a right for the unlimited amount of participants, which can strengthen the influence of organization for acceptance of important of a particular branch decisions.

To the modern agroindustrial organizational forms it is expedient to take the regional formings, economic agroindustrial formings and agroconsorciums. The regional agroindustrial formings – it technologically the unique production complex for production, processing and realization of agricultural produce which is managed and planned as the unique unit and functions as a legal entity on principles of complete recoupment and self-finance.

Agrarian enterprises, interfarm enterprises, enterprises from processing of agricultural produce, purveying organizations and enterprises of consumer cooperation, different agroservice enterprises and point-of-sale formings, enter in the complement of these formings.

The main task of the agroindustrial formings consists in providing of local population an agricultural produce in a fresh and done kind, coordinations of efforts of all participants with the purpose of providing of the balanced development of agroindustrial production, growth of his profitability and effective solution of social problems in the region. However in these formings the administrative methods of management and majority predominated from them appeared not ready to the rapid changes in a market environment.

The appropriate phenomenon in this process is an origin of more perfect form of the agroindustrial forming – associations. Agroindustrial associations are the voluntarily associations of enterprises on the base of main enterprise which economic independence and right for legal personality is kept after.

All of it pushes agricultural commodity producers to the creation of the processing productions and development of its own point-of-sale network. This process has positive
and negative sides.

Positive side is in that with the increase of amount of agrofirms a competition environment is created in the field of processing of products, which will force processing enterprises to be integrated with the suppliers of raw material on a mutual economic benefit, and negative – show up in the low technical and technological level of processing of products, as low-powered workshops which are built by them do not provide the depth of processing (processing of side products).

And, as a result, on such productions there is a higher unit cost and accordingly its lower quality

The reason of association of enterprises of APC is the necessity for providing of stable profits as a result of creation of its own reliable source of raw materials, forming of permanent markets of sale of products, expansion of spheres of activity, and others like that.

So associations are created for a successful solution of the enterprises tasks, related to the expansion of their possibilities in production and social development, by the increase of efficiency of the use of financial, financial and other resources on the basis of organization of joint activity, division of labor and cooperation, combining effort and facilities, in scientific and technical, production and social development.

The value of agrarian policy is determined by that role which is played by an agricultural production in the system of national economy. At the modern stage of agrarian reform in Ukraine a special place is taken to a scientific ground and practical solution of complex problem in determination of ways of development of competitive agroindustrial production.

This problem is especially topical, as a bulk of agricultural produce is produced in numerous lowproductivity personal peasant farms, agricultural enterprises which are independently unable to form large enough parties of agricultural produce for a sale.

Intermediary structures which in essence monopolized the food markets of country and in pursuit after overprofit successfully conduct a fight at establishment as possible
of lower buying and as possible higher consumer prices use these.

The questions of scientific ground of ways of forming of large agroindustrial production are examined by many researchers, especially they activated lately [7].

As integration mechanisms for adjusting of interfarms connections in many scientific publications are examined mechanisms of cooperation or orporatizztion, as it is certain in the Economic code of Ukraine [8].

Domestic practice of development of cooperation, foremost attendant, testifies that the mainly personal peasant and farmer economies are interested in it. An association in cooperative stores enables them to attain the comparable with agricultural enterprises levels of technologicalness and marketability and the same to promote the competitiveness of the products on the basis of joint purveying, agrotechnical and sale activity.

Together with that these necessary measures in direction of forming of large production are insufficient for the conquest of leading positions at the agrarian market in modern terms.

Therefore as well as the situation on food markets, so existent of (sectoral) a particular branch organization of management development of agroindustrial production stimulates the processes of vertical integration through forming of corporate agroindustrial associations, in particular agroholdings – associations, based on the lease of the dispersed large landed arrays.

Presently, according to different sources (official statistics on holdings in the country doesn’t exist), almost 35 agroholdings organize its activity on about 15% agricultural lands. The row of advantages of large production is the following:

1) developed specialization;
2) the active bringing in of investments for the technical retooling;
3) introduction of innovative technologies;
4) production of food of high quality stuffs;
5) possibilities of going into overseas markets without mediators.
However many of our researches testify that their activity results also in sharpening of social problems on a village: growth of unemployment rate through freeing of superfluous workers, often the inefficient use of soil through violation of crop rotations, establishment of the understated innercorporate purchase prices, and others like that, that as a result became another source of moneylaundering from the village.

It is therefore expedient it would be to make alteration in Law «On holdings companies in Ukraine» in direction of decentralization of management by forming of the associated companies on territories with rational limitations after the sizes of land-tenure, and also to perfect the legislation from leasings relations, relationships with workers and the organs of local self-government.

In EU, Canada, Australia, USA and other countries, with the developed agriculture the special role in organization of competitive agroindustrial production belongs to the corporate not associations in basis of activity of which there is the fixed concentration of property, but cooperatively associative by the association of independent agricultural enterprises, created for joint activity from advancement of their products on markets.

It is an association of cluster organization in basis of which lies state private partnership and interfarm self-government.

As evidently from a table 1, wholesale realization more than 2/3 agricultural produces in these countries are carried out not through commercial mediators, but due to activity of noncommercial self-governing economic or state economic associations.

In the European countries in cooperative stores about 80% farms are incorporated which provide a production 60 % eventual products. In the Netherlands cooperative stores provide processing and sale 80-85 % general volumes of milk, fruit, vegetables, about 60 % grain and beets, over 25 % meat of poultry and pork.

A third of fertilizers and greater half of forage is supplied to agroproducers due to their production on cooperative principles. On the whole, three central farmer unions operate in the Netherlands, here two from them unite the members on religious basis. Except for it, central advice of agricultural and gardener cooperative stores unites almost
all agricultural and gardener cooperative stores at mediation of central cooperative stores and farmer unions [9].

**Table 1**

*Volumes of wholesale realization of agricultural produce through cooperatively associative association*

<table>
<thead>
<tr>
<th>Country</th>
<th>Grain and grain-products</th>
<th>Milk and milk-products</th>
<th>Meat and meat-products</th>
<th>Resource supply</th>
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<tbody>
<tr>
<td>Sweden</td>
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<td>35</td>
<td>85</td>
<td>82</td>
</tr>
<tr>
<td>France</td>
<td>70</td>
<td>50</td>
<td>...</td>
<td>23</td>
</tr>
<tr>
<td>Germany</td>
<td>55</td>
<td>30</td>
<td>60</td>
<td>57</td>
</tr>
<tr>
<td>Canada</td>
<td>45</td>
<td>63</td>
<td>20</td>
<td>59</td>
</tr>
<tr>
<td>USA</td>
<td>32</td>
<td>43</td>
<td>20</td>
<td>86</td>
</tr>
</tbody>
</table>

Agricultural cooperative stores produce 80-99 % milk in Norway, New Zeland and USA, 71 % fish products in Republic Korea and 40 % agricultural produce in Brazil. In Germany the cooperative stores of farmers supply to the market 80 % milk, a fourth of beef, sell off more than half of volumes of grain and vegetables, provide a supply about 55 % capital goods and 40 % mixed fodders. In France a cooperative production engulfs 64-67 % volumes of grain and pork, to 50 % milk. Cooperative stores carry out 36 % supplying with machines and equipment, 44 % fuel. Production amalgamations in an agrarian sector engulf here 13 % farms and process over 25 % agricultural lands [10, s. 14].

The personal traits of collective agricultural associations which function in the European countries is noncommercial character, maintainance of peculiar on a capital and soil, submission of activity with the purpose of diminishing of charges of production and for the increase of its efficiency.
The important traits of cooperation associations is also responsibility for the results of activity, personal participating in a production process and allocation of profits. Due to a noncommercial character of activity, collective agricultural associations are free of payment of taxes. Taxes from profits are paid only by their members.

An active support of collective associations from the side of the state is stipulated by the attempts to limit monopolization in an agrarian sector and provide multifunctionness of agriculture.

On the whole in the developed market economies cooperative stores do not function only in the field of agrarian production, but they are the form of vertical integration. But it does not deny advantage of collaboration of producers, which is inferior the concentration of efforts of producers and processors for creation of powerful network of sale on perspective markets.

Advantages of such association consist in possibility to offer bargain prices for realization of products and supply of capital goods for agroproducers on permanent basis. Creation of the associated companies cooperative stores extends possibilities of satisfaction of necessities of members of cooperative stores, providing additional services, and also instrumental in growth of their profits and incomes from service of customers which are not the members of cooperative stores.

Strengthening of competition at the European and world market, development of processes of concentration and globalization of production is predetermined by the necessity of combining effort cooperative stores. From the data of Cabinet of Ministries of Ukraine, rural producers only in the process of realization of milk, as a result of dominant influence of intermediary structures and the absence of cooperative market, lose about UAH 26,9 bln, and during the sale of meat – there are UAH 16,9 bln, an as a result there is a reduction in the cattle amount [11, p. 114]. Intermediary structures with the purpose of receiving of maximal incomes set the lowest purchase prices at the high suggested retail prices.

Insufficient development of cooperation of the personal peasant economies in
Ukraine is related both to the traditional mistrust of peasants and their insufficient being informed in relation to advantages of modern cooperation. The brake factor of activity of cooperative stores, which threatens to reduce to zero the benefits of cooperation, is imperfection of mechanism of receiving of grants and privileges, foreseen by the legislation, and their use [12, p. 38].

For achievement of high-quality of new level of functioning of cooperative structures intensive state support is needed. In obedience to the Government having a special purpose program of development of agricultural attendant cooperative stores on a period up to 2015, ratified Cabinet Ukraine in 03.06.2009, development of agricultural co-operation is examined as important direction of re-erecting of economy domestic agrarian sector.

Organization is foreseen up to 2015 to no fewer than 10 thousands of agricultural attendant cooperative stores; creation of over 100 thousands of additional workplaces; stimulation of growth of agricultural production by 1,6 times. For realization of the put tasks it is foreseen up to 2015 to select UAH 7,2 bln from the budget [13].

Possibility of receiving of bank credits is created for the purchase of equipment with the subsequent connecting to the government program of indemnification of percents after bank credits. The Ukrainian state backing of farms fund took title to allot credit farmers to the amount of up to UAH 100 thousand for insetting of ration payments to the agricultural attendant cooperative stores by a term for 5 years on interest-free basis [14].

At mediation of the system «Ukragrrolizing» cooperative stores can purchase technique on the basis of leasing during a term of up to 7 years etc.

Along with that, development of cooperative stores is impossible without its own persuasion of people, that create, their mutual trust and personal return.

In the agrarian sector of Ukraine the also founded activity of over 50 public organizations which are created in the legal limits of Law of Ukraine «About the association of citizens» for satisfaction and defence of legal social, economic, creative,
age-old, national and cultural, sporting and other general interests of the members.

Actually most of these public organizations in APC unite not separate citizens, but farmers, agroentreprises, particular branch processing enterprises, credit unions, agrarian stock exchanges, and others like that. They still play a barely visible role in a management development of agroindustrial production.

To promote it, attempts to perfect a legislation in relation to activity of public organizations are constantly done lately (and not only in agroproduction but also in other spheres of economy).

Presently for a public discussion the presented variants of bills under the names «About professional and interprofessional associations in an agroproduction complex», «About self-governing organizations», «About public organizations», «About professional associations», «About agrarian chambers in Ukraine», «About general principles of development state private partnerships in Ukraine»

«About state private partnership» and others, plenty of which is another sign of unsettled of problems of development of self-government.

Agroproducers in associations see not only the mean of defence of the general interests, and mainly mean of receiving of benefits from: joint activity on a purveyance, storage, processing, sale of the products, without mediators; adjusting privately state partner relations in creation of favourable terms for the conduct of economic activity facilitation of access to the money of state support.

The organizational forms of self-governing economic associations can be associations, unions, other associations of cluster type, with the following functions:

1) disposing of the mixed (privately state) common property of association;

2) grant of infrastructural, marketings, co-ordinating, informatively consultative and other services the members of association in advancement of agroproduction at the agrarian market;

3) representative offices of interests of members of association are before the state and other operators of agrarian market;
4) public self-government by implementation of the programs of development and activity of funds from support of industries in agroindustrial production.

Activity of self-governing economic associations must be carried out on noncommercial (to unprofitable) basis. Expedience of such approach of self-governing economic associations in an agrarian sphere is confirmed by foreign experience of functioning of such associations in Canada, France, Denmark, Italy, Australia and many other countries, with a withstand socially directed market economy and limited government control (table. 2).

Table 2
Displays of privately state partnerships in activity of co-operatively associative associations of agroproducers

<table>
<thead>
<tr>
<th>Country</th>
<th>Association</th>
<th>Displays of state- of private partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>local food</td>
<td>umbrellalike</td>
</tr>
<tr>
<td>Canada</td>
<td>Cooperative stores after territorial linguistic a sign Provincial associative marketings agencies according to the types of products</td>
<td>A national council on agricultural produce Through provincial associations subsidies and grants are sent, guarantees on credits. On strategic kinds federal corporations which are financed from a federal budget and managed by the representatives of associations are created</td>
</tr>
<tr>
<td>Italy</td>
<td>Cooperative stores after the types of activity Co-operative consortia after the types of products</td>
<td>Four national co-operative associations and Central commission are on co-operation Direct subsidies, tax deductions cooperative stores, their crediting on the special terms</td>
</tr>
<tr>
<td>Denmark</td>
<td>Cooperative stores are on Point-of-sale associations</td>
<td>An association is &quot;agriculture of The role of the state consists in conditioning</td>
</tr>
<tr>
<td>Country</td>
<td>Type of Stores</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Denmark</td>
<td>Cooperative stores</td>
<td>Federation of the Danish cooperative stores, Federation of the Danish farmer unions and Associations of small farmers, which form Agricultural Council</td>
</tr>
<tr>
<td>France</td>
<td>Regional and national of a particular branch federations of cooperative stores</td>
<td>A federation of agricultural cooperative stores of France, and also Agrarian chambers, is on all levels</td>
</tr>
</tbody>
</table>

Reference source (15)

To stimulate agroproducers to team up with the minimum charges of state facilities, it is expedient to apply charts, similar to the chart of «going Dutch», to successfully approved during organization of crediting of enterprises of agroindustrial complex through the mechanism of reduction of prices of credits.

For bringing in of state part of facilities on organization and development of self-governing economic associations it is suggested to use methodological approach of WTO to state support of agroproducers after the programs «green», «yellow» and «dark blue» small boxes.

State financing of activity of agroproducers – after the rules of WTO bringing in of private capital will stimulate the members of self-governing economic associations for financing of activity of associations from the side of their participants as both membership dues and their having a special purpose payments, for realization of investment projects from re-erecting of general market and production service.
infrastructure which will make these associations viable.

Sponsorship which the state must give to an association physical persons – by the public (professional, professional) association of accountants, agriculturists, other specialists, and others like that, must be taken into account through changes to Law of Ukraine «On the association of citizens» and to include a short list of services only for categories general services of «green» small box of WTO:

from an inspection on accordance with the norms of safety, health protection, level of quality; distribution of information, experience, and consultancy services; research works.

Scope positions of activity of self-governing economic associations in an agroproduction sphere are the following:

Priority grant by the state of services after the rules of WTO agroproducers – members of self-governing economic associations.

Agroproducers, incorporated in self-governing economic associations, have a priority (repressing) right to use the transferred services, if they meet requirements in full, certain regulation documents and interbranch, of a particular branch and food agreements.

The financial and infrastructural providing of funds to services through self-governing economic associations is carried out on principles of economic-state partnerships. For this purpose the state as a participant of association gives in his order having a special purpose payments, necessary for providing of regulation activity:

lot lands, on possibility property (buildings, market and port buildings, equipments and inventory, transport vehicles, housing fund, other necessary infrastructural elements), for the grant of services in marketing, advancement of commodities to the market, inspection, distribution of information, and others like that, and also in a general with the state management – money, foreseen state and by local budgets for financing of the services listed above after the programs «green», «yellow» and «dark blue» small boxes. For realization of economic unenterprise joint activity a self-governing economic
association creates structural economic subdivisions (or the associated companies) – agencies from the grant of services the members. Agencies conduct the activity on noncommercial (to unprofitable) basis (after the ratified estimate).

For the grant of services the members of agency use the general infrastructure of association, and at the absence of such – infrastructure and services of enterprise structures on contractual principles, giving advantage to actual and associated members. The grant of services to non members of association an agency is forbidden. Appointing and firing of leaders of agencies is carried out in decision of Council of leaders of association.

On the sign of belonging to the certain type of economic activity self-governing economic associations are divided into:

- agricultural associations of primary producers of agricultural produce after the noted legal forms and other subjects of menage after the noted kinds economic activity are in industries of agroproduction sphere;
- of a particular branch associations of subjects of menage after the noted kind economic activity are in an agroproduction sphere;
- food associations (APA) are after the types of products (services) of agroproduction market;
- Higher agricultural Council (Agrarian chamber) is with its territorial branches.

From operating at national level of 50 public organizations in obedience to the given distributing it is possible to divide into:

1) to the agricultural associations – 4 (Allukrainian union of agricultural enterprises, Association of farmers and landed interests of Ukraine, Ukrainian agrarian confederation, Agrarian chamber of Ukraine);

2) to a particular branch associations about 36 organizations (including the National association of sugarproducers of Ukraine «UkrSugar», National association of producers of meat and meatproducts of «Ukrmeat», production-scientific association

To convert a particular branch public organizations into effective associations, it is needed to bring over to their activity as actual members of primary producers of agricultural produce in an amount not less, than other subjects of menage and also overorient activity of these organizations on the grant of infrastructural, marketings, informatively consultative and other services from advancement of products on that or to other food market, including the production of agricultural goods, its storage, processing and wholesale realization.

Conclusions. Consequently, it is possible to make such conclusions.

1. For forming of competitive agroindustrial production in Ukraine it is expedient to apply the mechanism of cluster integration of independent subjects of menage with forming of self-governing economic associations on principles privately state partnerships and self-government of advancement of agricultural produce and food at the agroproduct market.

2. Self-governing economic associations of enterprises and economies of agroproduct sphere in a counterbalance professional associations those or other specialists – physical persons which are created for defence of interests of their members within the limits of the legal field of Law of Ukraine «About the association of citizens», must reform not on principles of opposition and protecting from officials and agrobusiness, but on principlesof economic-state partnership and democratization of state administration.

3. It is expedient to extend the legal field of the Economic code of Ukraine in direction of development of noncommercial activity of economic associations of associative type through adopting an Act of Ukraine «About activity of self-governing
economic associations in an agroproduct sphere».

References:


2. there.

3. Tutenko N.V. Development of attendant cooperation is an important way of improvement of economic relations of peasant (farmer) economies / N.V. Tutenko // Agrarnyi vysnyk Pruchornomor’ya / Economic sciences. – [Electronic resource]. – Access mode: http://www.stat tionline.org.ua


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SUPPLY PRICE MAKING ACQUIRING UNDER IMPORT CONTRACTS

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Issues of imported stocks purchase value making, in particular, the delivery terms role on the supplies actual value.
Key words: international economic activity, business accounting, inventory values, accounting system services

The current economic reality in the Russian Federation is characterized by the development of the market mechanism, which requires management of business entities for effective and reasonable management decisions. These solutions are preceded by evaluation of marketing, accounting, legal, economic and financial conditions. [3] Formation of information on the factors affecting a particular transaction and communicating it to the management is a laborious process. Therefore, the using of the methods, proposed in this article, in the practice will simplify the process and provide a more balanced management of foreign economic activities of the organization.

Inventories are assets of the organization that have a significant impact on its property status. Regulatory accounting inventory is implemented by the Accounting Regulations 5/01, "Accounting for Inventories" (hereinafter - Accounting Regulations 5/01), however, the specific techniques and ways of accounting of these objects are chosen by the business entity, and this information is set in accounting policy. [2]

The feasibility of using techniques and methods of accounting by the organization determines the accuracy of formed financial and tax reporting. Under conditions of shortage of funds the majority of participants of business and reduce of the liquidity of assets of many business organizations manage and reduce financial risks is particularly important, one these risks is the risk of adverse tax consequences. This risk may be the result of errors associated with the said assets.

The most important issue related to the integration of inventory is the formation of their value, in the acquisition of import contracts;

Reserves include assets:

- used as a raw material, which is the basis of production, performed work;
- held for sale in the ordinary course of business (finished goods and products);
- used for the management needs of the organization.
Inventories are accounting at actual cost. The actual cost of inventories, purchased for a fee, is the sum of actual expenses of the organization to acquire, except VAT and other recoverable taxes.

The legislation of Russian Federation establishes different procedures of forming the initial cost for the various categories of reserves, such as finished goods, materials and products.

Under section 6 of Accounting Regulations 5/01, the actual acquisition cost of inventories, in particular, are:

- amounts payable under the contract to the supplier (seller);
- amounts paid to organizations for information and advisory services relating to the acquisition of inventory;
- customs duties;
- recoverable taxes paid in connection with the acquisition of units of inventory;
- remuneration paid to the intermediary organization through which the acquired inventories;
- the cost of procurement and delivery of inventory to the point of use, including the cost of insurance;
- costs to bring inventory to the state in which they are suitable for the intended purpose. These costs include the costs of the organization for part-sorting, packing and improve the technical data of the inventory, not related to the production of goods, works and services;
- any other costs directly attributable to the acquisition of inventory.

Based on this, the above list is open and determined by the economic entity recognized organization costs of acquiring inventory. Organization must necessarily include those costs in the price of purchased inventory.

The procedure for forming material cost for tax purposes to be included in the material expenses of the organization is determined paragraph 2 of Art. 254 of the Tax Code and the order established for accounting purposes.
However, paragraph 13 of the Accounting Regulations 5/01 establishes the features of formation of the purchase price of stocks that are bought as commodities, i.e. for resale in the ordinary course of business of the organization. Organizations engaged in trading activities, are eligible to include costs for procurement and delivery of goods to central storage (bases) made prior to their transfer to the sale, in selling expenses.

When calculating the corporate income tax the taxpayer has the right to (Article 320 of the Tax Code of Russian Federation):

- form purchase price plus costs associated with the acquisition of goods;
- include the cost of shipping these products, storage fees and other expenses of the month associated with the acquisition, the costs of sale, if they are not included in the cost of goods.

Thus, the taxpaying organization has the right to choose which should be established in the accounting policy for tax purposes. List of expenses, related to the acquisition, should be specified in this document.

For example, the costs of transportation, insurance, payment of intermediary organizations, customs duties and fees may be included in this list.

It should be noted that the costs of shipping (shipping costs) are:

- included in full in the costs for the period for accounting purposes;
- included in direct costs, and must be written off only to the extent of goods sold for tax purposes.

Consequently, the accounting of organization should reflect the deferred tax assets.

Other costs (excluding transport costs), related to the acquisition of goods, for tax purposes are included in the indirect costs.

Distinctive features of the formation of inventories’ costs, acquired for import contracts, are:

- term of the contract value and the settlement of accounts with the supplier in foreign currency;
conjugacy of moving goods from the seller to the buyer with the high costs incurred, as a rule, both partners involved in foreign trade;

- the large number of cost centers.

Each of these features in varying degrees affects the order of reflecting of the results of these activities in the accounting and possible tax risks.

Russian legislation does not define the foreign trade and foreign trade transactions, although these concepts are found in the texts of many regulations. According to the Vienna Convention on Contracts for the International Sale of Goods, 1980 (hereinafter - the Vienna Convention) under such agreements is an agreement reached between the parties whose places of business are in different countries.

The legal form of international commercial transaction is a contract based on the buy-sell act. Contract legally establishes the rights, duties and responsibilities of the parties. It is the result of search and studying the optimal solutions to meet directly opposing interests of partners. Timeliness and completeness of the commitments, eliminating the risk of loss of funds in foreign currency, minimization of the risk of penalties for non-compliance with contract terms, the efficiency of the transaction depend on correct execution of the contract. [1]

The main differences of the foreign trade contract from other contracts concluded that:

- one of the participants of foreign economic contract is not a resident of Russian Federation;
- there is opportunity to apply the rules of private international law in the negotiation and execution of the contract;
- there is opportunity to apply the rules of foreign countries’ law in the negotiation and execution of the contract.

As a foreign trade contract refers to the law of more than one state, there is not only complicated regulatory framework of its legal regulation, but also the practical application.
The main factors that influence the formation of the initial value of the stock are:

- the contractual time of transfer of ownership;
- basic conditions of supply stocks;
- conditions to estimate the seller reserves.

An important role is played by the time of the transfer of ownership of the imported product, as on all following depends directly on it:

- civil consequences;
- reliability of accounting data and related tax effects.

Time of transfer of ownership can be directly defined in the contract. For example, the transfer of ownership takes place at the time of transfer of the goods from the seller to the carrier nominated by the buyer, or at the point of transfer to the buyer the risk of accidental loss of the goods, etc.

It may also be a situation in which the time of transfer of ownership in the contract is not defined. In this case, following sequence of actions is used.

1. Specified time determined in accordance with the laws of the state which law is applied to the parties under the contract. Agreement of the parties to choose the applicable law must be express or arising from the terms of the contract or set of circumstances. For example, under the legislation of Russian Federation, the right to own property, which already has an owner, may be acquired by another person under a buy-sell act (Article 218 of the Civil Code). According to Article 223 of the Civil Code, the acquirer accrues the right of ownership of things under the contract arising from the time of transfer, unless otherwise provided by law or contract.

Sometimes the contract specifies that the provisions of the Vienna Convention may be applied to it. Be aware that this document governs only the international buy-sell act and the rights and obligations of the seller and the buyer arising from such a contract. But the Vienna Convention does not contain provisions establishing the time (date), when the right to own property passes from the seller to the buyer.
2. If an agreement on the applicable law is absent, the law of the country with which it is most closely connected, applies to the contract. That right is considered to be, if otherwise isn’t required by law, conditions of an existing contract or a combination of case law of the country, where the location or principal place of business of the parties, which provides a performance of a crucial importance for the maintenance contract. In particular, in the buy-sell act seller is recognized to be this party (Article 1211 Civil Code). Consequently, when determining the applicable law in the case, you should be guided by the law of the country of the seller.

In accordance with pp. 4, 5 of the Accounting Regulations, "Accounting for Assets and liabilities denominated in foreign currencies" the Accounting Regulations 3/2006 (hereinafter - the Accounting Regulations 3/2006) the cost of assets and liabilities denominated in foreign currencies for accounting and financial statements should be restated into rubles at the rate of the Bank of Russia for the foreign currency against the ruble.

For accounting purposes, the specified conversion into rubles at the exchange rate of the Bank of Russia on the date of the transaction in a foreign currency. According to the Annex of the Accounting Regulations 3/2006 the date of the transaction to import inventory is the date of the transfer of ownership to the importer for imported products.

The obligation to bear the costs the organization is determined the terms of the contract. Mentioned conditions are agreed between the parties and documented articles reflecting their mutual rights and obligations. Parties of the contract choose independently particular language articles, guided by the situation, trade practices and needs of the parties. Conditions of delivery are also an important element of the contract and determine:

- place of departure and destination and the date of delivery of the products, that is, the actual transfer by the seller to the buyer or his representative and, therefore, execution or non-execution of obligations under the terms of delivery. For example, transport organization can be a representative;
• distribution of the obligations to pay customs duties when exported and imported products between the seller and the buyer;
• distribution of responsibility for the organization and payment of transportation costs for delivery of goods, including the cost of loading and unloading of cargo insurance between the seller and the buyer;
• time of transfer from the seller to the buyer's risk of damage, loss or accidental loss of cargo.

The main international instrument that is widely used in modern commercial practice, which provides interpretation of the basic conditions of supply is Incoterms - Edition of the International Chamber of Commerce (ICC), the latest edition of which was published in 2010. However, each new edition of the rules doesn’t cancel the previous one, but it is necessary to indicate in the contract, which of the versions was used by partners. Rules "Incoterms 2010" give the definition of the most common terms used in the international buy-sell acts and delivery of products.

These rules determine:
- the distribution of the costs of transportation;
- time of transferring risk of accidental loss of the goods from the seller to the buyer,
- the distribution of duties, customs clearance and payment of customs duties,
- the duty of insurance.

In order to use "Incoterms 2010", you must take into account and know something about application of these terms to the individual modes of transport.

<table>
<thead>
<tr>
<th>Mode of transport</th>
<th>Terms of delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any mode of transport, including container and mixed (multimodal) transport</td>
<td>EXW, FCA, CPT, CIP</td>
</tr>
</tbody>
</table>

Table 1

Application of the "Incoterms-2010" in relation to the types of transport
Consider a list of costs for the most common customer delivery terms (Table 2).

**Table 2**

<table>
<thead>
<tr>
<th>Terms of delivery (base) to Incoterms 2010</th>
<th>Time of transferring of risk of accidental loss of the goods</th>
<th>The costs of the importer of the buyer, which are caused by delivery basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXW Ex Works (... name of the place)</td>
<td>Provision of goods to the buyer at the seller's (works, factory, warehouse, etc.)</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FCA Free Carrier (... name of the place)</td>
<td>Transfer to the buyer by the seller in the place which the buyer has chosen</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Formation of the purchase price of imported products and services is the feature of import operations. The purchase price of the products, as an accounting measure, is very important, since mark-up is calculated based on it, and, therefore, the price of the further implementation of the imported products depends on it too. In contrast to domestic products, purchase price of which is the amount paid to suppliers, in the purchase price of the imported products, except contract value, includes all overhead costs paid by the buyer.
The purchase price of imported products is formed as a complex cost of many items, and it should be calculated based on individual shipment, even before they are reflected in the accounting records of their posting.

To reflect the actual cost of capitalized goods trade organization account 41 "Products" is used. [1].

However, the information for the formation of the actual cost of imported products goes to the accounting not simultaneously, but with a time lag. For example, there can take a fairly long period of time between the date of the transfer of ownership of imported goods and the date of actual posting to the warehouse of the importer company. In this case, these dates may be in different reporting periods.

In addition, it seems inappropriate after the transfer of ownership to the importer reflected in account 41 values of the goods, which are in transit or in temporary storage of customs products. This adversely affects the reliability of accounting.

In our opinion, more appropriate for the formation of the actual cost of imported goods should be the use of the account 15 "Preparation and purchase materials," to which the organization importing goods opens sub "Formation of the actual cost of imported goods." Account 15 balances at year end is included in the calculation of the average annual value of the property for tax assets at the end of the reporting period, thus automatically included in the tax base and thus excluded penalties by the tax inspectorate.

Upon receipt of accounting documents of the business transaction affecting the formation of the actual cost imported products, the data recorded on the debit account 15 "Preparation and purchase materials," sub-account 1 "Formation of the actual cost imported products" in correspondence with the credit of the relevant account [1].

Figure 1 shows the connection between the accounts of the reflection of the execution of operations on the import contract.
As seen in Figure 1, in the calculation of import duties, customs fees, an accounting entry (1) is made:

Debit account 15 "Preparation and purchase materials," sub "Formation of the actual cost of imported goods"

Credit account 76 "Settlements with various debtors and creditors" - the amount charged customs duties.

In enumerating the import duties and other customs payments in currencies the following accounting entry is made:

Debit account 76 "Settlements with various debtors and creditors"

Credit account 51 "Current accounts" (2) or account 52 "Currency Account" (3).
Contract value of the imported goods on the date of transfer of ownership to the importer reflected entry (4):

Debit account 15 "Preparation and purchase materials," sub 1 "Formation of the actual cost of imported products"

Credit account 76 "Settlements with various debtors and creditors" - the amount charged customs duties.

In enumerating the import duties and other customs payments in currencies is entry:

Debit account 76 "Settlements with various debtors and creditors"
Credit Account 51 "Current accounts" (2) or account 52 "Currency accounts" (3).

Contract value of the imported products on the date of transfer of ownership to the importer reflected entry (4):

Debit account 15 "Preparation and purchase materials," sub 1 "Formation of the actual cost of imported goods"

Credit Account 60 "Payments to suppliers and contractors."

Charge of the value added tax payable in customs reflected entry:

Debit account 19 "VAT on purchased goods"
Credit Account 68 "Payments to the budget."

Enumeration of VAT is made the remark:

Debit account 68 "Settlements with budget"
Credit Account 51 "Current Account".

After completion of the formation of actual cost of the party of import products, posting it on a warehouse reflected entry (5):

Debit account 41 "Products"
Credit account 15 "Preparation and purchase materials", sub 1 "Formation of the actual cost of imported products".

Payments to suppliers reflected entry:

Debit account 60 "Settlements with suppliers and contractors"
Credit Account 52 "Currency Account" - using the methods of payment of collection (6).

Debit account 60 "Settlements with suppliers and contractors"
Credit account 55 "Other accounts in banks' sub 1" Letters "
- Th use of letters of credit (7)
Offset of the value added tax paid at the customs entry is made:
Debit account 68 "Settlements with budget"
Credit account 19 "VAT on purchased values".

The actual cost of inventory in which they are accepted for accounting purposes, is not subject to change, except as required by law of Russian Federation.

Inventories that are obsolete, wholly or partially lost their original quality or market value, the cost of sales of which have declined, are reflected in the balance sheet at the end of the year, except of provision for impairment of property. Provision for impairment of property formed by the financial results of the organization on the value of the difference between the current market value and the actual cost of inventory, if the latter is above the current market value. This requirement regulations are usually not performed organizations. The reasons for departing from the established requirements are as follows:

- the complexity of determining the fair market value of inventories, lack of established legal practice of this form of value;
- convergence of accounting organization with tax accounting.

This, in turn, can lead to distortion of accounting and audit clause when issuing the audit report on the results of the audit. The problem is particularly relevant to organizations with significant balances of inventories, as well as in cases where there is a low turnover of stocks.

Thus, organizations, that do not meet the requirements of the accounting legislation, form a false financial information to reflect the value of the stocks in the expression statements.
Legislation of the Russian Federation doesn’t provide on taxes and fees decrease in value of acquired inventory or create a provision for impairment of their value.

Therefore, an impairment provision in the accounting and recognition of this provision in other expenses in the accounting organization should reflect permanent tax differences.

It is also necessary to note that an organization that does not monitor the current market value of inventory and has no provision for impairment of property may have serious problems in the transformation of financial statements in accordance with IFRS.

The concept of "reserves" to determine the principles of training and the preparation of financial statements and the provisions of IFRS (IAS) 2.

Reserves are the resources that an organization controls and intends to apply for a profit in the following ways:

- sale in the ordinary course of (goods or finished products);
- the actual holiday in the production process for subsequent sale in the ordinary course of business (work in progress);
- planned distribution in the form of materials or supplies to be used in the production process or in the rendering of services.

During subsequent evaluation of inventories they are measured at the lower of cost and net realizable value (the possible selling price less costs to completion and implementation.)

Reserves are usually written down to possible realizable value on an article—which actually means the recognition of a loss before the actual formation. However, in some circumstances it may be convenient to group similar or related to each other article. This applies, for example, items of inventory relating to the same range of products, with the same purpose or end-use of products manufactured and sold in the same geographic area as well as the articles that cannot be practicably evaluated separately from other items this range.
It is important to remember that according to section 6 of the Accounting Regulations "Change estimates" Accounting Regulations 21/2008 in the notes to the financial statements for the current year should be disclosed about the creation of a reserve.

References


2. Bobryshev AN, Kostyukova EI, Elchaninova OV Improvement of methodological approaches to the analysis of financial condition of the agricultural organizations // Economics of agricultural and processing enterprises. 2009. № 11 pp 65-70;


J21317-048

UDC 365(470.317)

Tomilova A.S., Trofimova O.I.

FEATURES OF THE PROGRAM "HOUSING FOR YOUNG FAMILIES"

IN CFD REGIONS

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17 Dzerzhinskogo Ul., Kostroma, 156005
The paper deals with the development and implementation of the program "Housing for young families" on the basis of several regions of the Central Federal District (CFD).

Keywords: target program, mortgage loan, subsidy, region.

Housing security and the amount of housing construction are the most important characteristics of people’s life quality. There are currently three main parts of housing policy: waiting lists for housing improvement, the provision of housing in accordance with federal and regional programs and mortgage credit lending.

It should be noted that there were about 3mln people in the waiting list in 2012. The number of them tend to decrease only due to the fact that they try to solve their problem on their own. Mortgage credit lending can be helpful but the down payment is on average 30% of the total housing cost and the majority can’t pay. Special attention should be paid to federal and regional programs which have got widespread and which support people in solving their housing problems. They are special programs to support orphans and children left without parental care, programs for young families, young scientists, men of arms, ones for people having accommodation dangerous for life. Almost all of them are included in the federal program “Housing” and are its subprograms [1].

As a rule, young families can’t enter the housing market without budget support. Even having a high income level, they can’t pay the down payment. The majority of young people don’t have their own accommodation which they could use as a guarantee of the down payment. But they have good chances to earn more and more money as they become more and more skillful and qualified. And if the government gives them money for the down payment they will be stimulated to improve their career. Thus the support of young families in solving their housing problem can be the basis for stable living conditions for this category of the population, the most active one, and it can improve the demographic situation in the country.
The subprogram “Housing for Young Families for 2011-2015” started in 2011 as part of the “Housing” program. Table 1 shows the first results of it.

### Table 1

**Implementation of the subprogram “Housing for Young Families” in 2011 on the federal level**

<table>
<thead>
<tr>
<th></th>
<th>Plan</th>
<th>Fact</th>
<th>Implementation, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of families provided with accommodation</td>
<td>33657</td>
<td>11780</td>
<td>35</td>
</tr>
<tr>
<td>Funding in, mln. rbl.</td>
<td>52855,56</td>
<td>25860,85</td>
<td>48,9</td>
</tr>
<tr>
<td>Federal budget, mln. rbl.</td>
<td>4757</td>
<td>4757</td>
<td>100</td>
</tr>
<tr>
<td>Regional and local budgets, mln. rbl.</td>
<td>11099,67</td>
<td>10155,56</td>
<td>91,5</td>
</tr>
<tr>
<td>Extra-budgetary sources, mln. rbl.</td>
<td>36998,89</td>
<td>10948,29</td>
<td>29,6</td>
</tr>
</tbody>
</table>

Table 1 shows that actually 112,780 families got accommodation in 2011 with the help of the program, that is only 35% of the plan. The subprogram is funded from the federal, regional, local budgets and from extra-budgetary sources as well. The total funding in 2011 amounted to 25,860 mln rbl, which is less than half of the plan. It should be noted that the cash costs of the contracting authority of the federal budget for the program amounted to 4,757.0 mln rbl - 100% of the annual target.
In general, the first results of the subprogram on the regional level are quite similar to the results in the country. Thus since 2011 Kostroma region has been implementing a new long-term municipal target program "Housing for young families for 2011 -2015" in the framework of the federal program of the same name. The first results of the work are presented in Table 2.

Table 2

Implementation of the subprogram “Housing for Young Families” in 2011 in Kostroma region

<table>
<thead>
<tr>
<th></th>
<th>Plan</th>
<th>Fact</th>
<th>Implementation, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of families provided with accommodation</td>
<td>105000</td>
<td>76000</td>
<td>72,4</td>
</tr>
<tr>
<td>Funding in, mln. rbl.</td>
<td>152,9</td>
<td>65,901</td>
<td>43</td>
</tr>
<tr>
<td>Federal budget, mln. rbl.</td>
<td>23,5</td>
<td>15,901</td>
<td>66,7</td>
</tr>
<tr>
<td>Regional and local budgets, mln. rbl.</td>
<td>30,001</td>
<td>21,4</td>
<td>71,3</td>
</tr>
<tr>
<td>Extra-budgetary sources, mln. rbl.</td>
<td>99,4</td>
<td>28,6</td>
<td>28,7</td>
</tr>
</tbody>
</table>

Table 2 shows that in Kostroma region 76 young families improved their housing conditions in 2011 - 72.4% of the plan. After recalculation of the federal budget the
region got 15.9 mln rbl to fund the subprogram, instead of the planned 23.5 mln. Funding from the other sources has been insufficient.

Thus the first results of the program cannot be considered as positive, since only 35% of households have been provided with housing. On the one hand, the reason is in certain failures in funding (mainly local and regional ones) and on the other hand, the social factor plays a significant role because people do not trust such programs.

As noted above, participation in the program implies a subsidy, which is in most cases 35% of the whole cost of housing, and the rest of the money the family has to pay on their own. Usually people take mortgage loans. Repayment of a mortgage loan is done in equal parts - annuities, but the family has to have a certain level of income.

The subsidy in the regions depends on the average cost per square meter. Thus the calculation of the subsidy for the family with two children is as follows (1):

\[
\text{Subsidy} = K \times S \times P, \quad (1)
\]

K - the share of government social payment, which is equal to 0.35 of the average cost of housing;

S – the area of the apartment, which is equal to 72 sqm.;

P - price (value) of 1 sqm.

Table 3 shows the amount of the subsidy in some regions

<table>
<thead>
<tr>
<th>Subsidy in CFD regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Subsidy in th. rbl.</strong></td>
</tr>
<tr>
<td>Yaroslavl region</td>
</tr>
<tr>
<td>Kostroma region</td>
</tr>
</tbody>
</table>
Table 3 shows that among the regions in consideration the subsidy in Ivanovo region is the lowest and one in Yaroslavl region is the highest. Obviously, it is due to the difference in cost per square meter and therefore the total cost of housing is also different.

In most cases, the subsidy is used to pay the down payment of the mortgage, and the rest is paid on the basis of annuities (equal payments). Their size depends on the loan terms and, of course, on the loan amount. Data on the amount of annuity is shown in Table 4.

Table 4

Annuity payment in CFD regions

<table>
<thead>
<tr>
<th></th>
<th>Cost of the apartment in rbl</th>
<th>Monthly payment in rbl.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Credit period</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 years</td>
</tr>
<tr>
<td>Yaroslavl region</td>
<td>2167,2</td>
<td>20210</td>
</tr>
<tr>
<td>Kostroma region</td>
<td>1936,8</td>
<td>18061</td>
</tr>
<tr>
<td>Ivanovo region</td>
<td>1796,4</td>
<td>16752</td>
</tr>
<tr>
<td>Vladimir region</td>
<td>2023,2</td>
<td>18857</td>
</tr>
</tbody>
</table>

The greater the amount of the annuity payment is, the shorter the loan period is. The credit period of 15 years has appeared the most acceptable.
The program is largely dependent on people’s ability to participate in it, which is primarily related to the family income and salary and wages. Data on the average salary and wages in the regions is shown in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Average salary and wages in CFD regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>RF</td>
</tr>
<tr>
<td>Vladimir region</td>
</tr>
<tr>
<td>Kostroma region</td>
</tr>
<tr>
<td>Ivanovo region</td>
</tr>
<tr>
<td>Yaroslavl region</td>
</tr>
</tbody>
</table>

Table 5 shows that a family with the average income is unable to use the services of regional mortgage lending if we take into account the amount of annuity payment.

Thus it can be noted that usually people who need to improve their living conditions have low income. The analysis of the average salary and wages and the amount of the annuity payment allows us to conclude that most of the families in need of housing will not be able to use the system of mortgage lending because their income is not high enough. All these should be considered when developing a general strategy for socio-economic development and mortgage programs in particular regions of the country.

References:

1. Garipova Z.L. The state's role in improving the living standards of the population through the provision of housing affordability / Garipova Z.L - Advanced Study of Social Problems (electronic scientific journal), 2012, № 1 (09)
The article examines the nature and components of national economic security in the conditions of globalization. Peculiarities of national economic security are discovered, reasonable factors of influence are grounded, the cause-and-effect relations...
and opportunities to minimize the risks due to the effectiveness of public administration are substantiated.

**Key words:** globalization, national economy, economic security.

**Statement of the problem.** In our world the active processes of globalization take place, the necessity to organize the opposition for multiple threats at the global level to minimize the negative impact of financial, economic, environmental and other risks is growing. That is why the most important task of management at the national level is to guarantee and provide an appropriate national economic security.

In conditions of globalization the formation of economic security is closely connected to the prospects of national economy development. Theoretical base of peculiarities and essence of economic security are the main subjects of discussions, and have an influence on the subjects of management on every level.

The formation of possibilities to make the efficient economic security is the important part of society development.

**The analyzing of latest researches.** The significant contribution to the theoretical study of the problem of economic security has made such scientists and practitioners as L. Abalkin, K. Astapov, E. Veduta, S. Glazyev, A. Gorodetsky,

A. Illarionov, B. Mikhailov, E. Oleynikov, K. Samsonov, S. Svinarenko,

V. Senchahov, V. Tambovtsev and Ukrainian scientists I. Binko, V. Geets,

B. Kravchenko, V. Martynyuk, V. Muntiyan, V. Shlemko etc. Some theoretical and practical aspects of economic security were investigated by A. Belov, V. Boyko,

A. Vlasyuk, V. Horbulin, T. Kovalchuk, Y. Marchuk, L. Minin, S. Mocherny,

A. Podolak, I. Shumylo, etc.

The issue of globalization, its nature and consequences were examined such Ukrainian and foreign scientists as: A. Bekoyev, O. Belous, D. Lukyanenko,


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Taking into account the numerous publications and discussion aspects of essence and peculiarities of economic security we identified the need for further research.

The aims of the research are grounding of essence and parts of national security in the conditions of globalization, the substantiation of the cause-and-effect relations and opportunities to minimize the risks and negative influences of external factors.

The results of the research. Recent years the tendency towards deeper manifestations of globalization has seen. The dependence of national economy on external factors has increased; the instability of world financial market, the limitation and cost of energy resources have growing. The level of national economy accessibility is also very contradictory, but the role of international organizations in regulation of economic process is growing.

The economic security and globalization of the world economy are very complicated, multidimensional and ambiguous categories. That is why there are some differences in the determination of their essence.

Our study of different literature allows justifying that the economic security is a nationwide complex of measures aimed at continuous and stable development of the national economy, which includes a mechanism of internal and external threats resistance. [1]

Economic security is connected with the such economical situation, which can protect its vital interests. [3]

E. Oleynikov considers that the economic security is the position of the inefficient usage of economic resources to prevent threats and ensure stable operation of the economic system in the present and the future. [6].

With this the globalization of the world economy is the process of sustainable industrial and economic, cultural and political connections between the national economies of individual countries, as a result of which they become an integral part of the world economy. This leads to the dominance of international norms and standards, which are possible to be seen in more and more countries.
M. Shumilov says that in modern conditions of economic interdependency strengthening the weighty pattern of globalization can be noticed. It means that no country without involvement into the global economy is able to achieve major economic growth and significant welfare of its population.

Therefore, to determine the national interests it is not enough to focus exclusively on domestic aims. That is why the most important priority is the inclusion of the country in the process of world economic development. [4].

W. Beck defines that in practical terms the problematic field of globalization lies in global economy by its nature and scope. It can become the motivating factor for the removal of basic economic and political principles of national states, because the main direction of globalization is the elimination of national and state constraints. [5].

Despite the lack of a unified approach to the definition, we found that economic security in conditions of globalization must provide such position of the national economy, in which the community needs are carried out effectively; technical and economic independence can be achieved; protection of economic interests in domestic and foreign markets can be sold.

We conducted a study of basic factors which have an influence on the formation of economic security using a graphical method (Figure 1)

![The factors of influence on national economic security](image-url)

- **External factors of influence**
  - the level of country’s economic development
  - the development of national structure of international economic cooperation
  - the participation of the country in the international economic integration

- **Internal factors of influence**
  - financial resources
  - natural resources potential
  - legislative basis
  - factors which characterize the conditions of production and sales of products and services
  - climate and natural
Fig.1. The classification of factors of influence on the formation of national economic security*

* Presented by the author using [7].

The connection and interaction of external and internal factors ensures minimization of risks and prospects of the national economy at all levels and in all fields. Changes in the character or in the rates of development of one or more factors can change the process of other factors’ development, the system of national economic security and the possibilities to its adoption to the internal conditions.

Ensuring of national interests and economic security of globalization is one of the most important functions of the state, which has a decisive influence on the development of an independent country and some subjects of the market.

Among main directions of governmental policy as for the national security in economic sphere, the most important is to provide conditions for growing and strengthening of national economy competitiveness, progressive and structural institutional changes, improving of investment climate, activation of efficient investment processes, stimulating of technological industries’ development, improving of competition policy, creation of an effective mechanism of governmental regulation of
natural monopolies, overcoming the "shadow" economy through the tax reform. The factors of influence are providing of balanced budget development; formation of active energetic and food policy, defending of home markets from the low-quality import; development of an export potential of technological products of high quality; deepening of integration into the European and world economic system and active participation in international economic and financial organizations.

So, the increasing of economic security level is connected with possibility to identify the threats and to prevent and overcome them.

**Conclusions.** Minimizing of external risks through the effective management is an important component in the development prospective. Risk management involves forecasting the possibility of occurrence of potentially risky events, and gives some time to take measures to prevent the consequences which may have place and can not be localized.

That is why the economic security is characterized by possibility for national economy of the country and its regions to provide the sustainable and stable development and defending with the help of economic methods,

The main component of national security is national economic security, the role of which is growing in the conditions of globalization and integration of the world economy.

So, in order to create an effective economic security, it is necessary to take into account the peculiarities of the processes system, mechanisms and consequences of expression in the context of globalization, as well as in the development cycle of any economic system in order to minimize the risks and prospects for sustainable development.

**References:**
In this report we describe the questions of linkages between the size of the shadow economy and socio-economic conditions of the people.

Key words: shadow economy, informal economy, labor market, unemployment rate
The shadow sector of the economy is a significant and obvious phenomenon in any part of the world, yet especially in the developing and transition economies. Shadow economy if thriving may cause serious troubles to politicians because the official ratings, such as unemployment, the economically active population, the income, and consumption are not stable, and even may be erroneous. The management based on false ratings is not efficient [5].

As can be seen from the research carried out by F. Schneider shadow economy accounts for an average of 41% of the GDP in the developing countries, 38% - in the transition economies, and 17% - in the countries belonging to the Organization for Economic Co-operation and Development (OECD) [6]. According to the data from the World Bank, the International Consulting Group of A. T. Kearney this figure in Russia is 44% of the GDP.

The major reasons for the growth of shadow economy include: the rise of tax burden and social security contributions; increased regulations in the official economy especially related to labor markets; forced reduction of the working week; earlier retirement; unemployment; as well as decreasing positive attitude and loyalty towards public institutions, and readiness to pay taxes.

The existence and growth of shadow economy generates (raises) a number of problems. First of all, this may result in distorted statistics concerning the estimation of individuals’ and households’ socio-economic conditions (e.g. unemployment rate, level of poverty, GDP). Therefore, the statistics on the number of the unemployed may conceal the unknown share of those whom, actually are employed at the black market and have some income. Such deviations in statistics may lead to improper diagnoses and finally – to breach in the political system of the country.

Is there a connection between the data estimating the scale of shadow economy and the official unemployment level? These two developments “may be linked in the sense that some of those reported as unemployed are actually busy working underground” [7].
For many years the EU-countries with a high level of unemployment have demonstrated growth in the shadow economy level. At the same time part of the products manufactured in the shadow sector is created by those who are on the officially unemployed list and who are being paid their unemployment benefits. This poses a question related to the accuracy of the unemployment statistics and its relation to shadow economy, the official statistics of the national accounts, and the unemployment figures. Mention to be made that nowadays the EU-countries are using the figures on the employment to have a more complete picture when checking the national accounts and evaluating the GNP (Decision 94/168/E.U., of 22.02.1994) [2].

The research by F. Schneider and D. Enste [5] shows that the driving forces behind shadow economy are the intensity of regulations and labor costs at the official labor market, which also may be viewed as the reasons leading to the growth of shadow economy. In this context there are two major aspects that are often subject to discussion – reduced working hours per week and the unemployment level. It is unemployment that is largely caused by high combined costs of labor. The Governments and labor unions in Germany and France tried to reduce unemployment through limited working hours per week. This was supposed to create more workplaces. However people who could not work full day officially spent their time working in the shadow sector. Working for part-time and early retirement also offer possibilities for working in the economy that is neither taxed nor regulated. In their work the authors offer a look at the dependence between the working hours spent in the legal and the shadow economy, and they conclude that redistribution of work may prove efficient only in case the employee is offered flexible working hours following his/her preferences, and this reduces the distortion of individual solutions.

The findings in this research may be completed with the empirical results from Thomas Lemieux, Bernard Fortin, and Pierre Fréchette (1994). Their results show that “participation rates and hours worked in the underground sector also tend to be inversely related to the number of hours worked in the regular sector" [4].
Considering discrepancy between the official and the real quantity of the economically able-bodied population it is necessary to pay attention that reduction of this indicator in the official economy could be taken as the indicator of an increase in activity in shadow economy provided that the total of the efficient population does not change. However here we should take into account the fact that many people work both in the shadow and in the official economies at the same time.

The current demographic situation in the Russian Federation can be described with a maintained tendency towards a decrease in the nation’s population, its economically active part and the employment ratio despite the obvious migration flows.

An analysis of the number of the permanent population shows an average 2,3 mln decrease in the country within the period. The economically active population needs special attention if taken against the population on the whole as this particular part is directly involved into developing the social product. The major ratio in the total of the labor resources belongs to the working-age population. In 2011 this group suffered a 1,2% (1,1 mln) decrease if compared to 2003 [1].

As is seen from the data above the share of the population in its working-age is constantly growing, and this index grew 8,5% within the period in question, reaching 69,8%. The change in this index is proportionate to the change in the level of the economically active working-age population (Figure 1).
The level of the economically active population, in turn, grew by 3,1% if compared to 2003 (61,1%) and reached 63,8 % in 2011 (Figure 2).

The major impact on the number of the economically active population (calculated based on the number of those employed in the economy added to the unemployed number) was due to a change in the number of those employed in the economy. The
number of the economically active population in Russia (2011) was 75,7 mln people including those employed in the economy – 70,7 mln, and the unemployed – 5,0 mln.

Most of the employed in 2011 году (65,6 mln) worked as hired employees (92,8% of all the employed); this figure grew 1,0% compared to 2003.

The share of the Russian people involved in the economy and not hired went down from 8,2 % in 2003 to 7,2% in 2011 making down to up 5,1 mln people.

Among those not hired most people are self-employed (3,9 mln) and only 0,8 mln are employers, which makes 1,2 % of the total employed population in 2011.

Looking at the change dynamics in the informal employment in Russia it is necessary to have a look at the labor market as a whole. The statistics says that the number of the population in 2003-2011 was decreasing.

However, the population’s involvement in the economic activity was growing, people becoming more active and motivated, which is a positive sign at the labor market. The number of the employed (permanently) in companies officially registered as legal entities (according to the results of the population survey) has gone since 2008 by 0,8 mln people (1,4%).

An analysis of the employed population’s structure by the types of employment and its dynamics shows that the employment growth was due to the informal sector of the economy where the number of people employed grew by 1,4 mln people (13,7%) within 2010-2011.

Looking at the data from the Russian Statistics Agency (Rosstat) we can see the following trend in the informal sector: the total number of the informally employed within 2003-2011 was growing while it reached its peak in 2008 – 13, 9 mln people (Figure 3).

The sharp increase can be explained by the global financial crisis resulting in staff reduction in all the economic areas in the country. This made people look for some extra jobs. Employment in the informal sector ensured economic growth during the crisis compensating for the loss of workplaces at enterprises in the official sector of the
economy. After 2009 even a slight employment reduction came along with reduced intensity in labor use and its efficiency. The reduction of those inofficially involved in the economy is due to the reduced number of workplaces in the country.

Figure 3 – The dynamics of those inofficially employed 2003-2011

The growth of employment in the informal sector can have both negative and positive effects on the economy in general. On the one hand there is reduced efficiency in employing the labor force which results in slower economic development of the official sector; on the other hand this entails increased consumption and allows resolving social tension issues.

Gathering data on the underground economic activity is a tough task because none of those involved into such activities wants to be identified. Getting accurate statistics on the distribution of the national resources in the shadow economy is very important in terms of making efficient decisions in the economic policy of the country. Therefore it is very important to know who is involved in the shadow economy as well as to know about the frequency and the scale of such activities. Most countries try to control such activities through various punitive measures or training and not by reforming the
taxation and social security systems, which could improve the dynamics in the official economy.

References:


Antonova N.A., Kostyukova I.N., Lugovskoy D.V.

TRADE STOCKS: RECOGNITION AND MEASUREMENT

Kuban state university,
Russia, Krasnodar, Stavropol'skaya st., 149

The subject of the article is an accounting of inventories, particularly trade stocks. It is a most important accounting object in trade sector. Identification and valuation of inventories is necessary for creating accounting information, useful in economic decisions making.

Keywords: inventories, trade stocks, goods, impairment of assets.

Different transactions, which are connected with process of purchase and sale of goods, are the basis of the trade as an industry, and these transactions play the important role in the economic lives of most companies. Apart from those specialized on trade companies (where trading is the core business) there are a lot of diversified companies, which also sale their complete product and goods. So, the economic nature of these organizations seems to be the same, and accounting methods are very similar.

These circumstances determine the place and the role for recording trading transactions involving bookkeeping accounts.

It is known that trading is kind of business, where goods are purchased, transferred, saved and sold. The federal law “About basics of state regulation of trading in Russia Federation” defines trading as “a kind of entrepreneurial activity, which is connected with purchase and sale of goods” [1]. There is a wider definition of trading in the State standard of Russia Federation P501303-99 “Trade. Terms and definitions”: “trading is a kind of entrepreneurial activity, which is connected with purchase and sale of goods and providing clients with services” [7].

Goods are recognised as the main object of trade accounting. There is a definition of a good in the State standard of Russia Federation P501303-99 “Trade. Terms and
definitions”: it is an item that is not limited in circulation of commodities, it is freely alienable and it is transferred from one person to another under the contract of sale.

For accounting purposes according to Russian accounting standard PBU 5/01 “Accounting of inventories” goods are considered to be a part of inventories, purchased or received from different legal or private persons and held for resale [3].

According to IAS 2 “Inventories” p. 8 goods are defined as a part of inventories, purchased and held for resale including, for example, merchandise purchased by a retailer and held for resale, or land and other property held for resale [2].

There is a synonym for the word “goods” in Russian practice. This word is “merchandise inventory” and it is used as a collective name. It means a complex of goods in cash or in kind, which are in trade bodies, trading warehouses and in transit at specified date.

All inventories can be divided into classes of goods; classes can be divided into groups, groups can be divided into types and types can be divided into varieties of goods.

A Class of goods is the aggregate of products with equal function. For example, class of goods may be garments, knitted goods, fancy goods and so on.

A Group of goods may include the aggregate of a certain class goods with similar properties and composition. The example of this group is outerwear, underwear, shoes and so on.

A type of goods is represented by a set of goods of certain groups with common name and purpose (suits, shoes, boots, etc.).

Under variety of goods we understand a set of goods of a certain type having specific signs. For example, variety of goods may be represented by specific brands, models and so on.

A unit of inventories accounting is chosen by trade organizations independently to ensure the formation of complete and accurate information about these inventories as well as proper monitoring of their presence and movement. Depending on the nature of
inventories, their characteristics and their usage, a unit of analytical inventories accounting may be lot of goods, group of goods and so on.

It should be noted that IFRS (IAS) do not pay much attention to the similar questions because they just focus on the final result of accounting – financial statements. However, it is undeniable that, despite the fact that such work is beyond the scope of regulation, it is inevitable in every organization. None of the firms (whether kiosk or hypermarkets) is not able to work without the analytical and quantitative accounting of the goods, whatever is written in accounting standards.

Nowadays accounting of goods by nomenclature numbers is preferred with automation of accounting and warehouse transactions. It means when goods are delivered, company assigns a nomenclature number to each type of goods. Accountants of trade organization develop its own system of codification of products, or use the system laid down in the accounting program.

In Russia, a special card is opened for each nomenclature number. There is information about the name of the product, unit, opening balance, receipt, expenditure, and closing balance in this card. Also the nomenclature number of retired product must be specified in primary expenditure documents.

According to Methodical instructions on inventory accounting (p. 10) goods are recognized only if the organization has a right to them property (economic or operational control). Otherwise, accountant has to use off balance sheet accounts [4].

The fundamental difference from the Russian accounting standards is that IFRS are oriented to the principle of substance over form, so that goods are recognized and information about them is presented in financial statements whether or not the organization has a property right on them. Instead, the priority for recognition of inventory is control over them and the intention to use them for the sake of obtaining benefits. In this case, control is the possibility for assets management. Thus, whether or not the organization has the right to ownership of goods, they should be recognized on the balance sheet.
It should be noted that Russian accounting standard PBU 5/01 “Accounting of inventories” does not contain the information about recognition of inventory according to legal frame of reference, but Russian accounting standard PBU 1/08 “Accounting policy” (as IFRS) also recommends to use the principle of substance over form.

Therefore, in our opinion, despite the obstacles created by the Methodical instructions [4] and the Instructions on how to use the Chart of accounts [6], the principle of substance over form should be implemented in modern Russian conditions.

Measurement of inventories means the definition of the price at which they are recognized and presented in financial statements. At the same time, this price is not always constant, so IFRS and Russian accounting standards are refer to the initial and subsequent assessment. The initial assessment is usually carried out in the amount of actual costs for the purchase of goods, the subsequent assessment depends on the method chosen to allocate their cost and the presence or absence of factors and reasons for re-assessment of values, and (or) the recognition of impairment.

Let us consider the features of the initial and subsequent assessment of goods contained in the Russian and International standards in more detail.

There are different approaches to determine the initial cost of the goods in the Russian accounting standards and IFRS.

According to paragraph 13 PBU 5/01 “Accounting of inventories” trade organizations should form purchase cost of products. In particular, the costs of procurement and delivery of goods made before sale are allowed to include in cost of sales or cost of goods.

The purchase price is the amount of actual costs of organizations to purchase goods, with the exception of VAT and other recoverable taxes (except those provided by the legislation of the Russian Federation).

Actual costs of organizations to purchase goods include:
- Amounts paid under the contract to the supplier (seller);
− Amounts paid to organizations for information and advisory services relating to the purchase of goods;
− Customs duties;
− Non-recoverable taxes paid in connection with the purchase of goods;
− Interest paid by the intermediary organization through which goods are purchased;
− The costs of procurement and delivery of goods to the place of their use, including the cost of insurance. These costs include, in particular, the cost of procurement and delivery of goods, the cost of content storage-warehouse division of the organization, the cost of transport services for the delivery of goods to the point of use, if they are not included in the price of goods set by the agreement;
− Accrued interest on loans provided by the supplier (commercial credit) accrued prior to the adoption of accounting items, interest on borrowed funds, if they are drawn to purchase these goods;
− The costs to bring the goods to the state in which they are suitable to use for the purposes intended. These costs include the costs of organization for part-sorting, packing and improve the technical characteristics of the obtained products;

Other costs directly attributable with purchase of goods.

When trade organizations supply goods and provide discounts to their clients they record the historical cost of goods. In this case, the purchase price of the goods is deemed to be the actual value of money (or its equivalent), paid for goods given, in other words without discounts provided.

The actual cost of the purchased goods does not include administrative expenses and other similar expenses, other than these expenses are directly linked to the purchasing of goods [3].

According to Methodical instructions on inventory accounting transportation expenses are costs of the organization which are directly related to the process of the procurement and delivery of goods to the organization. Transportation expenses include:
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- costs of loading and transporting the goods in vehicles payable by the buyer in excess of the price of those goods in accordance with the contract;
- storage costs, including payroll expenses and contributions to the social needs of workers;
- costs of holding the special procurement centres, warehouses and agencies organized in places blanks (except expenses with deductions for social services);
- margin (mark-up), commissions (charges) paid to procurement agency, foreign trade and other intermediary organizations;
- payment for the storage of goods in the place of purchase, railway stations, ports, wharves;
- interest expenses associated with the purchasing of goods before these goods are recorded;
- travel expenses;
- costs of loss of goods delivered in a way (shortage, deterioration), within the limits of the rules of natural loss;
- other costs.

If transportation costs and procurement costs, associated with the purchasing and delivery of goods, amount to a significant share of total revenue from sales of products (over 10%), as well as their level can be irregular throughout the year (crop production, fish fishing, etc.), proportional distribution of these amounts are accomplished between value of goods sold in a given month and the rest goods at the end of the same month. The share attributable to rest goods (unsold at the end of the month) remains in the account 44 “Sale expenses” and is moved (is transcribed) to the next month [4].

Thus, in accordance with the law the item “Work in progress (sales expenses)” can take place in the actual form of the statement of financial position of Russian commercial enterprises in terms of transport-ordering costs for the rest of goods.

It should be noted, that the new typical form of the statement of financial position, which is in special law “About the forms of financial statements” ordered by Ministry of
Finance of the Russian Federation, includes the aggregate article “Inventories”, that contains the information about such expenses.

This method of distribution of sales expenses (including transportation and procurement costs) is determined by Russian companies independently and fixed in their accounting policy. But IFRS, over against Russian accounting standards, don’t permit distribution of sales expenses between goods sold and the rest of goods at the end of accounting period because this procedure results to the higher cost of assets and reduces accounting period expenses.

According to p. 10 IAS 2 “Inventories” historical cost of goods should include all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Purchase costs of goods include purchase price, import duties and other taxes (other than those subsequently reimbursed by tax authorities to organizations), as well as transportation costs, handling and other costs directly attributable to purchasing of goods. Price reduction, discounts and other similar things must be deducted when determining costs of purchase. Other costs are included in the historical cost of goods only in such a value that they are incurred in bringing the inventories to their present location and condition [2].

IAS 2 “Inventories” (p. 16) represents a list of costs that are not included in the cost of inventories and recognized as expenses in the period in which they are incurred:

– abnormal amounts of wasted materials, labor or other production costs;
– storage costs, unless those costs are necessary in the production process before a further production stage;
– administrative overheads that do not contribute to bringing inventories to their present location and condition;
– selling costs [9].

Thus, in general (according to Russia accounting standards) current national method of formation of the purchase price of goods meets the requirements of international standards.
The Chart of Accounts and the Regulations for its application determined that along with bookkeeping of goods on the account 41 “Goods” it is allowed to use the account 15 “Preparation and purchasing of inventories” in the way similar to the order of operations connected with inventories accounting [6].

In IFRS this accounting method was named Standard costs (paragraph 21 of IAS 2 “Inventories”). What is remarkable is that its essence and methods of realization are not specified. Apparently, the reason is that this method reflects the order to form information about inventories in accounts, not reports. However, this does not justify the use of such a specific, highly technical term as “standard costs” without any explanation.

In Russian accounting the similar technique (“standard costs” method) is implemented through the use of target prices and the use of the account 15 “Preparation and purchasing of inventories” and the account 16 “Deviation in costs of inventories”.

The Debit side of the account 15 “Preparation and purchasing of inventories” represents information about the purchase price of the goods from received documents of suppliers, in correspondence with the accounts of settlements, depending on where these inventories are from and what the nature of the costs is for storage and delivery of goods to the organization.

The Credit side of the account 15 “Preparation and purchasing of inventories” in correspondence with the debit side of the account 41 “Goods” represents information about the goods, arrived in organization de facto.

The difference between the target price and the purchase price of the goods, identified in the account 15 “Preparation and purchasing of inventories” at the end of the month, is debited to the account 16 “Deviation in costs of inventories”.

Deviations accumulated on account 16 “Deviation in costs of inventories” are written off to expenses related to ordinary activities – to the debit side of the account 90 “Sales” (or to the account 45 “Dispatched goods”) [6].
When choosing the method of writing off the deviations all conditions of delivery of goods, the volume and frequency of their coming to the organization should be considered. It is possible to use the following methods:

– Completely at the end of the accounting period, with minor amounts of sales and minor amounts of deviations;

– By distributing among all goods, sold and unsold, no matter to what objects these deviations are referred (usually proportional to the cost of goods sold (dispatched) in the accounting month;

– As far as the sale of a certain group of goods when deviations are identified for each group or for any specific delivery and written off in proportion to the cost of goods sold;

– Uniformly over a period, for example, during the accounting year the entire amount of deviations is written off to the sales expenses [4].

Along with the standard cost method trade organizations widely use so-called retail method (paragraph 21 of IAS 2 “Inventories”). Its meaning is given at the Russian accounting regulatory documents [3, 4, 6].

In accordance with paragraph 13 PBU 5/01 “Accounting for Inventories” organizations, engaged in commercial activities, are allowed to keep account for goods held for sale using one of the following ways:

1) historical cost on the account 41 “Goods”;

2) retail prices, with a separate accounting of markups (discounts) on the account 42 “Trading margin” [3].

The method of valuation of goods chosen by organization should be fixed in the accounting policy.

Formally, the wholesale trade organizations may not use the second method and keep accounts of goods using the historical cost.
However, it is appropriate to remind that the retail method, in fact, is a special version of the standard costs method, and there are no restrictions both in IFRS and in Russian accounting standards to use it.

The natural-cost or cost scheme usually used in trade. It means that accounting of each group of goods name is kept either in monetary or in monetary and physical units of measurement.

Organization of natural-cost accounting is difficult in retail. It is because of the significant range of products for sale, the daily supply of goods from different suppliers and significant workflow. However, at the present time, using of modern models of cash registers in retail allows make accounting records with purchase prices of goods using bar codes applied to the goods sold.

Retail organizations, when taking into account goods for sale, use purchase price and add value of the trade margin, which is designed to recover the costs to sell (cost-treatment), get profit and make the payment of indirect taxes. In other words, the markup is an element of price, providing compensation of costs and profit.

Using of purchase prices for goods at the time of making records on the debit side of the account 41 “Goods” formed their retail selling price. Simultaneously, in corresponding with the credit side of the account 60 “Payments to suppliers and contractors” the purchase price of goods is recorded, and in correspondence with the credit side of the account 42 “Trading margin” – the amount of the trade margin is recorded.

Suppliers may provide discounts for loss of goods and compensation for additional transportation expenditures to organizations (their clients). In retail trade discount as the markup, is a part of the retail price, and is recorded in the account 42 “Trading margin”.

The Instructions for use of Chart of Accounts state that the account 42 “Trading margin” is intended to summarize the information about the discounts and markup for goods in organizations engaged in retail trade, if they keep accounts using purchase
prices. The account 42 “Trading margin” is credited when making the accounting records on the amount of trade margin.

As a general rule, the amount of the trade margin on goods is unrestricted and can be anything. The exceptions are certain types of goods that are subject to government price and limits are set for retail markups to actual selling price.

Thus, the organization is free to determine the size and especially the scheme of calculation of the trade margin. In this case, there are various options, such as:

– for all goods (individual product groups) a single markup is set as a percentage of the purchase price of the goods;
– for the particular product (product groups) mark-up is set as a fixed fee;
– if the sale price is set, then the mark-up is calculated.

Market conditions, the competitive environment, substitute goods make the third option the most cost-effective. This is because the same products from different suppliers come to different purchase prices. To set different retail prices for the same item of goods is impractical. Therefore, under the same selling prices of the same goods and non-identical purchase prices on them only the value of the trade margin is changed.

IAS 2 “Inventories” (p. 22), as it has already been mentioned, also allow to use a method of retail prices to assess goods consisting of a large number of rapidly changing items with the same rate of return in respect of which is not possible to use other methods of determining the cost. Cost of one good is determined by reducing the sales price of the unit to the appropriate percentage gross margin. When determining the values for the percentage of the first recorded goods whose value has been reduced to below its original selling price. Often the average percentage for each department of retail organization is used [2].

Thus, products in retail, according to PBU 5/01 “Accounting of inventories” and IAS 2 “Inventories”, may be valued at sale prices. Discounts and markups are taken into account separately. When making the balance sheet the total of trade margins (discounts) should be deducted from the price of sold. This ensures the implementation
of the principle of accounting conservatism which helps to prevent overestimating of articles in the balance sheet.

Speaking of the subsequent valuation of goods, the existing methods of writing off costs should be noted, because choice of one or other of them has a direct impact on the value of inventory recorded.

According to paragraph 16 PBU 5/01 “Accounting for inventories” organizations taking into account the goods at purchase cost, measured them with one of the following methods:

- At the cost of each unit;
- At average cost;
- FIFO.

Use one of the ways for the group of goods is made on the assumption of the sequence of applying the accounting policies [3].

Valuation of goods at cost of each unit is applied to those goods that can not be normally replaced by each other (precious metals, precious stones, etc.).

Valuation of goods at the average cost is used for each group of products by dividing the total cost of the group (type) of the goods at their current number considering the balance of goods at the beginning of the month.

The calculation of the average actual cost of goods sold can be done in two ways:

- based on the average actual cost (weighted estimate), the number and value of the goods at the beginning of the month and all the receipts for the month (the reporting period) are included in the calculation;

- by determining the actual cost of goods at the time of their release (moving estimate), while the average number of evaluation at the beginning of the month and all proceeds until the holidays included in the calculation [4].

IAS 2 “Inventories” are also allow to calculate the average production cost with a periodic or continuous assessment: “The average may be calculated on a periodic basis,
or as each additional shipment is received, depending upon the circumstances of the entity” (p. 27) [2].

Thus, balanced and moving scores, methodically set by guidelines on accounting inventory, are relevant to periodical and continuous assessment according to international standards.

FIFO method is based on the assumption that goods are used in the reporting period in the order of their purchase (receipt). Products, first offered for sale at cost first acquired with the cost of goods, those on the beginning of the period (month).

In general, the methods of valuation of goods provided PBU 5/01, “Accounting of inventories”, are similar to the method permitted by the IAS 2 “Inventories”. However, it should be noted, that in IFRS (IAS), in fact, are allow only two ways – FIFO and average cost. This is due to uncontested provisions of the standard method is to use specific identification of costs (unit cost) for goods that are not interchangeable.

Next, we consider the recognition and recording of the impairment of inventory, which is recognized in case if the estimated sale price of goods is less than their original cost.

In paragraph 9 of IAS 2 “Inventories” is mentioned that goods should be measured at the lower of cost and net realizable value [2]. The basis of this approach is the principle of prudence and its special case – the principle of the lowest estimates, providing that the assets should not be recorded at cost, exceeds the amount that is expected to be obtained from their sale or use. It must be noted that the similar approach is provided in paragraph 25 PBU 5/01, “Accounting for Inventories” [3].

Reducing of prices usually happens because the products become outdated, expiring storage, consumer demand is reduced (for example, seasonal sale) and in other cases.

Such goods should be recorded in the balance sheet at their current market value, if it is lower then the historical cost (paragraph 25 PBU 5/01, “Accounting for Inventories”). In Russian accounting the difference between the current market value
and the fair value of harvested (purchases) goods form a provision on the debit side of the account 91 “Other income and expenses” and credit side of the 14 “Provisions for impairment value of the tangible assets”.

Due to impairment in the value of goods that they have been taken into account to the account 41 “Goods” remains unchanged. At the same time in the balance sheet products with recognized impairment losses are recognized in the assessment of the “Net”: from balance on the account 41 “Goods” deduct losses recognized in the account 14 “Provisions for impairment value of the tangible assets”.

According to paragraph 20 of the Guidelines for accounting inventory provision for impairment of inventory is created for each unit of inventory recorded in accounting. It is allowed to make provisions for certain types (groups) of similar or related inventories. The creation of provisions is not allowed to make for basic materials, auxiliary materials, finished goods, goods, stocks of certain operational or geographical segment and etc. [4].

In accordance with IFRS net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Net selling price relates to a net amount that the company expects to gain from the sale of inventories in the ordinary course of activities (paragraph 6 of IAS 2 “Inventories”) [2].

The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined. (paragraph 28 of IAS 2 “Inventories”) [2].

Inventories are usually written down to net realizable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are produced and marketed in the same geographical area, and cannot be practically evaluated separately from other items in that product line. (paragraph 29 IAS 2 “Inventories”) [2].
Estimates of net realizable value also take into consideration the purpose for which the inventory is held. For example, the net realizable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realizable value of the excess is based on general selling prices. Provisions may arise from firm sales contracts in excess of inventory quantities held or from firm purchase contracts. Such provisions are dealt with under IAS 37 “Provisions, Contingent Liabilities and Contingent Assets”. (paragraph 31 of IAS 2 “Inventories”) [2].

In each subsequent period a new assessment is made of net realizable value. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realizable value because of changed economic circumstances, the amount of the write-down is reversed (i.e. the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realizable value. This occurs, for example, when an item of inventory that is carried at net realizable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased (paragraph 33 of IAS 2 “Inventories”) [2].

It should be noted that in the original IFRS the term “cancellation of an entry” is a variation of term “reversed” that probably should be treated as “restored”. Another words it is about inverse-recording. At the same time, we know that IFRS do not speak on accounting, but reporting, so it just comes to restoring previously written off inventories in the balance sheet.

In Russia accounting standards there is information about recovery, not reversal or cancellation of an entry”. Reversal of impairment occurs when the current market value of the property, reduction of which was reflected by the impairment, once again increased (but not above the initial cost), there is entry recorded: on the debit side of the account 14 “Provisions for impairment of inventories” and credit side of the account 91 “Other income and expenses”. A similar entry is made as disposals (sales, write-offs,
etc.) of goods in respect of which the reserve was established, in part, related to goods chosen.

Thus, in spite of that there is a sufficient number of formal differences in accounting connected with transactions of goods, it must be said that modern Russian accounting standards and international standards have common methodology. All technical differences between Russian accounting standards and IFRS become less and less with each new edition of regulatory documents.

References:


The description of modern enterprise resource planning systems and identified the main objects of business processes, but also study the advantages and disadvantages of implementing ERP in the company.

**Keywords:** management, enterprise, planning resources, ERP, relationship management.

In an effort to automate and streamline the processes associated with the management of external and internal resources, Western companies are developing and implementing specialized control system. There is a huge number of foreign companies engaged in the development and implementation of management systems in enterprises of different levels and sectors, but it is worth noting that these systems are not practically implemented at the enterprises of the domestic medium and small business segments. Because of the national legislation, as well as due to the fact that there are real problems with the financing of this trend in enterprises because of its high cost, a professional system fully operational only at the level of large corporations and national monopolies.

This article attempts to analyze the advantages and disadvantages of enterprise resource planning system, and give recommendations on the justification of the integration of this system to midsize business segment.
According to the Dictionary of APICS (American Production and Inventory Control Society), the term “ERP-system” (Enterprise Resource Planning) can be used in two senses. First, it is - an information system for the identification and planning of all resources of the enterprise, which are necessary for sales, production, procurement and accountability in the execution of client orders. Second (in the more general context), it is - the methodology of effective planning and management of all enterprise resources that are necessary for sales, production, purchasing and accounting in the performance of customer orders in the fields of manufacturing, distribution and services. [1]

The purpose of the system is to facilitate the flow of information between all business functions inside the enterprise, and support relationships with members of the business processes using various types of communications. The basis of the system is the principle of creating a single repository of data [2], containing all the corporate business information and providing simultaneous access to any required number of company employees with adequate powers. Also we are declaring that it will not only increase the efficiency of production of the enterprise, but also reduce the internal flow of information, thus reducing the cost of their software. Mostly the same, of course, is a set of functional ERP, namely the following:

- maintenance and engineering specifications that define the composition of the manufactured products, as well as material resources and operations necessary for its production;
- the formation of sales and production plans;
- planning requirements for materials and components, timing and volume of deliveries to fulfill the plan of production;
- inventory management and procurement: maintenance contracts, implementation of centralized procurement, the achievement and optimization of warehouse and shop supplies;
- capacity planning of operations planning to use some tools and equipment;
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- operational financial management, including financial plan and monitoring its implementation, financial and management accounting;
- project management, including planning stages and resources required to implement them. [3]

Classic ERP-system [4], in contrast to so-called "box" software are classified as "heavy" software products requiring long enough setting to start using them, that is the main feature of this product by introducing plants.

Selection of ERP-system, acquisition and implementation, as a rule, require careful planning in the long-term project involving a partner company - a supplier or consultant. As the ERP-system built in a modular, the customer often, at least in the early stages of such projects, gets not a complete range of modules, and a limited their kit that perfected in the course of implementation of the system in all processes in the enterprise. Any complication of software modules results in an increase in the cost of their implementation, including training for employees.

However, the introduction and application of ERP in the enterprise carries with it substantial advantages, namely:
- ERP-system allows the use of a single integrated program instead of several disparate. A single system can manage the processing, logistics, distribution, inventory, shipping, invoicing and accounting;
- Implement the ERP-system system of access to information is intended as a counter external threats, such as industrial espionage, and internal, such as theft;
- Introduce in conjunction with the CRM-system (Customer Relationship Management System) system and quality control, ERP-systems aimed at meeting the needs of companies in the funds management business.

The main difficulty in the implementation phase of ERP-systems for midsize businesses arise for the following reasons:
- Owners of the companies do not trust the high-tech solutions, preferring the time-tested experience and software products designed to address the issues of enterprise
management, which ultimately makes the project difficult to realize due to weak support for the project from their side;

- Resistance departments to provide confidential information reduces the effectiveness of the system.

It is also worth noting that many problems associated with the functioning of ERP; arise from lack of investment in training, as well as in connection with poorly designed policy of updating and supporting the relevance of data in ERP.

There is a misconception that ERP is sometimes difficult or impossible to adapt a document of the company and its specific business processes. In fact, any implementation of the ERP-system made before describing business processes, often coupled with the subsequent stage of the business re-engineering. In fact, ERP-system represents a virtual projection of the company.

For mid-sized businesses, implement integrated information systems also promises undoubted benefit.

First, the level of payment and reduced debt to the main service providers. In this case, the unclaimed debts disappear forever after some time, due to the expiration of the statute of limitations on their demand. Debt relief is often many times greater than the cost of implementing an information system, which cannot be obtain by any increase in the state sales and service control.

Second, the more efficient use of resources of the enterprise, designed to improve the company's competitiveness in the market.

Third, the automation of the workplace increases employee productivity and improves the speed, accuracy and reliability of the accounting information.

Fourth, increase customer loyalty to the company and services, due to increased efficiency and quality of service provided to the consumer.

In summary, we can say that the introduction of the ERP-system in the enterprise medium business segment will give a significant economic impact, as well as significantly increase the investment attractiveness of the company.
Key aspects of the institutional mechanism of a society based on knowledge can be described by the Triple Helix Model [2], according to which the main participants of interaction “university-industry-government” not only perform their traditional functions, but also take over the tasks of other participants, that leads to the inner transformation of these institutions and promotes better performance of its functions. For example, going beyond the traditional tasks, the universities with the support of businesses and the authorities become sources of venture capital, the state, acting as principal guarantor, establishes rules of the game, but at the same time makes venture capital available for the development of new companies.
The latter is particularly important for the Russian economy, as in conditions of self-development Russian regions face the problem of the lack of own funds. A possible solution could be the creation of a state and, therefore, reliable, low-risk, technical instrument, which provides a mechanism for the knowledge economy, the role of which would qualify institute of Sovereign Fund (SF).

Traditionally, the SF is defined as a financial instrument, owned by the state, which accumulates, manages and disposes of public funds by investing in a wide range of different types of assets [3]. SF usually occurs when trade surplus in export is high. Mostly it is the export of natural resources (oil, gas). However, the imposition of requirements for SF as a public instrument, which provides a mechanism for technical knowledge economy, means, in particular, the relative independence of the global pricing environment for natural resources, so that the tool was able to work on high-tech projects, characterized by the steps of return in the long term.

Analyze the SF in terms of Norwegian SF – Government pension fund "Global", recognized as a model of openness in the world due to the availability of statistical information on it [4].

The main sources of the fund are income from the investment of the oil fund assets, part of the taxes collected by the government from companies engaged in the oil and gas industry. Annual reports on the activity of the fund are presented in the Norwegian parliament. Only 4% of the total fund savings may be spent by the government. To date the fund has accumulated 715.9 billion dollars [6]. According to experts [7], impressive success of the Norwegian SF functioning was contributed by following factors:

1) the role of the government in the economy has been and remains very significant, despite measures to privatize state-owned companies;

2) exploration and production of oil and gas are under strict government control, which is provided through the licensing once in two years;
3) the government is taking measures to prevent the concentration of rights in one hand, controlling the distribution of the shares in each license; performance licenses controlled by the State Petroleum Directorate;

4) strict environmental standards (carbon tax) introduced;

5) geographical placement of Norway is favorable in terms of geopolitical risks, climate and transportation costs;

6) an important aspect is the availability of long-term and transparent rules do not change under any government, strict financial discipline.

Norwegian SF, investing their money in real estate, trying to hold back the process of inflation, and thus follow changes in macro parameters. As an instrument of risk decreasing, sovereign wealth fund must be reliable; in particular the volumes of its assets must not depend on oil prices.

It will describe the dynamics of the volume of the Norwegian pension fund «Global» ($y$) and oil prices ($x$) from 2002 to projected 2014-2020 (tab. 1) [5] by defining a model of the form:

$$y_t = a + b_0 \cdot x_t + b_1 \cdot x_{t-1} + b_2 \cdot x_{t-2} + K + \epsilon_t.$$  \hspace{1cm} (1)

**Table 1**

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<th>Date</th>
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</tbody>
</table>
The parameters of this model cannot be determined by the usual OLS or by other standard statistical methods because the model includes an infinite number of factor variables [1]. However, estimates of its parameters can be obtained by adopting certain assumptions about the structure of lag. These assumptions are made in the presence of geometric structure of lag, i.e. the structure, when the impacts of lagged values of the factor on the result decrease with increasing values of lag exponentially.

Koyck suggested that there is a constant rate \( \lambda (0 < \lambda < 1) \) of time reducing of factor lagged influences on the result. If, for example, in the period \( t \) result has changed under the influence of factor changes in the same period of time to \( b_0 \) units, then under the influence of factor changes that occurred in the period \( (t-1) \), the result will change to \( b_0 \cdot \lambda \) units; in the period \( (t-2) \) – to \( b_0 \cdot \lambda^2 \) units, and so on.

Then the original model (1), written as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Value1</th>
<th>Value2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1390,1</td>
<td>63,458</td>
</tr>
<tr>
<td>2007</td>
<td>1782,8</td>
<td>54,485</td>
</tr>
<tr>
<td>2008</td>
<td>2018,5</td>
<td>91,627</td>
</tr>
<tr>
<td>2009</td>
<td>2279,6</td>
<td>46,324</td>
</tr>
<tr>
<td>2010</td>
<td>2642,0</td>
<td>76,82</td>
</tr>
<tr>
<td>2011</td>
<td>3080,9</td>
<td>97,036</td>
</tr>
<tr>
<td>2012</td>
<td>3307,9</td>
<td>111,448</td>
</tr>
<tr>
<td>2013</td>
<td>3793,1</td>
<td>111,762</td>
</tr>
<tr>
<td>2014</td>
<td>4280,7</td>
<td>110</td>
</tr>
<tr>
<td>2015</td>
<td>4641,4</td>
<td>113,5</td>
</tr>
<tr>
<td>2016</td>
<td>4954,6</td>
<td>117,7</td>
</tr>
<tr>
<td>2017</td>
<td>5275,2</td>
<td>122,1</td>
</tr>
<tr>
<td>2018</td>
<td>5600,2</td>
<td>126,7</td>
</tr>
<tr>
<td>2019</td>
<td>5926,9</td>
<td>131,4</td>
</tr>
<tr>
<td>2020</td>
<td>6262,3</td>
<td>136,3</td>
</tr>
</tbody>
</table>
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\[ y_t = a + b_0 \cdot x_t + b_0 \cdot \lambda \cdot x_{t-1} + b_0 \cdot \lambda^2 \cdot x_{t-2} + K + \varepsilon, \]  
(2)

For the period \((t-1)\) can be written:

\[ y_{t-1} = a + b_0 \cdot x_{t-1} + b_0 \cdot \lambda \cdot x_{t-2} + b_0 \cdot \lambda^2 \cdot x_{t-3} + K + \varepsilon_{t-1}, \]  
(3)

Multiply both sides of the model at \(\lambda\):

\[ \lambda \cdot y_{t-1} = \lambda \cdot a + \lambda \cdot b_0 \cdot x_{t-1} + \lambda \cdot b_0 \cdot \lambda^2 \cdot x_{t-2} + \lambda \cdot b_0 \cdot \lambda^3 \cdot x_{t-3} + K + \lambda \cdot \varepsilon_{t-1} \]  
(4)

Subtract (4) from (2):

\[ y_t - \lambda \cdot y_{t-1} = a - \lambda \cdot a + b_0 \cdot x_t + \varepsilon_t - \lambda \cdot \varepsilon_{t-1} \]  
(5)

Transformations lead to model Koyck:

\[ y_t = (1-\lambda) \cdot a + b_0 \cdot x_t + \lambda \cdot y_{t-1} + u_t, \]  
(6)

Find the regression coefficients: \((1-\lambda) \cdot a = 141,46, \ b_0 = 2,987, \ \lambda = 0,969.\)

\[ a = \frac{141,46}{(1-0,969)} = 4160,588. \]

Substitute the values in the original model (1):

\[ y_t = 4160,588 + 2,987 \cdot x_t + 2,987 \cdot 0,969 \cdot x_{t-1} + 2,987 \cdot 0,969^2 \cdot x_{t-2} + K + \varepsilon_t. \]

The resulting model describes the dynamics of Norwegian SF values and prices of oil. Rate of \(\lambda\) close to 1, it shows that the time lagged influences of factor on the result reduced to a small degree.

So, oil prices don’t affect values of Norwegian SF practically, therefore, it can be called reliable fund. Perhaps this is due to the significant role of the government in the economy (oil production is under strict government control) and the presence of long-term rigid rules, which contributes to the reorientation of the Norwegian economy to the format of the knowledge economy. This experience should be utilized by Russia for the construction of the knowledge economy, for which, as a minimum, the elimination of the nature resources type of the existing economic order is essential.
The report considers questions of formation and realization of economic incentives system of management of natural resources and reasonable use of the natural capital taking into account a margin of ecological safety. There is offered the author's vision of model of incentive of reasonable management of natural resources based on cooperative strategy of market and state forms and methods of regulation of management of natural recourses process.
Key words: management of natural resources, natural capital, incentives, economical mechanism of reasonable management of natural recourses, market safe-regulation, governmental control.

For the transition to sustainable development and innovative economic development of modern Russia is fundamentally important to increase efficiency in the use of natural capital and achievement in the community management of natural resources. Thus, in the long-term development of the Concept of the Russian Federation for the period up to 2020 noted that "the formation of an innovative economy is the transformation of intelligence, of human creativity in the leading factor of economic growth and national competitiveness, along with a significant increase in the efficiency of natural resources" [7]. Indeed, natural capital in the Russian economy is particularly important. According to World Bank estimates that in developed OECD countries, the share of natural capital accounts for only a small share of wealth: the ratio between the natural, human and physical capital is 2-5% :68-76% 18-20%, but a different situation in Russia where the share of natural capital accounts for more than two-thirds of 70%: 20%: 10% [1]. However, many important components of natural capital, including natural resource rents are not counted in GDP (GRP) and its dynamics. But it is obvious that the formation of an innovative economy should be considered as an environmental factor at the micro level in the development of various technologies of natural capital, and at the macro level the choice of socio-economic direction of the country.

Began in 2008, the global economic crisis has shown the potential exhaustion of raw materials export of Russia's economy. According to estimates by the Economic Expert Group, Russia spent on anti-crisis measures more than anyone else in the world - more than 11% of GDP, and was lower in all the "twenty" - at -7-9% of GDP. Compared to these figures, for example, the United States spent on anti-crisis measures 8.4% of GDP, and the world at large, 7% [1]. Therefore, an important feature of the new model of the Russian economy has become that ecological sustainability and promote the integration of environmental factors in environmental economics.
Research on the integration of environmental factors in the economic mechanism are conducted both in the direction of explication at ¬ rank environmental inefficiency of the market mechanism, because the formulation of the economic principles of ekologoorientirovannogo economic mechanism, the orientation of the registration and reproduction of environmental factors [2]. We believe that at the forefront here put forward the problem of forming methods and forms of environmental issues in the framework of current and future mechanisms to encourage environmental sustainability.

Under the stimulus we understand the process of external influence on the economic actors with a view to agreeing and implementing economic interests. Stimulation affects the interests of economic entities, but the nature of this impact is due to the development of society, the economic relations of a society at a given moment, finally, forms and methods of stimulation. Due to the fact that we consider the stimulation applied to the type of market economy, it should be noted related specific features. First of all, because the economy is the market, the stimulation can occur through market self-regulation. However, due to the presence of well-known "market failures", or "externalities", the possibility of self-regulation of the market is very limited. This situation objectively determines the need for government intervention, that is stimulating in this case due to government regulation.

In economic science, is currently in progress "move out", strengthen the new, non-traditional directions of theoretical sociology, management, marketing [1,4]. Gaining a stronger position within the community representatives of rational choice theory and the new institutional economics. Therefore associated with the reproduction of a general form and methods stimulate becoming increasingly diverse. Since the implementation of interest or lack of it for the specific subject of the economy due to the possible acquisition or loss, it is self promotion is through the creation of conditions for the material rewards or liability.

Is an expansion of facilities in the area of environmental stimulation. These are, for example, the norms and standards of maximum permissible emissions, discharges of
hazardous substances and disposal of pollutants; activities to promote environmentally friendly technology, the production of environmentally friendly products, carrying out various environmental protection measures to ensure the preservation of the quality of the environment, restoration of natural resources and others. The objects are the promotion and enterprises of different ownership forms, the separate structures, units of the enterprises and their employees.

Subjects incentives are the state and its structures, municipalities, business executives, managers, who own the right to make decisions in favor of a process of the use of natural resources professionals whose activities can influence the implementation of quality standards for the environment, etc.

If we examine in more detail in the promotion of government regulation, it is possible to highlight the "economic" and "non-economic" forms and methods. "Non-economic" forms of such incentives - is, above all, the administrative impact on the subjects of the market economy in the form of various prohibitions, restrictions, penalties, etc.

Administrative incentives are based on the power of the state, regional or local authorities, based on legal norms, but it does not mean that they are "cut off" from economic interests. The proof of this is the fact that the law itself can be realized only to the extent that they are coordinated with the economic interests of their constituents. An example of the use of these methods are promoting anti-trust legislation restricting the activities of monopolies legislation governing customs, environmental, social and other areas that put certain limits in the activity of economic agents who are in their responsibilities or promotion.

Along with the widely used administrative and economic incentives that dominate the market type of economy and are more flexible tools for selecting optimal schemes include environmental requirements in a complex multi-piece country's economic machinery. Appointment of economic instruments in environmental management is as follows:
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- targeted, direct or indirect improvement of the environment;
- introduction to the practice of management subjects, the environmental factor;
- the provision of natural resources of freedom in choosing the means of nature protection;
- involvement of state and local governments in the implementation of environmental and economic policies, etc.

Economic methods that stimulate the rational use of natural resources and the efficient use of natural capital can be: payment for the use of natural resources, payments for environmental pollution, a tax on production of environmentally hazardous products; tax exemptions, accelerated depreciation of environmental equipment, fee for service recreational nature; issue of environmental actions and others. The mechanism for the stimulation of market concerns as monetary - credit system. With these forms of stimulation as soft loans, subsidies and subventions, discount policy pursued by the Central Bank, the operations of the state securities market may engage in economic policy. Part of the incentive mechanism is a state policy and prices. State intervention in the pricing process by authorized overstatement of costs of production, price subsidies to producers and consumers of export subsidies, the value added tax that is included in the price of goods and services, encourages producers by encouraging them to justice.

Catalytic role in society also plays a public enterprise, carried out within the public sector or in mixed economic structures. Public enterprise is generally not focused on the high level of profits, and its stimulating effect on private enterprise due to the minimization of the cost of non-state structures in those areas where the process is carried out at the expense of the state (infrastructure, environmental protection, national defense, research and development, energy).

Unfortunately, to date, in the Russian system of economic incentives provided only payments for environmental pollution, which we refer to a negative stimulus, or "stimulus-enforcement." But their rates are quite low, in the range of emission standards included in the cost of production, and do not serve as a deduction from the profits of the
enterprise. As a result, they do not affect the economic interests of the company and do not encourage them to environmental management. In addition, the rates are not differentiated according to the nature of enterprises ("useful" area or not), and manufactured from environmentally friendly products or services.

The disadvantages of the system of payments for pollution of the environment should include the fact that they do not have the status of taxes. This allows enterprises to accumulate them with impunity. Consequently, in the framework of the market economic mechanism of nature must change the economic approaches to the formation and collection of these fees. We believe that the most time-consuming task in this assessment will be specific damage as a result of various contaminants as it is quite difficult to trace the direct consequences of their harmful effects, much less evaluate them in terms of value. As the data of various researchers, the amount of payments covering existing damage from environmental pollution is, for various economic sectors and territories, from 0.5% to 10% of its value. [8] In addition, one should take into account the modern inflationary activity that makes the fixed cost estimates uscherbonositeley comparable at periodic intervals

Other economic instruments promoting environmental management and sustainable use of natural capital in Russia has not yet found a use that definitely affects the formation of an innovative, environmentally sustainable model of development.

It should be noted that among the economic and administrative methods no one ideal, that is, one that is bringing positive results in some markets, as well, and would be disrupted by a friend. Therefore, in any given situation, a control of the effects of stimulus and dealing with their problems. We believe that in the sphere of nature, as in the economy as a whole, it is necessary to find the optimal structure of a combination of these methods, allowing for the ecological - economic systems, where there is a stimulation.

In conclusion, the active use of economic incentives for environmental management in modern Russia, with its enormous disparities in development and institutional vacuum
should create conditions unidirectional economic interests of the market and, ultimately, contribute to the formation of an innovative economy. In general, stimulation of Natural Resources should be based on system analysis and integrated assessment of environmental and economic effects of the market economy, and economic interests of the market.

References:
8. www.iet.ru (date accessed: 02.05.2013g.)
STRATEGY OF SOCIAL AND ECONOMIC DEVELOPMENT: SCENARIOS AND RISKS

Siberian state university of telecommunications and informatics

One of topical issues of the present is formation of post-crisis economic system. Creation and calculation of concrete model of new economic architecture requires involvement of economic community, creation of the center of responsibility. It is obvious that creation of this system has to proceed from long-term strategy of Russia as which main objective it is necessary to consider creation of the new economy reflecting real technological revolution and structural modernization. The economy based on creation, innovative application and dissemination of knowledge and information, on benevolent perception of new ideas, systems and technologies, on readiness for their practical realization gradually comes instead of the traditional industrial economy which is based on use of natural resources. The choice of a way of development of economy as mainly raw or innovative defines social and economic strategy of the country and its geopolitical opportunities.

However it should be noted that today it isn't created fully weighed strategic plan of achievement of innovative economic growth. Strategy of development of Russia till 2020 has to be subjected to a certain adjustment, especially in the direction of its balance and security with resources.

Then, as official promotion declares that the country overcame crisis, steadily moves in the direction of innovation and post-industrial civilization, strengthens the geostrategic positions in the world, it is impossible to deny that the fact that going deep world recession can affect in the long term a situation in the Russian economy which already now endures slow recession (the truth, not being noted in official statistics).
The matter is that the main problem for Russia is possible reduction of a share from sale of energy carriers. So, for example, the share of the oil and gas income in gross domestic product was reduced from 11,4% in 2006 to 5,6% in 2010 [4]. Thus all possible scenarios of development of economy of Russia (however, as well as key parameters of the state budget), both short-term, and the long-term character, offered by various experts, mainly proceed from the forecast of average annual price of oil.

The Ministry of Economic Development of the Russian Federation in 2012 developed the long-term forecast of social and economic development of the country till 2030, based on two versions of the scenario. The first – the scenario of innovative development of economy, transition to which covers six-eight years, the second – the scenario conservative, or power-raw model which assumes preservation of domination of fuel and energy complex not only from the point of view of a contribution to gross domestic product growth, but also from the point of view of formation of the income of economy and the budget.

In turn the World Bank presented two scenarios of development of economy of Russia in the report. The basic scenario proceeds from average price of oil in 2012 of 98,2 dollars for barrel, in 2013 – 97,1 dollars for barrel, the second scenario is based on higher prices of oil – 125 dollars for barrel. According to the basic scenario growth of gross domestic product had to make 3,5% in 2012, in 2013 it is supposed at the level of 3,9%. In case of high prices of oil in 2012 the World bank expected growth of gross domestic product by 4%, in 2013 plans for 4,2% [9].

In the press the IMF prepared by experts three scenarios of development of economy of Russia is published. According to the first option of succession of events price of oil will fall to 80 dollars for barrel that will lead to gross domestic product falling. The second scenario assumes preservation of the current economic situation that will provide to Russia rather low economic growth. According to the third possible scenario economic growth is higher, than on the second, but additional investments in the industry for this purpose be required.
As a whole in developments of world crisis experts see two main scenarios: deflationary at which prices of oil and need for it will fall, or inflationary at which prices of oil will grow. But for economy of Russia it is important that the prices of crucial import grew not quicker than prices of oil. If it happens, crisis deepening in Russia is inevitable. And if prices of oil quicker grow, it will soften consequences of world crisis for our country though this option is represented rather improbable, especially, if to consider the developed economic realities.

To presented quite real forecasts it is possible to add two almost unreal – from the Danish bank Saxo Bank and the Russian astrologer Pavel Globa. The Danish bank regularly at the end of every year issues the list of improbable events under the name "Shocking Predictions". So, in 2013 as predictors believe, probably sharp falling of prices of oil to 50 dollars for barrel. And according to Pavel Globa's forecast in 2013-2014 will burst global crisis, in March, 2014 the third world war, part of Ukraine войдет in structure of Russia till December 31, 2020 го will begin, and in 30 years Russian becomes universal, having pressed English. Hardly these forecasts have serious scientific justification [4].

Actually according to Rosstat estimates, growth rates of gross domestic product following the results of 2012, the made 3,4%, were significantly worse (by 1,44 times) than the forecasts given by the government at the beginning of a year (4,2-4,3%) [9]. Economic growth in Russia fades even against high energy costs. So, in 2012 average annual prices of oil of the Brent brand reached a point in 111 dollars for barrel. But thus growth rates of the Russian economy from 4,7-4,9% at the beginning of a year decreased to 1,9% by the end of the year. As experts note, so low rates of economic growth wasn't observed since fall of 2010 when prices of oil were at the level of 1,5 times lower than today's indicators and hesitated in the range of 72-78 dollars for barrel [4].

Further falling of growth rates of domestic economy will be promoted at once by some risks: 1) advancing growth rates of import in comparison with export; 2) pure outflow of the capital abroad; 3) increase in net investment losses; 4) further
expansion of deficiency in foreign trade in services; 5) inflow to national economy of foreign currency in the form of petrodollars, the foreign credits, the speculative capital; 6) interest in devaluation of ruble of the Ministry of Finance of the Russian Federation, and also lack of the mechanism of radical improvement of the budgetary system. All this will promote weakening of ruble which can fall to 35 rubles for dollar. Even to bigger delay of growth of gross domestic product can bring and such internal risks, as shortage of liquidity, weak positions of manufacturing industry, as well as external – crisis in Europe, delay of development of developing countries that can lead to falling of prices of oil and capital outflow from developing countries [4].

Not only that total results of growth of the Russian economy in 2012 were lower even than the most pessimistic forecasts, so still there was a prompt deterioration of the quality of growth of gross domestic product and strengthening of degradation of structure of economy.

It is known that as the main indicator of economic recovery industrial production acts.

And here, to be fair we will note that since May, 2009 positive dynamics - growth of industrial production though rates of a gain are very insignificant is observed. The index of industrial production in the first quarter 2013 in comparison with the similar period of 2012 made 92,9% (fig. 1) [7].

![Fig. 1. Indexes of industrial production in % to average monthly value of 2010](URL: http://www.sworld.com.ua/e-journal/J21316.pdf)
It is necessary to tell that rates of restoration of the industry were more modest than expectations of analysts (the consensus forecast gave average value of 7.2%). And available growth by tradition mainly provided raw sector of economy approximately for 7% whereas processing sectors added only 0.8% [6]. It means that in the Russian economy stagnation of the developed model of raw capitalism is observed.

As the positive moment it should be noted that fact that in the first decade of the XXI century in Russia there was growth of per capita gross domestic product which made 10.8% on the average in a year, that is increased by 3.1 times from 2000 for 2011. But, as this growth is truly noted in the next release of the bulletin "New Comments on the State and Business" was a consequence of growth of the raw prices and its stability has to be supported with changes of branch structure, and also diversification of the Russian economy [6]. The matter is that there is a certain dependence between branch structural shifts and dynamics of gross domestic product.

Last year the branch structure of the Russian economy even more degraded to what given gross domestic product recently published by Rosstat on production in 2012 (tab. 1) testifies [in the same place]. So, it is possible to note and short-term (in 2012) and long-term (since 2002) a tendency, first, to increase in gross domestic product of a share of mining (for 0.1% last year and for 3.4% as a whole for the period), and secondly, to reduction of a share of processing productions as a whole (-0.2% and - 2.2%, respectively).

Besides hardly economy diversification is promoted by obviously being shown tendency to steady falling of a share of transport and communication (for 0.1% in 2012 and for 2.1% as a whole for the period), and also steadily low shares in education and health care gross domestic product – in 2012 only 5.9% of gross domestic product together were the share of them [in the same place].

Certainly, the ideal branch structure doesn't exist, but as a whole is conventional that the basis of optimum branch structure is made by processing industries (about 20%), sector of finance (about 25%) and a services sector (about 22%). In turn the main
kernel of processing sector of the industry has to consist from hi-tech (about 20%) and srednevysokotekhnologichny (about 30%) branches. As it is accepted to speak among economists – in branch structure it has to be carried out "governed one heel and half" [1].

Tab. 1
Structure of gross domestic product of Russia, in % (if other isn't specified)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic product in present prices</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and other</td>
<td>5,3</td>
<td>3,5</td>
<td>3,1</td>
<td>-0,4</td>
<td>-2,2</td>
</tr>
<tr>
<td>Fishery, fish breeding</td>
<td>0,3</td>
<td>0,2</td>
<td>0,2</td>
<td>0</td>
<td>-0,1</td>
</tr>
<tr>
<td>Mining</td>
<td>5,9</td>
<td>9,2</td>
<td>9,3</td>
<td>0,1</td>
<td>3,4</td>
</tr>
<tr>
<td>Processing productions</td>
<td>15,2</td>
<td>13,2</td>
<td>13</td>
<td>-0,2</td>
<td>-2,2</td>
</tr>
<tr>
<td>including oil processing and coke</td>
<td>1,8</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1,2</td>
</tr>
<tr>
<td>Power industry and other</td>
<td>3,2</td>
<td>3,3</td>
<td>3</td>
<td>-0,3</td>
<td>-0,3</td>
</tr>
<tr>
<td>Building</td>
<td>4,7</td>
<td>5,6</td>
<td>5,5</td>
<td>0</td>
<td>0,8</td>
</tr>
<tr>
<td>Trade and other</td>
<td>20,2</td>
<td>16,7</td>
<td>16,9</td>
<td>0,1</td>
<td>-3,4</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>0,8</td>
<td>0,8</td>
<td>0,8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>9</td>
<td>7,1</td>
<td>7</td>
<td>-0,1</td>
<td>-2,1</td>
</tr>
<tr>
<td>Financial activity</td>
<td>2,6</td>
<td>3,5</td>
<td>3,7</td>
<td>0,2</td>
<td>1,1</td>
</tr>
<tr>
<td>Real estate, rent</td>
<td>9,4</td>
<td>10,1</td>
<td>10,1</td>
<td>0</td>
<td>0,7</td>
</tr>
<tr>
<td>State administration and defense</td>
<td>4,5</td>
<td>4,8</td>
<td>5,6</td>
<td>0,8</td>
<td>1,1</td>
</tr>
<tr>
<td>Education</td>
<td>2,6</td>
<td>2,5</td>
<td>2,6</td>
<td>0,1</td>
<td>0</td>
</tr>
<tr>
<td>Public health services</td>
<td>3</td>
<td>3,1</td>
<td>3,3</td>
<td>0,2</td>
<td>0,4</td>
</tr>
<tr>
<td>Other social services</td>
<td>1,7</td>
<td>1,4</td>
<td>1,4</td>
<td>0</td>
<td>-0,3</td>
</tr>
</tbody>
</table>
However the share of hi-tech production of Russia in the total amount of export is very insignificant - indicators of Russia are comparable, perhaps, with the Republic of South Africa – 3,02% and Turkey – 3,44% [5]. And in a total amount of world hi-tech export, presence of Russia, it is possible to tell, in general it is imperceptible as its contribution makes only 0,14% [3].

In the general structure of domestic export by types of production (fig. 2) fuel and energy goods — 70%, including oil and natural gas — 45% traditionally prevail [8].

![Fig. 2. Structure of export of goods from Russia, 2012](http://www.sworld.com.ua/e-journal/J21316.pdf)

So, "the gain of economy of Russia without transition to qualitatively new balanced structure of economy in the next years hardly will be considerable", the professor of economy of University of New York, Nobel prize winner Nuriel Rubini (about it reports NEWSru) considers.

Such branch structure in which the big share is occupied by branches with high extent of processing is thus economically expedient that favorably influences the size and stability of long-term growth rates of economy, first of all owing to generating by them of basic innovations and their diffusion on all economy.
Russia, first of all, needs to increase technological level that the economy was capable to perceive innovations and to master innovative products. Investments into fixed capital as a part of which hi-tech and highly productive the equipment today it is estimated at 25-35% whereas by estimates of experts it is necessary to reach level approximately in 75% are for this purpose necessary [2].

But in a consequence of a resursozavisimost of domestic economy insufficient investment of innovative development (tab. 2) is observed [7]. Investments into research and development and an innovation made in 2009 1,1% of gross domestic product (then as it is necessary, at least, within 3%) of which investment of public sector made 0,5%, and private - 0,6% [1].

**Tab. 2**

**Investments into fixed capital of high-tech industries of the industry of the Russian Federation**

<table>
<thead>
<tr>
<th>Investments into high-tech industries of the industry (HTI)</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>All HTI, billion rubles.</td>
<td>85,8</td>
</tr>
<tr>
<td>All HTI, % to total amount of investments</td>
<td>2,4</td>
</tr>
</tbody>
</table>

Having analysed dynamics of expenses for innovations it is possible to note that the domestic branches which have chosen a rent-oriented vector of development, have no motivation of investment of means in scientific development and researches. The brevity of the chosen strategy doesn't assume expectation of long-term return. Really, investments have to have economic return, but hardly it can arise at the development working model.
It is obvious that the economic model based on high prices of oil and on the cheap western credits, any more doesn't work and can't work. But the effective mechanism of innovative movement of the country isn't developed. The chance of the economy rationalization, provided by crisis, is actually missed. However and the subsequent depression which borders are approximately outlined by the period from 2010 to 2018-2020, favorable time to put demanded tendencies of branch and technological structural shifts, and also for development and introduction of a new wave of basic innovations. In this regard pertinently to remember words of professor Gerhard Mensh: "Innovations overcome a depression" [2].

But while the state has a resource in the form of a natural rent it it will be simple, being covered with fashionable rhetoric about "modernization" and "innovations", "to eat" the remains of this resource. And when resources practically will end, there will be a real danger of growth of poverty, social instability, restriction of possibility of receiving high-quality medical care and educational services, and also decrease in quality of life as a whole.

Also it is quite real scenario of realization of export and raw model in its worsened option.

Actually there are two real models. The first model is an economic collapse after which can come and very heavy, very expensive, very rigid economic revival of Russia, and can not come. The second model is a purposeful carrying out structural reforms, ensuring economic success and economic attractiveness. Certainly, the second model is more attractive.

Crucial importance for economic dynamics and new strategic breakthrough gets transition of domestic economy to innovative type of economic growth.

In our opinion, the following has to become the conceptual priorities conforming to requirements of further advance of Russia in the direction of an innovative vector:

1) further formation of the national innovative system providing needs of the country in new technologies and their conclusion to the global market;
2) search of new sources and forms of innovative activity;

3) formation of system of a "pareto-optimal" combination of all system of economic interests from individual to national and global;

4) development of system of competitive and strategic forms of thinking and action, formation at the population of creativity of thinking and active intelligence;

5) optimum combination of branch and territorial aspects in scientific and innovative and educational process.

As a whole possibly to provide new strategic break for Russia by means of original strategy quite justified now parallel, instead of consecutive regional development of three economy at once: agrarian economy for part of regions, for example, the South of the European Russia; industrial for the Center and the North of the European Russia; information economy for some regions, for example, regions of the European kernel of Russia – Central, North Western, Volga-Vyatka and others, having huge scientific and information potential (scientific research institute, design institutes, higher education institutions, etc.) (fig. 3). At a stage primary information economy is already and the West Siberian region having powerful intellectual and scientific and innovative potential, and also system of operating science cities and prospect of functioning of science and technology park. Probably, it will allow to make a peculiar Russian miracle.

![Diagram](http://www.sworld.com.ua/e-journal/J21316.pdf)

**Fig. 3. Strategy of innovative economic**

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growing of Russia

Therefore, today the question of a future choice for Russia – a choice between innovative or export and raw model – remains open. Though available realities allow to see through a prism of innovative rhetoric commitment to a former course on realization of hydrocarbonic advantages. Also it is quite real scenario.

Instead of modernization and radical innovative changes in society there is an economic degradation which produces intellectual and spiritual degradation. Whereas crucial importance for economic dynamics gets transition of economy to innovative type of economic growth. Other way simply isn't present.

Thus, it is necessary to consider as the global purpose of long-term geoeconomic strategy of Russia creation of innovative economy which defines position of any region in the geopolitical competition of the 21th century. However realities of economic development of our country while are significantly remote from the solution of this strategic task.

References:


THE EVOLUTIONARY DEVELOPMENT OF FOREIGN AND DOMESTIC CREDIT SUPPORT OF THE AGRICULTURAL SECTOR OF ECONOMY

Orel State Agrarian University,
Russia, Orel, General Rodin Street, 69

Owing to a long gestation period, to maintain the reproductive process, agriculture is constantly in need of leveraged investment. The practice of the developed market-economy countries and the domestic experience have shown that the most useful source of replenishment of the deficient financial assets is the system of the credit cooperation in the form of small credit.

As a result of evolution the rural credit cooperation turned into the important part of the credit system, which serves the rural commodity producers, and it contributed to the growth of productive efficiency in the agricultural sector, and on their bases cooperative banks were found, that became leaders in credit and financial system and gained international recognition [5].
The most prominent representatives of this direction are the network of German Raiffeisen-banks, the French banking group Crédit Agricole and the U.S. Farm Credit System, all of which have the three-tier and mixed hierarchical structure.

The German Cooperative and Raiffeisen Confederation (DGRV) incorporates all the cooperative banks, agricultural and industrial producers’ and servicing cooperatives, registered in Germany. Apart from the crediting the current activity of rural commodity producers, they provide fixed capital investment and make investments in construction projects [1]. Germany is an example of a country with a mixed type of agricultural credit, which is characterized by the functioning of the commercial banks and specialized institutions on the credit market.

The credit system, built on the model of Germany, successfully adjusted to the functioning conditions of the rural commodity producers and agricultural credit. This system was recognized as sufficiently effective and it spread throughout Europe with some slight modifications due to specifics of a functioning credit system, the existing legislation and socioeconomic conditions.

On the principles of Raiffeisen-banks the cooperative model in the Netherlands was created. The first local cooperative bank was established in 1896 without the state assistance. Later, on the basis of several local cooperative banks, the first cooperative central bank – Rabobank (Raiffeisen-Boerenleenbank) was created [6].

The important factor in the state regulation of agricultural production in the USA is the functioning of the agricultural credit system (Farm Credit System), which includes different commercial banks such as CoBank, ACB and St. Paul Bank for Cooperatives, insurance companies, three Farm Credit Banks, The Farm Credit Administration and Production Credit Association [2].

The developers of the Farm Credit System legal framework are the authors of the most significant Banking Act, known as The Glass–Steagall Act, which regulates the activities of the entire U.S.A. banking system [7].
In France it is banks and various business corporations, that are engaged in the crediting of the rural economy. The biggest monopoly in agribusiness lending is an agrarian bank Credit Agricole (Mutual Agricultural Credit). Credit Agricole has a three-tier structure, which includes the cantonal, regional and national offices [4]. The Credit Agricole rise happened «from above», i.e. with the state assistance.

In the course of evolution, the growth of the membership, scope of activities, consolidation of the economic status of the cooperatives, they separated from the state structures and the state ceased its funding [4].

A variety of credit institutions types, operating in Europe and in the United States, have their own distinctive features that are presented in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Distinctive features</th>
</tr>
</thead>
<tbody>
<tr>
<td>The USA</td>
<td>Lack of collective responsibility, lack of capital shares among the cooperative members, loans are provided for producing agricultural products, rural inhabitants and manufacturer don’t make investments in the credit cooperative.</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Each member of the cooperative has an equal responsibility, profit is not distributed among the members, but accumulated in the reserve fund, the size of the share is the same for all members, loans for agricultural production do not exceed 5% of the total amount of a loan, most of the capital is formed at the expense of the local population and foreign investors.</td>
</tr>
<tr>
<td>Germany</td>
<td>The size of a share is the same for all members, loans for agricultural production do not exceed 5% of the total amount of a loan, most of the capital is formed at the expense of the local population, the size of a loan depends on the collateral value, but not on the size of a share.</td>
</tr>
<tr>
<td>France</td>
<td>Rural inhabitants and manufacturer don’t make investments in the</td>
</tr>
</tbody>
</table>
The origin of agricultural credit in Russia took place in the early nineteenth century, when numerous prototypes of credit institutions (orphan, municipal, saving- and loan offices, and district banks, etc.) emerged [3].

During the period from 1917 to 1990 the system of agricultural credit has repeatedly been subjected to numerous reorganizations. During the economic crisis, lending to the agricultural sector became risky and unattractive type of banking business. Which resulted in the loss of the important lever of financial support in the form of loans.

The difficult financial situation in agriculture, the growth of mutual defaults provoked «commodity crediting», that is, agriculture received petroleum products, fertilizers in exchange for the future harvests. In 1997 a special fund of concessional loans to agricultural producers was revived (it was abolished in 1992).

Resources were supplied to agriculture for a period of one year with the interest on compensation at the rate of one-fourth of the refinancing rate of the Bank of Russia, to make up for the lack of circulating assets. The Fond «went» not only «through» Groprombank, but also «through» the banks that had not worked with agriculture before.

The 1998 financial crisis exacerbated the situation not only in the real economy, but also caused the collapse of the Russian banking system. This had a negative impact on economic development in general and agriculture in particular.

As a result of such a situation the need to create a fundamentally new system of credit support of rural producers emerged.

To address this issue the Agricultural Bank, which became the leading element of the modern system of agricultural credit, was established in 2000.

Based on a retrospective analysis of the formation and development of the agricultural credit system, stages of its evolution should be allocated (table 2).
Table 2

The main stages of the agricultural credit development in Russia

<table>
<thead>
<tr>
<th>Stages</th>
<th>Years</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>I stage</td>
<td>1803-1814</td>
<td>Formation of credit institutions prototypes (orphan, municipal, saving- and loan</td>
</tr>
<tr>
<td></td>
<td>1814</td>
<td>The first peasant bank is created.</td>
</tr>
<tr>
<td></td>
<td>1814-1882</td>
<td>Creating a network of savings – and subsidiary banks and credit cooperatives, the</td>
</tr>
<tr>
<td></td>
<td>1882-1912</td>
<td>Creation of the Peasant Land Bank, the Noble Land Bank, the Moscow People's Coop</td>
</tr>
<tr>
<td></td>
<td>1922-1923</td>
<td>Creation of a consumer cooperative.</td>
</tr>
<tr>
<td></td>
<td>1924-1959</td>
<td>Creation of the Central Agricultural Bank.</td>
</tr>
<tr>
<td></td>
<td>1932-1959</td>
<td>Selkhozbanki sestablished.</td>
</tr>
<tr>
<td>II stage</td>
<td>1959-1988</td>
<td>Functions of Selkhozbank transferred to the State Bank.</td>
</tr>
<tr>
<td></td>
<td>2000 –up to the present</td>
<td>The State Russian Agricultural Bank OJSC «Russian Agricultural Bank» is established.</td>
</tr>
</tbody>
</table>

The development of market relations in the Russian economy caused an objective need to address a number of issues that have arisen in the agricultural sector because of the imperfect practice of centralized lending to farmers. Limited access to the bank credit resources due to high interest rates on loans, lack of liquid collateral and poor financial condition of borrowers had a negative impact on production and economic condition of agricultural producers and owners of personal subsidiary plots [5].

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From the above reasoning it is clear that there is a need of a new system of credit and financial support for the agricultural sector in the form of credit co-operatives as an alternative to bank lending.

References:
Lyshchikova Y.V.

PERFORMANCE EVALUATION OF MECHANISM OF INCREASING OF CAPITALIZATION OF REGIONAL INNOVATIVE POTENTIAL

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In this report the mechanism of approbation of activities to increase capitalization of the regional economy on the example of innovation potential of the region is considered, indicators of implementation and effectiveness of the use of innovations in the region are calculated.

Key words: region, capitalization, innovative potential.

Introduction. Development and application of strategy to increase the level of capitalization of the region's economy requires a systematic evaluation of the effectiveness of implementation of the proposed measures in the regions, both in terms of increasing economic potential and the effectiveness of its use. Due to the fact that among the components of the economic potential of the region the innovative potential is least-capitalized at the moment [2], as well as the fundamental role of the innovation component in the modern economic development of the region the most urgent task is the assessment of the effectiveness of measures elaborated precisely relative to the capitalization of the innovative potential of the region.

The main science research. To evaluate the effectiveness measures for capacity of regional innovative potential it is proposed to use introduction of innovation ratio, calculated as the ratio of the number of advanced manufacturing technologies used in the region, normalized to the same Russian figure to the number of advanced production technology created in the region, also normalized to the Russian figure. Thus the formula for calculating the author introduction of innovations ratio
where \( C_I \) - introduction of innovations ratio in the region,
\( T_U \) - the number of advanced manufacturing technologies used in the region, normalized to the same Russian figure,
\( T_C \) - the number of advanced production technology created in the region, normalized to the same Russian figure.

This ratio, in our opinion, reflects the impact of measures to enhance innovation capacity in the region. Approbation of the proposed ratio was conducted in the form of the calculation and comparison of dynamics to the level of capitalization for example, Belgorod and Voronezh regions for the period 2006 - 2010. (fig. 1).

![Fig. 1. The dynamics of the introduction of innovations ratio on the example of Belgorod and Voronezh regions in 2006-2010 years.](image)

Comparative analysis of the dynamics of calculated introduction of innovations ratio and the level of capitalization of the Belgorod and Voronezh region over during the analyzed period (fig. 2) suggests a coincidence of trends in the considered indicators.
To evaluate the effectiveness of measures to improve the efficiency of innovation capacity, we propose to calculate the indicator of the effectiveness of innovation in the region as the ratio of the volume of innovative products, works and services in the region, normalized to the same Russian figure, to the volume of internal expenditures on scientific research and development, normalized to the same Russian indicator. This indicator is based on the classic sense of effectiveness as the relationship of the results to the costs associated with them, reflecting the impact of the funds invested in the implementation of scientific research and development and the impact of measures to increase it. Efficiency of innovations ratio is calculated by the formula

$$C_{EI} = \frac{V_I}{E_I},$$  \hspace{1cm} (2)

where $C_{EI}$ – the efficiency of innovations ratio of the region,

$V_I$ – the volume of innovative products, works and services in the region, normalized to the same Russian figure,

$E_I$ - the volume of internal expenditures on scientific research and development, normalized to the same Russian indicator.

Fig. 2. Dynamics of the level of capitalization of Belgorod and the Voronezh region in 2006-2010 years.
Approbation of the proposed ratio was conducted in the form of its calculation and comparison of dynamics to the level of capitalization by the example of Kursk, Lipetsk and Tambov regions for the period 2006 - 2010. (fig. 3).

![Graph showing the dynamics of the innovation efficiency of Kursk, Lipetsk and Tambov regions in 2006-2010 years.](image)

Comparison of dynamics of efficiency of innovation ratio and the level of capitalization of the three regions during the analyzed period (fig. 4) allows to conclude the coincidence of trends in the considered indicators.

**Fig.3. The dynamics of the innovation efficiency of Kursk, Lipetsk and Tambov regions in 2006-2010 years.**
Conclusions and suggestions. Therefore, we can assume that the application of developed measures can enhance the level the capitalization of the innovation potential of the region, including

- a system of support of some critical mass of innovation in the region in line with business needs through the implementation of basic and applied research, as well as by the presence of a transfer of innovation;
- expanding of innovations in low-tech industries, especially in the food processing industry and in the services sector;
- development of innovative infrastructure of universities and research institutions;
- expanding of network of research centers which provide basic and applied research focused on the needs of business formation (initiation) of new, etc.

[1]

will increase the level of capitalization of the regional innovation potential due to its capacity and increased efficiency of its use.

References:

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In this paper we describe a lot of trends which were recorded in 2012. These tendencies exercised influence on the banking system of Russia and determined the system’s development.

Key words: the banking system of Russia, economic growth, tendencies, the Central Bank of Russia, Russian economy.

No radical changes were observed in the banking system in 2012. However, a lot of trends were recorded in 2012 which exercised influence on the banking system of Russia and determined the system’s development. The banking sector in Russia has witnessed appreciable growth in past few years and has continued the trend despite the crisis. Showing resistance to the global economic meltdown, the sector continued to record double digit growth since 2008. [3]
Therefore, one of the main trends is the development of private banks in the banking sector separately from the major banks of Russia, where they have a chance to become leaders.

Credit cards, mortgage, uncovered consumer credits and auto-lending showed high growth rate, which contributed to a bank’s successful performance within the retail segment. It has fostered strong economic growth in this segment. The inflow of funds to the deposits of individuals with the banking sector has significantly increased. The growth of assets at the accounts and deposits of individuals over the month made 2.0% and 20.2% in annual terms. [1]

A downward tendency in the total number of bank institutions was observed in 2012 and reduced number of organizations decreased by 22 and the number of banks decreased by 25. Increasing competition and cruel rules in the banking services market lead to the reduction of the number of banks in Russia.

According to the analysts in 2013 the number of banks will decrease to 870. The banks which don’t have the support of their founders will be forced to leave the market. But, as for the bank branches, on the contrary their number will increase up to 1687.

WestLB Vostok and Absolut are big foreign companies which fled Russian banking sector in 2012. It was a negative tendency that year. They left banking system because it was in the post-crisis period and a lot of foreign banks did not think that they faced high competition. But, Russia's financial market suffered from a shortage of private domestic institutional investors. For example, the life insurance market remained underdeveloped, comprising only 6.2% of insurance premium payments. Private pension funds, held back by a public distrust of financial instruments and a lack of tax incentives, currently have an equivalent of USD 17 billion in management, equal to 0.8% of GDP. Pension reform proposals supported by the government in late 2012 would do little to grow the private pension fund industry. [5]
Russia had very high capital outflow (USD 34.6 billion) in early 2012, which later decelerated to average about USD 12 billion per quarter. In January –September 2012, total net private capital outflows were estimated at USD 57.9 billion.

In 2012 the most popular banking companies in Russia were “Svyaznoy Bank”, “Alfa-Bank”, “Home Credit & Finance Bank”. They showed the best results and strengthened their position in the rating of the country’s banks.

As to the production of consumer goods, sustainable growth was recorded only in food production. Textile and sewing industry, as well as leather, leather goods and footwear production are contracting as compared with the previous year. Given the existing dynamics of the consumer goods production, the proportion of the domestic products is decreasing in the structure of the retail trade resources. It should be noted that in contrast to 2011 this year the share of imported goods in the resources of the foodstuffs retail market has been observed to increase.

Prime Minister Medvedev is particularly committed to building a strong high technology sector in Russia. The country's solid base of expertise in the scientific and mathematics fields, combined with a sizable market and an economy growing faster than most others in the region, have helped entice a series of U.S. firms to make investments in Russia. Roughly a dozen U.S. companies and organizations already have announced their intention to invest in the Skolkovo Innovation Center, Russia's high-tech cluster in Moscow's outskirts modeled on the example of Silicon Valley. [5]

One of the most dramatic events for the further development in the banking sector is the replacement of the head of the Central Bank. Now, the head of this bank is Sergey Ignatiev. S.M. Ignatiev has been the head of the Central Bank since 2002. There were many candidates who could succeed Sergey Ignatiev: first Deputy Chairman of the Central Bank Alexei Ulyukayev, the head of VTB 24 Mikhail Zadornov, the head of VTB Andrey Kostin, the chairman of Vnesheconombank Vladimir Dmitriyev and the former head of the Federal Financial Markets Service, Oleg Vyugkin. Presidential advisor Sergei Glazyev was also named as a candidate to replace Ignatiev. But President
Vladimir Putin nominated Elvira Nabiullina, who is a close political ally and who is now serving as his chief economic adviser, to become the new chief of the Russian Central Bank.

The Russian banking system is very young in international terms, so it is not surprising that after 20 years of reform it is still not perfect. But as the Russian population becomes more finance-literate and gains more experience in the world of credit, competition in the market will gradually become healthier – provided, of course, that the government does not throw a spanner in the works. [4]

Both the economy and banking system of Russia have become an integral part of the global market and, should the debt problems of Eurozone countries persist, there will be another period of turbulence. However, Russian banks, the Central Bank, and governments are better positioned to address the possible crisis today more than ever before. There is a strong argument for a more optimistic outlook for the Russian economy and its banks in the long-term. [2]

References:


In this paper we study the economic and environmental benefits of using suncollectors on the buildings of economy-class.

Keywords: renewable energy sources (RES), sun energy, suncollectors.

From the time being and up to the middle of the 20-th century people were sure that reserves of such traditional energy sources as wood, coal, oil are inexhaustible. The search of alternative forms of energy was delayed for some uncertain future. Under these circumstances renewable energy sources (RES) were treated as resources of future when all the traditional deposits would be exhausted or would become too expensive.

Nowadays we can single out the following reasons that ensured development of renewable energy sources (RES):

- providing of energy safety;
- environmental protection and safety;
- development of world markets of RES, especially in the under-developed countries;
- preserving of energy resources for future generations.

Renewable energy sources (RES) consist of the following forms of energy:
Modern scientific research and their practical application. Vol. 21317

- **traditional**: hydraulic energy, heat energy of coal, wood burning and geothermal energy;
- **non-traditional**: sun energy, wind energy, wave energy, hydraulic energy, new type of biomass energy.

The main advantages of the renewable energy are inexhaustibility and environmental purity. Its use does not change the ecological balance of the planet.

The use of the RES in the Russian Federation is of great importance though we are still in a more advantageous situation compared to other countries. The economic potential of the RES on the territory of the Russian Federation is (in million of tons of equivalent fuel): sun energy 12.5, wind energy – 10, heat of the Earth – 115, biomass energy – 35, energy of small rivers – 65, energy of the low-potential heat sources – 31.5, and total is 270 million. These sources constitute almost 30% of the consumption of fuel and energy resources in Russia, which is 916 million tons of equivalent fuel, so they can be considered as beneficial factors of solving energetic, social, environmental problems in future.

The Rostov Region is fully dependent on the supply of gas and oil from other regions, though it has some small deposits of coal (about 10 million tons). But increase in coal production and power generation requires significant investments. That is why from year to year the question of enhancing the energetic efficiency of the Don Region economy becomes ever still more acute.

The Centre of Energy Saving and Innovative Technologies was founded in Rostov-on-Don. Its purpose is to solve management problems which hold back energy-saving development, to work out the unified methodology and to assist the municipality subjects in realization of different energy developing programmes. The Centre has close relations with foreign partners (especially in Germany) and Russian companies which take part in RES promoting programmes, initiated by Kioto Agreement.
The Administration of the Rostov Region and the above mentioned Centre have worked out the Programme “Energy Saving in the Sphere of Housing and Communal Services of the Rostov Region for the period of 2010 – 2015” [2].

Though the Rostov Region possesses a potential for developing all the types of RES, the most advantages prospects are connected with sun energy. As studies conducted during a number of years show in the towns of Tsimlyansk, Dubovskoe, Gigant and the city of Rostov-on-Don average annual value of sun power is 832Vt/sq.m that makes it beneficial to create systems of transformation electricity into heat.

According to the average day sums of sun radiation on the optimally located surface in the Rostov Region we can observe one of highest values in Russia – about 40 kVt x hour.

The following table also proves favourable prospects of sun energy development in the Southern Federal District:

<table>
<thead>
<tr>
<th>The Potential of the Sun Energy in the Southern Federal District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Potential</td>
</tr>
<tr>
<td>Technical Potential</td>
</tr>
<tr>
<td>Economic Potential</td>
</tr>
</tbody>
</table>

The Opportunity to Provide by Means of Sun Energy

| Electric Power | 420 billion kVt h/year |
| Heat Energy | 1150 million Giga cal/year |

Although development of sun energy in the Rostov Region and the city of Rostov-on-Don is still on the initial stage.

For example, on October, 9, 2009 on the roof of the Electrotechnical College in Rostov the first sun collectors were installed [1]. We have conducted an interview with the Director of the Centre “Sunny Roof”, a teacher of the College Vyacheslav Pankov. He explained that these first sun collectors in Rostov were installed as a promotion by German agency Dena according to the Programme “Dena-Solardachprogramm” directed to the development of world markets [4]. On the roof of the College there are two
suncollectors: a liquid collector and an air one. Their total area is 80 sk.m. During a year of their work 8010 KVT h of energy were received. this energy was used for water heating in the college canteen.

After visiting the Electrotechnical College I have decided to calculate if there an economic advantage of use of suncollectors in the educational institutions.

For my calculation I used the model of a college building with a total square of a roof of 300 sk.m. It is possible to install on its sunny side a collector of 80 sq.m.

I have also used a technique of calculating energy required for heating in the article “Calculation of Heating” [5].

A formula for calculation

\[ Q_h = 100V_t/sqm \times sqm \times K1 \times K2 \times K3 \times K4 \times K5 \times K6 \times K7 = V_t \]

where

- \( Q_h \) is heat loss for heating of the building per hour,
- \( V_t/sqm \) is specific value of heat loss (65-80 Vt/sqm), which consists of heat flow through windows, walls, ventilation and a ceiling,
- \( sq.m \) is a building space,
- \( K \) means coefficients (see [5]).

Taking into account the ordinary state of our educational buildings, their windows and lack of special energy-saving system as well as the length of the heating season from November, 1-st till March, 31-st, I calculated that the required amount of energy is 18932 kVt. It is more than 2.5 times more than energy received by two suncollectors. Their cost is still unaffordable for educational establishments and private houses.

But if we want to preserve our planet for future generations we are to consider the favourite aspects of such new technology for Russia as suncollectors and try to make them more popular among our population.

References:

1. The first Suncollectors in the Don Area / http://www.161.ru
2. The Programme of the Administration of the Rostov Region “Energy Saving in the Sphere of Housing and Communal Services of the Rostov Region for the period of 2010 – 2015”.


4. The Sun Roof – Rostov-on-Don // www.solarrostov.ru


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Vorobyeva O., Tokareva G.

PROFIT MAXIMISATION AT AN ENTERPRISE

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Summary: The article presents types of profit, provides the subject matter of different methods of profit maximisation, reveals the main ways of profit maximisation in the short and longer terms.

Keywords: profit, gross profit, balance profit, net profit, normal profit, economic profit, accounting profit, profit maximisation.

Profit is a source of material welfare of members of the labour collective, social and production development. That is the reason why every entrepreneurship goes for profit maximisation by any way.

Profit is the amount of revenue left over after all the expenses for production and business operations have been subtracted. Income express the purpose of business and is taken as the main indicator of its performance (efficiency) describing the excess of income over expenses (input). Every enterprise has to create a special system of management that fits its internal capabilities to produce high quality products in accordance with customer expectations, sell these products, so that enterprise derives income, to make inventories, through which the products are manufactured in the right
We can distinguish the following types: gross profit on sales, balance-sheet profit, profit for taxation, net profit, real profit, marginal profit, normal profit, economic profit and accounting profit.

Profit is calculated by the following formula:

\[ D - R = P, \]

where \( D \) – income, \( R \) – costs, \( P \) – profit. Although profits calculation can be more complex.

Regular profit is the primary goal of any enterprise. That is the reason why the supreme task for all the enterprises is profit maximization. It means that it is necessary to develop a strategy for systematically maximizing profits and minimizing costs. Such problems are multifaceted, so their solutions requires a special approach.

Profit maximization is a determination of special direction made by a company, a business, an enterprise to make maximum current profit through reasoned choice of manufactured or sold goods, its volume, supply price, branch, area of sale, partners, etc.

Profit maximization is related to the process of increment of business profit. This means that the calculation should use limiting values: marginal profit, marginal revenue and marginal costs. Modern market economy imposes significant requirements on enterprises and products produced. Enterprises have to maintain their positions and make maximum profit. Therefore, in modern conditions enterprises produce different tactics to attract consumers and investors.

So, there are several ways to maximize profits: reducing costs, increasing product prices, increasing sales volumes. The fastest profit growth rate can be obtained by the first two methods, but the most long-term results can be achieved through sales growth. But, nevertheless, we can not increase the volume of sales by reducing prices. It can have a disastrous influence on the entire business. No one should give up any improvement because it is too small. The smallest modification in the right direction can lead to effective increase in profit. The main task for any leader is to involve their
employees in the process of profit maximization, to let them know that their salary depends on the value of the company’s profits - for example, a part of their salary is composed of some percentage of the size of the profits.

Improvements help increase profits for the long, not for the short term. Improvements most effectively help to improve the operation of the enterprise, and this helps to maximize profits.

Therefore, in order to increase profits we can propose the development of the following activities: modernization of production; sales promotion that allow you to attract the attention of consumers; attraction of new suppliers; organization of tenders; introduction of a new product, expansion of the boundaries of distribution; focus on the more numerous class of society; matching the price and quality; increase in productivity; providing consumer with company products, in accordance with agreements and market demand; carrying a large-scale and effective policies in staff training; decrease in non-operating expenses and losses; stable increase in production rate and enterprise income.

It is especially important to pay attention to the methods which allow redistributing income and expenses.

Thus, it is possible to maximize operating income, i.e. income from operations.

The financial stability of the company confirms the great importance in operating profit. Mostly, these methods are ranked as the second group, but some of them are also in the first. Thus, the write-off of interest on loans for the expenses can increase the gross margin.

The amount of profit should be optimized rather than unconsciously increased. Therefore, initially one should determine the optimization problem. If it is a single loan, one should maximize profit for the period, representing a favorable trend in the enterprise development.

If the main purpose is to increase the capitalization of the company, you have to be more careful with the methods that redistribute income between periods. They are less mobile because of the requirement of consistent application of accounting policies.
The fact is that if one maximizes the revenue the current period, it may be significantly reduced in the following periods. And this trend will be considered as a negative one and can lead to fall of stock.

For example, interest on loans should be consistently written off to period expenses or capitalized. If it was decided not to raise income and write off the interest on the costs in the accounting period, in the following period this decision can not be changed without special justification. And usually it is no easy to find this one.

To give the long term positive growth rates one should make focus on means that will increase income and decrease costs. For example, the sale of fixed assets with a subsequent purchase or reclassification of investments from trading in available for sale and back. Such methods allow adjusting the profit of a new period according to the needs of an entrepreneur.

The implementation of these proposals will significantly increase the efficiency of management of the company’s profit and will contribute to the profit maximisation that is a priority for any company.

References.
7. Semenov V.M.; Economy of enterprise; Piter; 2007.
EVALUATION OF REFORMS IN EDUCATION FOR A SOCIO-ECONOMIC DEVELOPMENT OF THE REGION

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It is described the process of economic-mathematical modeling in education to research the influence of the Unified state exam (USE) on a socio-economic region development.

Key words: university, region, the Unified state examination, factor analysis, education leverage, anticipatory education function.

The transition to a knowledge economy requires systemic analytical researches: the list of participants, the types and the extent of their interaction, and the analytical tools for the quantitative estimates. The develops of researchers in this area is similar in
different parts in the world: the Triple Helix model (TH-model) «University – Business – Power» by the Stanford University professor H. Etzkowitz [3] and Russian research «University – Science City – Region» (USR-model) [4]. In the TH-model and in the USR-model the educational element is very important. The TH-model is based on the fact that we can build a new economy with the help of universities, where innovation resources concentrates. The USR-model is based on the principle of the anticipatory education function of: the education development rate should exceed the economy development rate. The H. Etzkowitz’s-model has deep the meaningful interpretation of the idea, the USR-model has mathematical tools for the economics modeling. The results of the USR-model modeling can be combined with the results of the TH-model. The TH-model given accents on the institutional objects, the USR-model given accents on the territorial objects. It can be supposed that the models complement each other and, in particular, allows to use different combinations of elements for new researches.

We suppose that in the Institutional – Territorial «State – University – Region» model the power have an impact on the university by the introduction of the USE in 2001, and across the university influences on the socio-economic region development.

The modeling process consists from identifying the object, the subject, purpose and use of mathematical methods, that realized in the process of building the system.
Fig. 1. The Scheme for construction and use of the economic-mathematical model of the particular socio-economic object

The research focused on the educational and economic indicators meaningfully associated with the USE-institution [6] – [8]. The factor analysis was used for the Regions selection and the following parameters was taken: the USE-average results of students entered to the university, the number of students enrolled on budgetary places, the difference between the USE-average scores in 2011 and 2012, the faculty number, the personal computers number used for teaching, gross regional product per capita (GRP) and the turnover of small manufacturing enterprises. Two groups of regions are selected in two factors: Saint-Petersburg, Leningrad region, Moscow, Moscow region; and seven regions of the Central Federal District (CFD) – Ryazan, Voronezh, Tula, Ivanovo, Lipetsk, Tambov and Smolensk regions. We investigated St. Petersburg and the Leningrad region, because of significant cultural interest, and they area three times less than the other the world super-agglomeration of the first group [9].

Next, we research the anticipatory education function to determine the USE-influence on the socio-economic development. We used the definition of leverage as a
elasticity measure (the ratio of the education growth rate to the economy growth), \[ E = \frac{\Delta Y / Y}{\Delta X / X} \]

where \( Y \) – the number of graduates working in the specialty, \( X \) – the GRP. The anticipatory education function is, if the education leverage has a value greater than one [2]. The inflation is taken into account in the calculations.

The upward trend is for the situation before the USE-introduction (the period 1998 – 2001), the downward trend is for the situation after the USE-introduction (the period 2007 – 2010), this goes on today. This is a typical situation for St. Petersburg and the Leningrad region, for the number of CFD areas, for the University «Dubna» Moscow region. We made a comparison with the earlier results for the University «Dubna» [4].

It can be concluded that, unfortunately, until the USE introduction had a negative. Perhaps a positive USE introduction impact has not yet manifested itself.

This method results are preliminary, it is important to carefully justify the analyzed parameters and possible casual factors. Another important factor is the socio-economic processes inertia, perhaps, not enough time for the economy to «feel» the USE effect. In this case, the work should be considered the starting point of the research in this direction.

References:


4) E.A. Pakhomova Methodological and instrumental framework for the assessment of influence of the university town of science on the effectiveness of
We investigate advancing education function and define the roles for business and education for dynamic bilateral interaction model at macro- and microlevel.

Key words: triple helix model, university, business, institute, macrolevel, microlevel, leverage, driving force.

The institutional economic relations inside and between public institutes – the state, business, education – can be described by the Triple Helix model (TH-model), offered by G. Itskovits [1]. Historically known ways of social and economic development such as command and market models which «represent in effect different sides of the same coin state and business interactions», so-called «double spirals». In the market model the leading role is played by business; in command model the state acts as the engine for
scientific community and the enterprises. But in these «double spirals» there is no third intermediary element (the third spiral). Thus so there is a conflict between two existing institutional spheres [3]. Because of absent of the third element the whole system become instable. This instability can be eliminated with addition of the third element – education institute called as «university» in the TH-model.

According to the TH-model spirals have non-equal roles: usually one of them is a driving force or «organizer» of innovations and other spirals twist round it. The institute which is carrying out a role of the organizer in the TH-model and also its roles can change over time, and then leadership will pass to the other component of the TH-model. In the conditions of knowledge economy leadership has to pass to a «university» spiral. Therefore including a «university» element in «double spirals» is represented as not deprived of sense.

We considered the calculation of leverage at macrolevel for Russia and Germany as the bilateral interaction «University-business (economy) ». The object of research is education in Russia and Germany. The method which was used is research of advancing education function.

In this work the leverage is understood as the ratio of the education growth rate to the economy growth. We can see advancing function of education if the leverage is more than unit. In this case the spiral «university» is a driving force, a spiral «business» is auxiliary one.

Let’s designate the economic indicator through $X$ and the educational indicator through $Y$. Then the leverage indicator $E$ calculates as follows: $E = \frac{\Delta Y}{Y} / \frac{\Delta X}{X}$ . For leverage research at macrolevel (microlevel) we used follows indicators: $X$ – gross domestic product (GDP) per capita, $Y$ – the number of higher school’s students. Calculation of leverage is carried with inflation influence [2].

Calculation’s results show us a depression of the sphere «education-economy» for Russia and stable but not ideal for Germany as there is no stable excess of «unit» that is advancing. There are the following leverage tendencies: downward for Russia, upward for Germany with the value of leverage exceeding «unit» in 2008, 2010, 2011. We interpreted negative values of leverage. In 2007 there is a decrease in number of students (relative recession of an educational indicator) and at the same time growth of GDP in comparison with previous year (a relative gain of an economic indicator) in Germany. For Russia in 2009 we had negative value because in this year there was decrease in number of students and growth of GDP while in Germany there is a decrease in gross domestic product and increase in number of students. In 2011 sharp emission on leverage is explained by growth in economy of Germany to slower, than increase in number of students. For Russia at same year there is decrease in number of students and increase on gross domestic product indicator that leads to negative value of leverage.

For the analysis at microlevel we chose Moscow and St. Petersburg as the most developed cities of Russia which economy sharply differs from economy of other regions. There are results of leverage calculations in table. 2.

Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow</td>
<td>0,154</td>
<td>0,054</td>
<td>-0,007</td>
<td>0,030</td>
<td>10,294</td>
</tr>
<tr>
<td>St. Petersburg</td>
<td>0,133</td>
<td>0,020</td>
<td>-0,010</td>
<td>0,295</td>
<td>2,341</td>
</tr>
</tbody>
</table>

The leverage for Moscow and St. Petersburg shows us a downward tendency during 2006-2008 and upward in 2009-2010 with «unit» excess in 2010.
Despite the value of leverage exceeding unit, in this case it is impossible to speak about advancing education function: in calculation of this indicator for 2010 year negative absolute values are received. Rate of decrease in number of students is more than rate of decrease in GDP therefore sharp emission on leverage for both capitals is observed.

Thus, in Germany models of bilateral interaction the driving role for the last years is played by education institute. There is the opposite tendency in Russia: universities play auxiliary, and business – a driving role. The same is true for the capitals. If the rates of education development exceed the rates of economy development (leverage effect), an education will be the engine of economic development.

**References:**


**Sytnik O. E.**
ASPECTS OF ACCOUNTING INFORMATION ON COSTS FOR THE IMPROVEMENT OF AGRICULTURAL LAND

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Introduction. Economic reform in the agricultural sector, associated with the transfer of agriculture with the administrative and management planning to a free market basis, has had a direct impact on the entire system of land relations. In the process of economic reforms in the system of land relations were formed and were developed entirely new objects of land relations in the form of agricultural land, with the ability of the free market turnover, and new actors in the form of legal and natural persons authorized in the prescribed manner the rights of use, possession and disposal of land.

Earth as a natural object and natural resource occupies a unique position in the whole system of business people and society as a whole, due to its nature and not reproducible multipurpose. The subject of land relations is a plot of land - part of the earth's surface, the boundaries of which are described and certified in due course. The problem of accounting land is of paramount importance, being decisive. Thus, there is an objective need to adjust the focus areas and accounting practices of land assets.

Inference. Earth, as the object of accounting, was treated in ancient Greece. A method of accounting of land was described in a treatise Luca Pacioli "On the accounts and records." In the last quarter of the XIX - early XX century in Russia was carried out accounting of land, the scientists aim was to calculate the result in crop activities in the context of each crop rotation, fields and cultures, indicating that sufficient development of his technique.

Plots of land, in accordance with paragraph 17 of AR 6/01, "Accounting for fixed assets" refers to assets, consumer properties over time do not change. However, very often, agricultural organizations are faced with situations where it is necessary to carry out work on land reclamation, clearing fields of tussocks, stumps, boulders, drainage,
irrigation, etc., on the artificial restoration of topsoil. That is, the improvement of agricultural land can take the form of a radical improvement or remediation.

Under the current Today the legal framework for accounting the amount spent on rehabilitation of agricultural land can be taken into account in prepaid expenses (account 97 "Prepayments"), operating costs, or to write off against the allowance for future expenses.

Agricultural organization may obtain land on which before using it in the main activities required to conduct remediation activities. In this case, the cost of remediation (for example, the cost of materials, the cost of reclamation works contractors, the salary of their own workers, etc.) can be recorded as prepaid expenses, similar to the cost of training a new production (§ 9, 19 AR 10 / 99 "Accounting Organizations"). These costs, in accordance with the requirements of the Federal Law "On Accounting» № 402 - FZ accepted accounting on the basis of source documents (eg, requirements, invoice, certificate of acceptance and transfer of work performed, payroll, etc.). Calculation of the costs of site restoration will be reflected accounting entry Debit 97 "Prepayments" Credit 10 "Materials" (60 "Payments to suppliers and contractors", 69 "Settlement of social security and welfare," 70 "Payments to staff on pay", ...).

In the future, the costs of site restoration, recorded in the accounting records in prepaid expenses should be written off, which is issued debit account 20 "Primary production" Credit 97 "Prepayments". The order of writing off expenses related to several periods agriculture organization shall have the right to set their own. Thus, these costs can be written off evenly over the period, approved by the head of the economic entity. The selected option write-off of deferred expenses must be secured in the accounting policy for accounting purposes. Such is the requirement of Paragraph 4, paragraph 8 PBU 1/2008.

As part of the running costs of agricultural organizations have the right to take into account the costs of restoration of land damaged by natural disasters or other emergencies (eg fire, flood). In this case, the cancellation costs will be reflected
accounting entry Debit 20 "Primary production" Credit 10 "Materials" (60 "Payments to suppliers and contractors", 69 "Settlement of social security and welfare," 70 "Payments to staff on pay", ...).

If land reclamation agriculture organization will hold after the asset is in operation, the amount of future expenses should be regarded as a provision and to reflect on the bill excluding accrued expenses (account 96 "Provisions for liabilities"). The expenses for impairment in accordance with paragraph 8 PBU 8/2010 are included in the price of the asset.

In the event that during the reclamation works harmed parcel of land, the obligation agriculture organization of the remediation of the site should also be considered as a provision by which you want to form a reserve for future expenses. But in this case, in accordance with paragraph 8 PBU 8/2010, the amount of the reserve will be treated as an expense from ordinary activities.

In this case, the provision charge for the upcoming restoration of land will be reflected in the accounting accounting entry: Debit 20 "Primary production" Credit 96 "Provisions for future expenses." To account 96 "Provisions for liabilities" in our opinion it seems appropriate to open a special sub-account "Accrued reclamation."

Write-off costs of reclamation of land (cost of materials, payment of work performed by contractors, their employees salary working for the restoration) due to the allowance reflects accounting entry: Debit 96 "Provisions for liabilities" subaccount "Accrued reclamation" Credit 10 "Materials" (60 "Payments to suppliers and contractors", 69 "Settlement of social security and welfare," 70 "Payments to staff on pay", ...).

As for the radical improvement of land, the agricultural work such organizations should consider as part of capital investments.

Classification and a detailed list of works that relate to the work on the radical improvement of the land is given in paragraph 27 of the Methodical recommendations.
on accounting of investments approved by the Ministry of Agriculture of Russia October 22, 2008.

At work for a radical improvement of land have to be made up of design and construction documents. All costs and inventory and no inventory nature on land reclamation should be reflected in the account 08 "Investments in non-current assets" subaccount 08-1 "The acquisition of land and capital costs of land reclamation" (paragraph 27 of the Methodical recommendations on accounting of investments approved by the Ministry of Agriculture of Russia October 22, 2008).

Upon completion costs no inventory nature are to increase the value of improved land, and the nature of the costs of the inventory, as well as uncompensated costs to radically improve the leased land counted as a separate inventory item. Amortizations of indigenous land improvements (such as fixed assets) are allocated to the cost of growing crops on the land.

**Literature:**


In this paper I describe about stimulation of heat tariffs in Ukraine and the EU. I analyzed the current legislation of Ukraine and the European Union directives regarding these issues. Also I have provided some guidance regarding the implementation of The Directive 2012/27/EU.

Key words: economy, the tariff, heat energy, heating, saving of energy

The scarcity of fuel resources and high energy prices and environmental aspects of traditional fuel resources require special policy for production and consumption of energy in general and thermal energy in particular. The energy policy in developed countries is based on energy saving. These countries are looking for the new technologies for production and transportation of electricity and heating as well as methods of economic influence on producers and suppliers of energy to consumers. In the European Union there are directives which oblige member states to invest in energy saving projects. Return of investment on such projects is achieved through energy costs saved as a result of project implementation. Furthermore, these directives introduce “incentive tariffs” for energy saving by consumers.

Regulations that define methods and rules of formation and adoption of heat energy tariffs for consumers are one of the most effective methods of economic impact on producers, transmitters of heat energy and heat energy suppliers to consumers. These regulations play a special role in creating conditions for energy saving and efficient usage of thermal energy by consumers in Ukraine, where centralized heat supply is used.
At present, tariffs for heat energy in Ukraine are regulated by such major public documents:

- "The order on tariffs formation for heat energy of production, transportation and providing of services of central heating and hot water" approved by The Resolution of the Cabinet of Ministers of Ukraine dd. June 1, 2011 N 869 "On ensuring a common approach to setting tariffs for housing and utility services" (hereinafter referred to as the “Order”)[1].

- The Resolution of the National Commission for the State Regulation of utilities dd. 02.11.2012 № 357 "On Approval of the Methodology for the tariffs formation for transmission of heat energy with main and local (distribution) heating networks on the basis of incentive regulation” (hereinafter - the “Methodology”) [2].

These two documents must together ensure the implementation of government policy to encourage members of the process of production and consumption of heat to rationally use energy resources. Both documents contain some useful measures of regulation and promotion to energy efficiency.

For instance, the Resolution of 01.06.2011 № 869 includes:

- introduction of a two-rate tariff for heating payment to stimulate energy consumers to use optimally sufficient heat loading and increase the use of thermal energy in production in order to reduce the proportion of heating expenses in the total cost of production;

- setting norms for planned expenditures, including norms for specific consumption of energy resources and loss of thermal energy in production and transportation to consumers. This stimulates energy companies to lower actual costs in order to generate additional income;

- provisions under which funds received during the term of tariffs from the implementation of energy saving measures remain in energy company.
The Resolution of the National Commission for the State Regulation of utilities dd. 2 November 2012 № 357 includes such principles of incentive regulation of tariffs for heat energy:

- setting a performance indicator that reflects the targeted annual reduction of inefficient controlled operating expenses;
- incentive regulation of the estimated useful lives and of the methods of depreciation for assets;
- introduction of the service quality index - the task of gradually improving the reliability of service to transmission of heat energy;
- introduction of regulatory norm of income (separately for the regulatory asset base imposed to move to incentive regulation, and separately for the regulatory asset base, imposed after the transition to incentive regulation);
- setting of the target index of heat losses in networks;
- introduction of the target index of unit cost of electricity for industrial needs;
- introduction of the index of smoothing for required income;
- calculation of profit as income on the regulatory framework of income.

These indicators are designed to encourage businesses to save energy, reduce overheads and replace outdated assets by attracting investments in accordance with the approved investment programs.

However, if the Order has some real incentives for consumers and producers for saving of energy then the Methodology contains a large number of indexes which must be planned by the technical and economic departments of companies. With this regulation, the companies may be left without funds which they get from energy-saving measures. Furthermore they may be charged additional fines for non-fulfillment of one of the large number of these indicators. Introduction of incentive regulation of transportation tariffs (RAB) for thermal energy has some other drawbacks.

Set performance indicators that are designed to encourage energy manufacturers and transporters to the efficient use of resources and decrease in tariffs for heat energy.
may result in reduced security of heat supply system due to limited funds of energy companies and increased fines paid to tax authorities in case of exceeding the level of financial costs for purchase of heat energy to compensate thermal losses in the distribution network. Thermal losses in some cases may exceed regulatory limits due to reasons independent from the power companies. Thus, the value of thermal losses depends on temperature conditions and on length, diameter and quality of material of pipes. That is, the established indicators do not always contain the right incentives. Also the requirements to reduce expenses and non-regulated losses by 5% annually may lead to the absurd claims to companies. European countries determine in such cases the maximum size that must be achieved for the entire regulatory period - few years, i.e. norms show only trends but do not contain specific requirements. The term “income on the regulatory framework of income” used in the Methodology, is nothing but profit, defined as in most developed countries, depending on the capital structure and the need to pay dividends and bonuses to shareholders. The scheme of tariffs, which is outlined in the Methodology, reflects the overall scheme "cost + profit on the regulatory framework of income". It is aimed at encouraging energy companies to reduce costs and to encourage investments in this sector.

The disadvantage of this regulation is that a policy aimed at stimulating the reduction of production and transportation costs of heat energy may be unfulfilled and policy of planning payments to investors regardless of the outcome of investments will only lead to a direct increase of tariffs for thermal energy.

Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Principles and methods of incentive regulation through energy tariffs</th>
<th>Purpose</th>
<th>Positive effects</th>
<th>Negative consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Setting norms for technical and economic parameters</td>
<td>To set tariffs for thermal energy by technically sound standards</td>
<td>Incentive to reduce the actual values in order to generate additional income</td>
<td>No</td>
</tr>
<tr>
<td>2.</td>
<td>Profit is calculated given</td>
<td>To attract</td>
<td>Guaranteed refund for</td>
<td>Opportunities for</td>
</tr>
<tr>
<td></td>
<td>the necessary benefits associated with the implementation of investment projects</td>
<td>investment in thermal power sector</td>
<td>investors with interest paid</td>
<td>involvement of inefficient investment</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Payments at two rate of tariff's scheme</td>
<td>To stimulate consumers to determine the optimal load and use of thermal energy in order to reduce the total cost of a unit of heat energy</td>
<td>Ensuring of payment of fixed costs regardless of the amount of heat energy</td>
<td>Increasing the cost per unit of thermal energy in the case of reducing the overall level of consumption of heat energy.</td>
</tr>
<tr>
<td>4</td>
<td>The use of funds that were received during the term of tariffs as a result of the implementation of energy efficiency measures</td>
<td>To stimulate enterprises to conduct energy saving measures</td>
<td>The use of these funds to further promote reduction of specific consumption of energy and other material resources, recovery of assets to stimulate employees and other purposes in accordance with the law.</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>The introduction of a number of performance indicators and regulations to reduce costs and losses of heat energy</td>
<td>To set liabilities for heat energy enterprises to reduce costs and losses</td>
<td>Reducing the cost of specific tariffs for heat energy and improving energy efficiency and heat energy</td>
<td>Possible sanctions on noncompliance these performance in case independent from enterprises reasons</td>
</tr>
<tr>
<td>6</td>
<td>Accounting of the heat losses as financial costs to purchase additional quantities of heat</td>
<td>Estimation of heat losses in financial terms</td>
<td>Opportunities of financial impact on thermal power companies</td>
<td>Increased financial penalties in cases independent from energy companies activity</td>
</tr>
<tr>
<td>7</td>
<td>Planning of profit as income on the regulatory framework of income</td>
<td>Legalization principles of generation of profits in accordance with principles of</td>
<td>Guarantee of payment to any investors</td>
<td>Increase of the heat tariff</td>
</tr>
</tbody>
</table>
The overall result of the introduction of such regulation is the increase in tariffs for heat energy to return any investments and interest payments to investors. Consumers as a members of processes of regulation can be only payers without choice. That is a RAB-regulation of the heat tariff lies in two mutually independent processes:

1. formulation of tasks to reduce cost of heat power - for energy companies.
2. setting of high levels of tariffs that include a guaranteed payment for any investment - for investors. (Figure 1)

**Figure 1. RAB-regulation of tariffs for Ukraine**

Thus tariff system for thermal energy in Ukraine has only one incentive tariff for consumers, a two-rate tariff. This stimulating tariff first appeared in 90s as a result of research of Kyivenergo conducted with the IBRD[6].. As a result of the research a new form of incentive tariffs, consisting of 3 or more rates were proposed. Later these offers were simplified to the form of two-rate tariff due to the fact that at that time the Law "On Heat Supply" that established three stages of heat supply was not yet adopted. The method of determining of this tariff was published by the authors in the energy industry magazine in 1997.

New form of RAB-regulation of tariffs is nothing more but regulation of investments through increase in tariffs. However, such increase does not guarantee a return of funds to investor. Due to other reasons (non-payment due to high tariffs), the company may not have sufficient funds for actual payments to investor. This form of
regulation was supported in the energy sector of Romania. It is centralized regulation of economic processes in companies. However, this is contrary to market principles.

Research of current state of regulation of energy conservation in northern European countries that use the centralized heat supply for consumers and review European Union documents show that the methods of state regulation of energy in Europe include a huge range of instruments of impact on all participants of processes of heat supply.

They include the following:

- using of technical instruments of impact to encourage the development of joint production of electricity and heat, the development of new heat sources including alternative;
- using of economic instruments to form the cost of thermal energy: economic methods of cost division for joint production of heat and power, obligation for energy market to buy electricity from Combined Heating and (CHP) at their price and other measure;
- introduction of new forms of investment agreements that are funded by the resulting saving resources;
- introduction of settlement with investors through shares, securities and the share of newly created assets;
- different forms of tariffs and payments for consumers;
- create of funds to guarantee the return of investments to the energy sector and others.

Also, European countries regularly carry out calculations and compare of different options of district heating (DH) and individual heating. Only if district heating is more profitable, then payment for connection of the costumer to district heating is the percentage of the economic effect of using DH.

Many countries which have district heating systems encourage the development of a combined heat and power. Such production is using all the benefits of the combined production of the electricity and heat. Several countries including the USA, Finland,
Denmark, the UK widely use economic methods of cost allocation between different activities that have no such restrictions as technical methods of distribution of fuel costs that are used in Ukraine.

EU countries by performing the EU directive are using special types of contracts for the implementation of investments in the energy sector that are funded by the received economic benefits. These investors are interested in the results of implementation of investment projects. Their regulators as opposed to Ukrainian leave the entire savings of funds from the implementation of investment projects to energy companies for making payments to investors. Implementation of EU Directives in relation to the development of common financial market EU countries also includes use the settlement with investors with payment through securities of companies. This saves money and such cases in the investment sector don't lead to an increase in tariffs for thermal energy for the consumers.

Development of marketing science in the world also has positive effect on the formation of different types and forms of heat tariffs that really provide the optimal choice of options for all stakeholders heat supply. Individual approach to each customer or group of customers (delivery of a steam, heat supply for heating or hot water) provides the possibility to define different tariffs for different consumer groups to allow for the possibility of effective payment.

Formation of single- and multi-rate tariffs affects consumer behavior. So, multi-rate tariffs that have both constant rates and variable rates must motivate consumers to increase their own production in order to reduce the overall cost per unit of production. Setting of tariffs for heat energy, depending from the volume of pipeline offers consumers think about what he diameter need pipeline to ensure optimal heat supply. This encourages to reducing the cost of laying pipelines and to save heat loss in the future. Setting of tariffs for thermal energy supply based on the number of consumers leads to saving human resources and promotes the introduction of modern methods of accounting for quantity of consumed heat energy and payments.
Fig. 2. Forms of state influence on the regulation of energy efficiency that are made by the EU

All these methods of state regulation are carried out within the overall cost of heat and regulations that do not change over 3-5 years to use enterprise funds derived from the implementation of energy efficiency measures for payments to investors.

The methods of state regulation of energy saving measures in the European Union and Ukraine are significantly different. Regulation in European countries is within the approved general tariffs, aimed at increasing efficiency of energy consumption and involves all participants of heat supply. To the contrary, the new methods of price regulation in Ukraine concern only investments and guarantees of repayment to investors regardless of the actual outcome of such investment.
If we are a civilized European country, then methods of regulation need to be European. In accordance with provisions of the Directive 2012/27/EU member states of the EU shall carry out a cost-benefit analysis covering their territory based on climate conditions, economic feasibility and technical suitability of district heating and individual heating. A comparative analysis of using district heating or individual heating can be an important step for Ukraine in the fight for effective use of thermal energy. Setting tariffs for transmission heat energy as payment for the capacity of pipe that supplies heat is another strong motivating factor to save of heat energy. Such tariffs for heat transporting completely will reflect optimal demand for reliable heating. So reliability of thermal networks is characterized by such indicators (according to p.7.4.4. "DBN B.2.5-39: 2008. Engineering equipment of buildings and structures. External networks and facilities. Heating Networks")[3]):

a) maximum permissible length of pipelines;
b) adequacy of diameters pipelines;
c) sequence of repairs and replacement of pipelines.

The formula of determining of heat losses during transport of heat energy includes not only effect from temperature regimes, but also volumes of pipeline that affect these losses too. So, heat losses networks for underground non-ducted laying of pipelines $Q_{6,к.п.}$, Gcal, defined by the formula (according to the project "Methods of rationing fuel and heat energy to produce and transport, consuming heat for heating, ventilation and hot water and household needs of homes and public buildings in Ukraine")[4]:

$$Q_{6,к.п.} = \sum q^i_{6,к.п.} \cdot l^i_{6,к.п.} \cdot \tau \cdot 10^{-6} \cdot \beta$$

(1)

where ,

$q^i_{6,к.п.}$ - specific heat loss of 1 m heat network from heating pipe of certain diameter, kcal / m • h;
\(l_{6.к.п}^i\) - length of heating pipes certain diameter, m;

\(\tau\) - term of work of heating network in the billing period, hours

\(\beta\) - coefficient of local heat losses, taking into account the loss in reinforcement, fixed supports and compensators.

Also, the main cost item for repair of pipelines depends on length and diameter of the pipe.

Considering all these factors we can say that values of the capacity of pipelines is a determining factor in the cost of transmission thermal energy to the consumer. Therefore formula of annual tariff for transporting thermal energy to the consumer \(T_{tp}\) might look like:

\[
T_{tp} = \frac{D_{tp}}{\sum_{i} V_{is}^i}
\]

(2)

where,

- \(D_{tp}\) - total planned income required for transmission all heat energy through the year.

\[
\sum_{i} V_{is}^i
\]

- is the sum total of all capacity of pipings required for all consumers.

And the annual payment for the transportation component of each consumer (Sopl.) looks so:

\[
Sopl = T_{tp} * V_{is}^i
\]

(3)

Where,
- V’s- capacity of pipeline system to supply heat for i-consumer, which is calculated as the sum of the individual capacity of piping and part of general conduits, which corresponds to declared maximum heat load during this years.

Such definition of payment of the transmission of heat encourages both sides to implement clause of Directive2012/27/eu regarding creation of 'economically justifiable demand'.

This formula of payment of the transmission of thermal energy to the consumer can be supplemented with indexes of heat-conducting qualities on pipelines.

The tariff of transportation of heat energy is established in different countries of EU in different ways. In most countries, it is installed depending on the length of pipelines, on their diameter, the required maximum load, etc. This is stimulating tariff which encourages consumers to choose the energy efficient systems of transmission of heat.

Yet another rate tariff for heat is payment for supply of thermal energy. It is less dependent on the amount of consumed heat. The cost of this service is mainly influenced by the following factors:

1. availability of electronic methods of accounting consumed heat. ‘Smart metering system or ’‘intelligent metering system’

2. numbers of staff involved in the supply
3. method of calculations with consumers.

It is important to choose the right unit costs for supplying heat to determine the tariff for these services.

Thus, the total amount of monthly payment of every consumer has at least three parts:

1. payment for heat production;
2. payment for transport of thermal energy;
3. payment for provider of thermal energy
The Directive 2012/27/EU also contains recommendations for the use of additional stimulus in the application of tariffs for energy. According to ANNEX XI “Network or retail tariffs may support dynamic pricing for demand response measures by final customers, such as:

(a) time-of-use tariffs;
(b) critical peak pricing;
(c) real time pricing; and
(d) peak time rebates.”[5].

**Conclusions:**

Ukraine tries to integrate into the European Union. Given this, Ukraine should keep pace with the modern world and apply modern methods of state regulation of heating systems and energy efficiency. So it would be advisable:

- to implement the Directive 2012/27/EU regarding carrying out of a cost-benefit analysis covering territory based on climate conditions, economic feasibility and technical suitability of district heating and individual heating for all customers;
- to implement the Directive 2012/27/EU regarding introduction of a new kind of investment contracts ‘energy performance contracting’ and to guarantee the refund of money to investors by creating a fund of guarantees of return on investment;
- to join the fulfillment of the Directive 2012/27/EU regarding payments to investors in the thermal power industry using securities (stocks, bonds, etc.);
- to introduce the latest developments on the establishment of incentives to actual saving of the energy through tariffs and move away from the outdated system "only "cost +" divided by the amount of supplies heat energy".

**References:**

1. The Resolution of the Cabinet of Ministers of Ukraine dd. June 1, 2011 N 869 "On ensuring a common approach to setting tariffs for housing and utility services"

2. The Resolution of the National Commission for the State Regulation of utilities dd. 02.11.2012 № 357 "On Approval of the Methodology for the tariffs formation for
transmission of heat energy with main and local (distribution) heating networks on the basis of incentive regulation”


4. Project "Methods of rationing fuel and heat energy to produce and transport, consuming heat for heating, ventilation and hot water and household needs of homes and public buildings in Ukraine" http://www.minregion.gov.ua/


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RELATED SERVICES IN SYNERGETIC SYSTEM OF INTERNAL AND EXTERNAL AUDIT

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This article discusses content and specific related services in a synergy of internal and external audit entities. We investigate the need for related services, and the problem of determining the subject of their specific applications synergies.

Keywords: audit, independent audit, external audit, internal audit, Synergy, synergetic system.

Statement of the problem.
Audit and related services each year represent a growing interest and internal auditors, and external for major clients such as auditing - users of financial statements, audit reports, owners of businesses, shareholders, and CEO others. It has attracted more and more attention to the problem of auditing services and consumption in a synergistic system of internal and external audit, as the high cost of such services makes auditors think about the fact that their high efficiency and economic conditionality allowed to avoid duplication, thereby reducing the cost of such services.

**Analysis of recent research and publications.**

Related services in audit (audit related services) is the subject of research by many scientists. In particular, their conceptual aspects covered in the profile law on auditing [1], and in the development of the main regulator of audit in Ukraine [2], and in the writings of S. Mocherny [3] A. Kasych [4], O. Podolyanchyk [5], S. Basalay [6], V. Nemchenko [7], O. Redko [7], K. Redko [7], O. Syha [8] and others.

In these studies examine the problems associated with related services mainly in the external audit, much less in internal audit and in synergy issue has not been investigated.

**Problem.** The research was set out to determine the features of related services in a synergistic system of internal and external audit.

**The main material.**

Audit services market in Ukraine in recent years divided in accordance with the interests of its customers. This is due primarily to the expansion of opportunities to diversify professional services auditors somewhat new opportunities as before by auditors and audit firms and their services to customers.

The result of the auditor (audit firm) performs audit services, which in general economic works is defined as "... the act or help auditors (auditors), designed to meet contractual obligations to customers. There is a list of services that auditors can provide: Checking accounting records to confirm its authenticity with the disclosure in connection with the privatization issue securities companies; validation of accounting,
its recovery if necessary, advice on accounting, financial reporting, taxation, analysis of economic and financial activity; recommendations for improving the accounting, reporting, efficiency of ... etc. "[3, p. 21].

It should be emphasized that the direct interpretation of the term "audit" in Ukrainian legislation is not defined. According to Article 3 of the Law of Ukraine follows the identity concepts of "auditing" and "audit services". So we can assume that any activities of auditors types of audit services "[2].

In recent years Ukraine has expanded greatly different additional audit services, including attendant. In particular, O. Podolyanchyk differentiate concurrent audit services on criteria such as content and compatibility. In particular, the researcher points out that the services are compatible with the conduct of the statutory audit of the entity, include a variety of services, such as services for proactive audit.

Data Audit Chamber of Ukraine indicate a tendency to decrease in the share of world services directly Audit and increase of audit services, including related. Recently in Ukraine the average cost of one audit services to other professional services increased by 24% and amounted to 13.36 in 2011 ths. The average cost of one audit services accounting increased by 35%, recovery accounting - 34% of consulting services - at 19%. During this period, the average cost of audit services provided within the organizational and methodological support audit, decreased by 45%.

It is important to note that all audit and Big 4 consulting firms are now providing services related to the external and internal audit (under outsourcing or co-sourcing). Moreover, for many potential customers of both types of audit is sometimes difficult mentally perceived, even becoming the cornerstone issue of independence and objectivity of the company that provides the two, we can say the opposite vector, types of audit. Accordingly, more businesses owners, shareholders, CEO and others. seek to resolve their doubts this model audit as synerhiyna.

**Conclusions.**
For harmonization of state classification of goods and services state classification of goods and services of the Audit Chamber of Ukraine "On approval of the list of services that can provide the auditor (audit firm)" it would be appropriate to supplement national qualifier Ukraine and changes in classification of economic activities and state classification of goods and services that will National Classifier of Ukraine to the European qualifier and create conditions for Ukraine's transition to international accounting system and statistics.

Therefore, to improve synergy of internal and external audits to make adjustments to the current classification of products and services and as a result, auditors must make clarifications methods of internal and external audit of related services in order to increase their effectiveness and avoid duplication.

**References:**


7. Nemchenko V. V., Redko K. O. Audit. (Osnovy dergavnogo, nazaleznogo
INNOVATIVE TOOLS TO ENSURE THE ECONOMIC SUSTAINABILITY OF SMALL BUSINESSES

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In this report defined the innovative tools to ensure economic sustainability of small businesses, the main of which is the re-engineering of business processes.

Key words: small business, reengineering, economic sustainability, business processes.

Introduction. Today's small businesses operating conditions characterized by constant dependence on all subjects of general infrastructure. They collaborate with internal and external environment, seeking to strengthen their market position and achieve its economic potential. In such circumstances, the activities of small businesses can not protect against adverse shocks. Therefore, there is the issue of economic sustainability in terms of environmental impact, the ability to quickly eliminate threats and adapt to conditions that are favorable to the business, using its capabilities.

In economic literature questions the economic sustainability study such economists as: A.Bandurin, V.Bondarenko, A.Vasylenko, A.Gaponenko, L.Chahovets and others [1, 2, 3, 4, 6].

Therefore, to ensure the economic sustainability of small businesses they need flexibility and speed of response to changing market conditions, increased
competitiveness and production, high investment activity, liquidity and financial stability. Only this will create a dynamic equilibrium coherent framework that defines its own direction of development in the present and the future. Thus, the economic sustainability of small businesses, determine its structure, types and impacts is a key issue today.

Analysis of publications on the nature of economic sustainability showed no single universally accepted today thought to determine the category. Research the concept of economic sustainability, particularly small business, allowed forming a generalized notion of economic sustainability. Thus the term economic sustainability of small business is considered its ability to provide sustainable profitable growth in a changing external and internal environment. We understand the term economic sustainability of small businesses set of interrelated and interconnected components (financial, production, human resources (personnel), marketing, investment and management) that under any conditions provide a margin of safety of the enterprise and balanced process of their functioning. The balance is achieved by ensuring optimum quantitative relationships between the elements of the total system, giving her the opportunity to develop harmoniously. Therefore, the economic sustainability of the enterprise provides a state enterprise, when provided with the most efficient and expedient work of all its elements. Accordingly, under the control of economic sustainability businesses need to understand the management process as a system of methods, principles, mechanisms and tools that provides a state of the system components, their development and distribution, and allows the company to develop on the basis of income and capital growth while maintaining the competitiveness of production process. The main purpose of this control is to ensure the economic sustainability under the stability operation and development of enterprises in the current and future periods. Ensuring economic sustainability provides their economic independence, which is manifested primarily in committed effective control over its own resources and the fullest possible use of competitive advantage.
As with any business, small enterprise in domestic level represents an organizational structure which operates on the principles identified by performing a number of functions and processes to create a product or service and deliver it to the consumer. And we think that it is from a successful organizational structure of the enterprise depends on its sustainability. It is therefore important to maintain the sustainability of small businesses are science-based design and redesign of the organizational structure of the enterprise.

Examining the mechanisms and tools to ensure the economic sustainability of small businesses, we formed a scheme to ensure the economic sustainability of small enterprises (fig. 1).
Fig. 1. Scheme to ensure economic sustainability of small enterprises

The external environment has a direct effect on the economic sustainability of small business. Mechanisms of external influence to ensure economic viability of small businesses are: public policy to support small businesses, financial credit and monetary policies, tax incentives and market factors such as demand, inflation, competition, monopoly and others. Building an effective external mechanism of interaction creates a positive external environment for the functioning of all small businesses and ensures their economic sustainability. But, in terms of economic and political instability, the overall effect external mechanisms leveled and every small business must self decide...
their own economic sustainability. In view of the theory of systems approach in managing the impact of one of the elements of the system is able to affect the entire system as a whole. Based on this statement to ensure economic sustainability from the middle of a small business should have a positive effect on the external environment of small businesses as part of the system. Mechanisms to ensure economic sustainability from inside include items such as: corporate culture, investment attractiveness, organizational structure, functional areas of control technology and computerization. These mechanisms provide better each component of economic sustainability. But specific tools which can enhance economic sustainability are not very much. Investigated the works of local and foreign scientists, we assume that one of the innovative tools that can provide economic sustainability is reengineering of business processes.

Basic theory of reengineering was laid in the 90th century in the 20 U.S., when the scientists Michael Hammer and James Champy that published in the 1993 book “Reengineering the Corporation: A Manifesto for Business Revolution " [5]. Since 1994 the United States held annual conferences on reengineering and reengineering for today has been adopted by almost all large successful big companies in the world. But reengineering of business processes is still little studied by scientists for the purpose of its use in the small business and was considered a tool of big corporations. Therefore, we consider appropriate to study business process reengineering in terms of justification for its use as a tool to enhance the economic sustainability of small businesses.

For this purpose let us analyze which problems can be solved reengineering business processes for small business to ensure economic stability. Considering experience of studying and practice of small businesses, we have identified the following problems that can be solved with the help of business process reengineering (fig. 2).
Fig. 2. Problems solved by applying for small business reengineering business processes

1. Improving the quality of products and services: as the basis of business process reengineering is the theory of total quality and the company as a result of reengineering is the most customer-oriented, it is one of the main problems during reengineering is to find the most appropriate forms of production with minimal possible cost, which, however, not inferior in quality to the products and services of competitors, as well as the desire to achieve compliance with quality standards and certification of products (services) to worldwide (ISO 9000).

2. Enhancing personnel motivation: since the staff directly involved in making the results of the business process, its incentives depends on the efficiency of the process, and moral incentives will improve as a result of empowerment in decision-making and assign the employee more responsibility and duties.

3. Increased sales of products (services), sustainable market share: the method of business process reengineering involves the creation of small enterprises process of
"marketing", which has been studying the market environment, the study of consumer preferences and create a product that is able to meet the unmet needs of individual consumer market segments and provide a niche market. Also, this process will engage actively working to find potential customers who will expand the base for sales of goods and services.

4. Increase of efficiency cooperation between departments of the enterprise: all processes in the company are interconnected and inputs of some business processes are outputs of other business processes.

5. Increase of efficiency and speed of decision-making: the decision making process as a result of business process reengineering shifts to primary place of origin need to take this decision, and the staff on the ground becomes necessary authority and responsibility for making such decisions. Therefore, there is no need to refer to the upper levels of the organizational structure for management decision that reduces the time required for adoption, but that decision is made by the employee most knowledgeable in circumstances of necessity decision in terms of completeness, it makes most decisions effective.

6. Reduce the cost of activities (process): efficiency of each process is given by the product (service) at the output of the process to fuel product, services and resources at the entrance process. Since the results of material incentives managers process directly depends on the efficiency of the process, they have to increase the volume of production, and when they become critical - to reduce the cost of the process to improve its performance.

7. Implementation of the internal potential of the company without investing extra money: theory of business process reengineering based on more efficient use of available resources on the creation of a process-oriented model that enhances the efficiency of economic activity.

8. The implementation and application of new ideas and innovation, as one of the basic principles of business process reengineering is creativity.
9. Improving control: due to the fact that the outputs of some business processes are inputs other enhanced control of the processes consuming, and depending on the results due to material incentives for workers on the outcome of the process of increasing internal operational self-control.

10. Stability thanks to fast adaptation to changing market conditions.

11. Rational division of labor, with a small number of employees, which does not require an increase in the number of staff: employees perform business process as a whole as opposed to individual workers perform functions reduces the required number of personnel. A selection of individual business processes, giving the finished product the result is more efficient than the performance of certain functions, which generally can not lead to the production of the product.

Conclusions. Therefore having considered a number of tasks that can solve for small business reengineering business processes, we can conclude that this innovative tool is able to increase the economic sustainability of small businesses and strengthen the market position of a small business in its environment functioning.

**Literature:**


VECTORS OF TRANSFORMATION DEVELOPMENT OF THE GLOBAL ECONOMY

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This article contains description of theoretical and methodological basis of the global economy system, elaborated in the context of spatiotemporal, organizational-institutional and functional vectors of development. It identifies transformational changes in the global economic system and demonstrates adaptation of systems of national, regional and enterprise levels.

Keywords: global economy, transformation, market mechanism, crisis, national and supranational regulation.

The modern world is experiencing a difficult period of radical transformation with quite ambiguous consequences. Affecting the foundations of economic system on different levels, these consequences show themselves in decrease of system stability and entail crisis in different spheres of society’s life. And in this transformation, which is identified with the process of spatio-temporal transition of the socio-economic system from one state to a qualitatively different state (functional, organizational and institutional), the driving force is the market mechanism itself, as well as crises of the functioning and development of structural elements of the socio-economic systems on different levels – mega-, macro- and microlevel.

Transformation (from Latin transformatio) is a conversion, alteration of condition, state, form or essential features of some object [1]. Transformation involves change of
components, parameters, proportions and connections inside the economic system which, accumulating together, cause its transition to a qualitatively new state. So transformation represents a process of subjective-objective development, which, on the one hand, is based on objective laws and principles, and on the other hand, is initiated and regulated by subjects in order to accelerate and direct it.

Thereby economic system has three basic tendencies: functioning (maintenance of vital functions, which determine its integrity, qualitative definiteness and essential characteristics); development (means irreversible, directional modification of objects, acquisition of new features, reinforcement of this system in conditions of constantly changing environment) and transformation (certain stage of development) [2, p.10].

So the problem of entity’s adaptation to transformations and changes within economic system can be studied in two directions:

1) detection and substantiation of transformational changes at different time intervals in structural and spatial aspects of global economy, identifying its forms, ways of manifestation and interaction;

2) structuring of the economic systems of different levels and substantiation of changes in their characteristics which appear due to adaptation to the global transformational processes.

Identification of the main trends of globalization serves as an imperative of building the national trajectories, creating conditions for the conversion of supranational transformation factors from exogenous to endogenous.

At the same time, on the basis of existing economic doctrines and theories of the world economy (evolutionary, self-regulation, classical and neoclassical, institutional and neo-institutional, etc.), it can be interpreted as a system that functions in the coordinates:

- spatio-temporal (coverage (spread), dynamic of development, system and the intensity of correlation);
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- organizational and institutional (structure, dominating factors and development model, institutionalization of the global elements);
- functional (market mechanism (self-regulation), control mechanism (state, national, regional, entrepreneurial control)) [e.g. 3, p.2-17, 4].

However along with the presence of major systemic shifts at the global market economy level, which are connected with globalization, some of the key structural features of the global market have not changed significantly over the last 300 years (from the position of the three selected vectors of the transformation of economic development).

Within the framework of the spatio-temporal continuum a system of basic characteristics of the world economy has formed. Among these characteristics are:
- modification of economic mechanisms (from preindustrial to industrial, postindustrial and innovation (neoindustrial));
- change of technological modes (they form different echelons of development of the subjects in the world economy in the conditions of technogenic civilization);
- internalization of economic relations (based on strengthening and correlation of national economies through cooperation and sharing results and factors of production, investment and innovative collaboration). This internalization creates conditions for the operation of the liberalized global supranational economic subsystem (international intergovernmental and business organizations);
- cyclical development of the global economy including emergence of its new qualitative characteristics and replacement of outdated systems by new ones (degradation, dissipation, collapse and disintegration of the system - bifurcation transition to a qualitatively new steady system). Moreover in the context of globalization there is an acceleration of this transitions and shrinkage of system replacing cycles.

The fundamental features of the organizational- institutional vector are:

1. Presence of multitude of autonomous centers of market regulation and their constant competition (because of the objective nature of market laws);
2. Existence in a global economic system of the expressed market kernel of large economies which is historically formed and is remarkable for powerful economic and scientific-technical potential.

3. Existence of less-developed economic periphery: countries-recipients of technologies and financial resources. These countries can be divided into two groups: semi-periphery (states which on the certain stage of historical development started to use a catch-up type of market mechanism integration and then realized reformation development model) and periphery (which is characterized by weak self-regulation system, absence or underdevelopment of market mechanism and excess of administrative interference).

Described model of the world economy regionalization leads to the forming of regional blocs of both major economies and economies of periphery and semi-periphery countries, as well as to creation of asymmetrical groupings of governments for establishing dominancy of strong market players over the weak ones. At the same time a restructuring of such a subsystem of global economy as “special overliberalized global economic system” (SOGES) is taking place. SOGES has the following elements:

- system of large transnational corporations with a substantial degree of independence from the countries of their origin;
- system of intercommunicative exchanges plus special zones with liberalized conditions of operation (together forming a special translocal economic community, or quasi-state);
- offshore (highly liberalized financial markets with a particular territorial localization) [5, p. 51-52].

At the same time forming of regional economic blocs and integrated formations correspond with the systemic changes in the global economy which are generated by private market mechanisms and the global market mechanism (through increased competition). As for SOGES, which got the possibility of significant impact on the world economic processes in the mid-1980s, the situation is different. It is a purely
conventional system which was spontaneously formed in the global economy under the influence of changes in objects (virtual assets, product-program) and satisfies development goals of separate subjects. Therefore no wonder that its influence on the world economy has not yet manifested itself in a positive form, but rather had a negative impact. Firstly, because of this system being the center of speculative activity that increased the global level of market risks and significantly raised the instability of the global economic system. Secondly, because offshore, eurobonds, derivatives and even special zones greatly facilitated the laundering of capital of criminal origin, thus made a significant contribution to the criminalization of the economy.

Thereby, structural-institutional context of the global economy development is mostly described as a center-periphery model by Freedman. It forms premise of spreading transformational changes in global economy on national economies, as well as four directions of development of functional transformation vector:

- evolutionary (typical for core market economies);
- reformational (determines the development of most of the participants of the global economy);
- mobilizational (or catching-up) that due to accelerating dynamic of socio-economic development can be used only on short time intervals. After that it is supposed to be a transition to reformational model of development or “stuckness” at the stage of inertial development with fixing catching-up model of state structures functioning;
- revolutionary (or innovative breakthrough).

Simultaneously to the central-peripheral hierarchical structure of global economy, virtual subsystems with network (streaming) structure is forming and developing. It is remarkable for being highly liberalized and having well-developed infrastructure of its operation through territorial and even temporal boundaries.

Functional vector of the world economy transformation as the fundamental basis has a proportion of influence of the market mechanism and the system of national regulation. And taking into consideration such transformer as the global structural crisis
2008-2009, we can state that the advantage is on the regulatory (not self-regulating) mechanism’s side.

Choosing the direction of transformation, different proportions of self-regulatory and regulatory principles should be taken into account. Thus, evolutionary transformation is continuous process of self-development, it covers the entire system and presumes the gradual establishment of system integrity based on resolution of objective contradictions through the operation of economic forces. It is a gradual, smooth process without any sudden changes and bifurcations. Evolutionary process can be divided into several stages, coming one after another: genesis of the system; achievement of its mature, stable state; further obsolescence; system's downfall and origination of new relations inside the old system. However different researches of the origin and effects of the global crisis 2008-2009 show that described transformation model is unacceptable within this time interval for systems of both mega- and macrolevel.

Reformational transformation, which is being realized “from the outside” through reforms, suggests that reorganization of large part of system’s parameters (but not its basic futures) is initiated by reformative forces. Reforming of economic systems just updates some of its elements in order to improve the efficiency of the old system without changing its basis. So a reform can be considered as a latent phase of transformation. Reforms create conditions for the following qualitative rebirth of the system, they significantly accelerate the evolitional process. This is now a world system of supranational regulation is developing (as well as governmental regulation of national economies). It focuses on the reforming of the institutions, responsible for maintaining the stability and transparency of the global economy.

Revolutional transformation implies “removing” of the old system and forming of new one in rapid, revolutional regime. Revolutional transformation means destruction of the old economic and social institutions and creation of new ones with active participation of political and governmental forces. On the one hand, this kind of transformation as a driving force implies military coups. It is more widespread among
countries of the periphery, wherein changes of the ruling clans through military actions create conditions for a new trajectory of functioning, but not development, as the reforming issues of the national socio-economic system itself are not being solved. On the other hand, crisis as a transforming factor could initiate an “innovative breakthrough” in semiperiphery countries and, as a consequence of it, change the structure of the market core (which has not yet happened).

As a result, we can say that at the present stage of world economy development reformational transformation trajectory is maintained on both mega and macro levels. And the major influence of crisis as a transforming factor intensifies the functional vector of supranational and national regulation, keeps the central-peripheral organization-institutional structure of the global economic system and dependence of subjects of market self-regulatory system (e.g. multinational corporation) on regulated system; strengthening the control of over-liberalized global economic system and its gradual elimination.

References:


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FORMALIZATION QUALITY PERFORMANCE OF BUDGET
MANAGEMENT

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The semantic rule for constructing the membership function of composite linguistic variables. The semantics of the constituent components of the linguistic variable term is defined on the basis of the authors' formal grammar.

Keywords: budgetary control, economic and mathematical model, the linguistic variable semantic rule, the formal grammar.

Introduction. At the end of the last century in connection with the change of the paradigm of society and the formation of a knowledge economy, as the main resource of economic development, the need for computer processing of qualitative information in decision-making. A particularly acute problem in the development of econometric models for the management of budgetary processes at the meso-and micro-level, which bear the load of financing social development, supporting the main areas of structural adjustment, the incremental development of the sphere of production, etc. The use as input qualitative oriented data require the use of non-traditional mathematical tool that allows to operate with semantic information.

The formalization of the semantics of structured linguistic variables. In [1], a linguistic model is a formal description of the qualitative characteristics of budget revenues and expenditures, including the syntactic and semantic rules for the formation of atomic and composite terms. Syntactic rule is designed in the form of a formal grammar $G = \langle V_T, V_N, \delta, P \rangle$, which allows to generate and recognize the constituent terms $t_i \in V_T$ of linguistic variables $\langle X, T(X), U, G, M \rangle$, where
\[ X = \{дoходы, расходы\}, \ T(X) = V_T^*, \ V_T^* - \text{a set of words in the alphabet } V_T. \]

Semantic rule allows you to build membership functions of fuzzy sets generated by the corresponding formal grammar composite term. A necessary condition for the application of fuzzy sets is the presence of the membership functions, ie their semantics, with which the corresponding linguistic information is converted into a form suitable for computer processing. A formal grammar \( G = \langle V_T, V_N, \delta, P \rangle \) is mapped to a finite automaton \( R = \langle Q, A, q_1, F, q_\varphi \rangle \) that recognizes the possible sequences of terminal symbols, where \( Q = \{q_0, q_1, q_2, q_3, q_\varphi\} \) - the set of states, considered as non-terminal symbols, \( q_0 \in Q \), \( q_\varphi \in Q \) - respectively the initial and final states, \( tA \) - the input alphabet, and \( A = \{a_1, a_2, a_3, a_4, a_5, a_6, a_7, a_8, a_9, a_{10}, a_{11}\} \); \( F : A \times Q \rightarrow Q \) - the function of the automaton \( R \). To construct the semantic rules \( M : \{t_i\}_{i \in I} \rightarrow \{\mu_i\}_{i \in I} \), authors describe a method of membership functions of fuzzy sets induced a set of syntax rules, ie system of productions, output composite terms in the grammar \( G \). The semantic rule \( M \) for a structured variable \( t_i \in V_T \) is created in the form of the function that each element \( t_i, i \in I \), which is considered as the name of a fuzzy set, assigns to its meaning (semantics) \( \mu_i \) and is defined algorithmically. Semantics \( \mu_i \) is a function of fuzzy subsets \( \mu_i : U \rightarrow [0,1] \) corresponding to the term \( t_i \). Thus, the semantic rule \( M \) of structured linguistic variables "revenues" and "expenses" budget is built in the form of some algorithmic procedure for evaluating the membership function \( \mu_i \) for each composite term \( t_i \in T(X), \ T(X) = V_T^* \), representing the name of a fuzzy variable defined on a universal set \( U \). The universe \( U \) is seen as a set of values taken by the linguistic variables "Income" and "Expenses" budget.

To calculate the meaning (semantics) of compound terms \( t_i \in T(X) \) you need to know the meaning of primary (atomic) terms \( a_i \in T(X) \) such as \( a_2 = \text{"big"}, \ a_5 = \)
"small", \( a_6 = \) "medium", and the meaning of subterms, such as \( a_1 = \) "very", \( a_3 = \) "very", \( a_9 = \) "much" \( a_{10} = \) "more or less", \( a_{11} = \) "completely."

Authors proposed a method of semantic parsing grammar \( G \) and induces the production is as follows. Atomic therms \( a_k \in V_T \) a priori assigned to their meaning. Each rule is the substitution \( P_i : q_i \rightarrow a_k q_j \) of formal grammar \( G \) is assigned a ratio \( \tilde{F} : \{q_i\} \rightarrow \{\mu_{q_i}\} \) that indicates the membership function \( \mu_{q_i} \) as follows:

a) The nonterminal symbol \( q_i \), as a fuzzy variable, from which a terminal symbol \( a_k \in V_T \) — for atomic rule \( q_i \rightarrow a_k q_{4\varphi} \), where \( q_{4\varphi} \in V_N \) — the final state is assigned a membership function \( \mu_{q_i} \), which coincides with the function of a fuzzy set corresponding to the term atomic \( a_k \), i.e., \( \mu_{q_i} = \mu_{a_k} \);

b) The nonterminal symbol \( q_i \) of the resulting output \( q_i \Rightarrow a_\alpha q_j \), where the \( a_\alpha \in V_T \) — subterm (modifier) of the type,,, is associated with a membership function, where a unary operation on the function of a fuzzy subset of the corresponding modifier.

b) The nonterminal symbol \( q_i \) of the resulting output \( q_i \Rightarrow a_\alpha q_j \), where the \( a_\alpha \in V_T \) — subterm (modifier) of the \( a_1 = \) "very", \( a_3 = \) "quite", \( a_4 = \) "no", \( a_{10} = \) "more or less", \( a_{11} = \) "pretty" is associated with a membership function \( \mu_{q_i} = f(\mu_{q_j}) \), where \( f \) — a unary operation on the membership function \( \mu_{q_j} \) fuzzy subsets \( q_j \) corresponding to the modifier \( a_\alpha \in V_T^{\alpha} \).
c) variable $q_j$ obtained by applying a sequence of inference rules 

$$
\begin{align*}
q_j &\Rightarrow a_i q_\alpha \\
q_\alpha &\Rightarrow a_i q_\beta \\
q_\beta &\Rightarrow a_i q_\gamma
\end{align*}
$$

that lead to the production of output $q_j \Rightarrow^* a_i a_i a_i q_\alpha$ is associated with a membership function $\mu_{q_j} = O_{a_i}(\tilde{\mu}_{q_j}, \mu_{q_\beta})$, where $O_{a_i}(\tilde{\mu}_{q_j}, \mu_{q_\beta})$ - the binary operation on the membership functions $\tilde{\mu}_{q_j}$ and $\mu_{q_\beta}$ fuzzy sets, and the corresponding subterm $q_j$, and $q_\alpha$, and $q_\beta$ - subterms $q_\alpha \in V_N$, $q_j \in V_N$, that appear in the grammar $G$ of the following way: $q_j \Rightarrow a_i q_\alpha$, $q_j \in V_N$; $a_z = a_{a_1}, ..., a_{a_n}$ - concatenation of subterms $a_{a_i} \in V_T$, $i = 1, n$, and atomic term $a_k \in V_T$; $a_\delta = a_{a_1} a_{a_2}, ..., a_{a_m}$ - a concatenation of subterms $a_{a_j}$, $j = 1, m$, and atomic term, $a_j$, $a_i \in V_T$ - the word "and", "or." At the same time, and determined in accordance with paragraphs (a) and (b).

Let us consider the operation $O_{a_i}(\tilde{\mu}_{q_j}, \mu_{q_\beta})$ of paragraph (b). If the $a_i \in V_T$ - word "and", then on fuzzy sets $q_j$ and $q_\beta$ the operation is performed with the intersection of the membership function $O_{a_i}(\tilde{\mu}_{q_j}, \mu_{q_\beta}) = \tilde{\mu}_{q_j} \wedge \mu_{q_\beta} = \min(\tilde{\mu}_{q_j}, \mu_{q_\beta})$. At $a_i \in V_T$ - a union "or", then on fuzzy sets $a_z$ and $q_\beta$ made the join operation with the membership function $O_{a_i}(\tilde{\mu}_{q_j}, \mu_{q_\beta}) = \tilde{\mu}_{q_j} \vee \mu_{q_\beta} = \max(\tilde{\mu}_{q_j}, \mu_{q_\beta})$.

**Conclusion.** On the basis of applying the method of semantic parsing can obtain analytical expressions for the semantics of fuzzy sets corresponding to the structured linguistic variables. In the derivation $\mu_{q_i}$ of as an approximation of the action modifier $a_i$, which means "very" in the composite term $t_i = a_i a_i a_i ..., a_i a_k$, where $a_k \in V_T$ - the...
atomic term is used in the operation of raising the degree of fuzzy sets. Then the
semantic rule for calculating the meaning of a structured variable $t_i = a_i a_i a_i \ldots a_i a_k$ is
written as $\mu_{a_i a_i a_i \ldots a_i a_k} = \mu^{n+1}$ where $n$ – the number of copies $a_i$ in the first variable $t_i$,
which is a concatenation of characters. The proposed semantic rule base is created by the
authors of economic-mathematical model for constructing the function of fuzzy sets
corresponding admitted for entry system structured linguistic variables that describe a
qualitative point of view, revenues and expenditures.

References:

1. Streltsova ED, Bogomyagkova IV, Sagittarius VS Linguistic approach to the
modeling of budget flows / / Scientific Statement of the Belgorod State University
(Computer Science Series). - № 1 (120). -2012.-Issue 21/1

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Polishchuk N. V.

INNOVATIVE APPROACHES FOR COMPARATIVE ANALYSIS
OF EFFICIENCY OF PROCESS OF FORMATION OF GROSS PROFIT,
MIXED REVENUE: INTERSTATE ASPECT

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Statement of problem. One of groups of tasks, which stand before an economy
from micro- to the macrolevel, is development of methods of calculation of force of
corresponding processes of various types and levels with the aim of management by
them.

In particular, the results of comparative analysis of force of processes, related with
indexes of national accounts (processes of formation of gross national revenue;
formation of gross profit, mixed revenue; to allocation of primary profits, secondary allocation of profits, operations with a capital etc.), provide basis for comparison of socio-economic development of any country with other countries for aim of being of optimal variants of actions in relation to a management these processes.

**Analysis of the last researches and publications.** The existent classic approach by the calculation of force of process is the philosophy, based on effectiveness as on a concept identical to efficiency [1-3 and others]. Researches showed that for description of force of process it is sense to examine the category of efficiency of any process as such, which is characterized simultaneously on end result from a quantitative side (in the form of scale product) and from a qualitative – in the shape of efficiency of process, that lead to more deeper cognition of process on his end result [4, 5, 8-11 and others].

In published work [8] efficiency of process of labour was investigated, the new models of regularities of component parts of efficiency of process of labour were offered, examples were made them practical application. In next works on the basis of generalization and distribution on any process of models and approaches that were used to the process of labour, economic processes that is related to functioning of the economic systems of various hierarchical levels were examined [4, 5, 9, 11], and also of other complex systems [10].

Unsolved part of problem is forming (on the basis of concept of efficiency in the newest understanding) of methodology comparative analysis of force of processes, related to the indexes of national accounts, at intergovernmental level.

A research aim is a comparative analysis of constituents of efficiency of process of formation of gross profit, mixed revenue at intergovernmental level (on the example of Russia and Ukraine) on the basis of the use of authorial models of efficiency and corresponding indexes of component parts of efficiency of any economic process.

**Basic results of research.** In the article the object of research is a process of formation of gross profit, mixed revenue at intergovernmental level (on the example of Russia and Ukraine). The subject of research is theoretical and practical aspects of
provision of the optimal force of the process of formation of national gross profit, mixed revenue at interstate level.

The application such thesis of author's researches about duality of every process has been established: effects of any process are his foods – as benefit, as losses. A general product corresponds to every process as benefit and as losses, but a scale product corresponds to every process as benefit and part losses that are proportional to the share of product as a benefit in a general product. The indexes of constituents of efficiency of process can be expressed through the indexes of corresponding products.

Indexes of constituents of efficiency of economic process, offered in works [4, 5, 9, 11] and others, are component part of mechanism of adjusting of this process. Researches specified on possibility of such adjusting [11]. At research of process will use such equations of change of his efficiency:

\[
J_R = J_K \cdot J_E = J_K \cdot J_{V/Z} = J_G \cdot J_{1+V/Z} = J_G \cdot J_{1+1/D_Z};
\]

\[
J_R = J_G \cdot J_{1+D_Z} \cdot J_{G/Z} \cdot J_{V/G} = J_G \cdot J_{1+D_Z} \cdot J_{G/Z} \cdot J_{1+Z/G},
\]

where indexes \( J_R, J_K, J_E \) and others are the indexes of change of certain indexes as attitudes of corresponding indexes toward a base. In last formulas: \( V \) is an index of general product of process; \( Z \) is an index of his product as losses; \( G = V - Z \) is an index as benefit of process; \( K = G + Z_G = G + Z \cdot G/V \) is an index of him scale product; \( E = V/Z \) is an index of efficiency of process as ratio of general product of \( V \) and product as losses of \( Z \); \( R = K \cdot E = K \cdot V/Z = G(1+V/Z) \) is the index of efficiency of process (more detailed see [5, 10]).

In a tables 1, 2 accordingly gross domestic product and gross profit, mixed revenue of Russia (in actual prices; million of roubles) and Ukraine (in actual prices, millions of hryvnias), and also average annual amount of busy in an economy (millions of persons) are stated in 2006–2010 years.

**Table 1**
The Macroeconomic indexes, related to the process of formation of gross profit, mixed revenue of Russia in 2006–2010 years*

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>1. Gross domestic product</td>
<td>26917201</td>
</tr>
<tr>
<td>2. Gross profit, mixed revenue</td>
<td>11387082</td>
</tr>
<tr>
<td>3. Average annual amount of busy in an economy (millions of persons)</td>
<td>67.174</td>
</tr>
</tbody>
</table>

*It is made on the basis of data [6]. Money indexes are given in actual prices; millions of roubles

Table 2

The Macroeconomic indexes, related to the process of formation of gross profit, mixed revenue of Ukraine in 2006–2010 years*

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>1. Gross domestic product</td>
<td>544153</td>
</tr>
<tr>
<td>2. Gross profit, mixed revenue</td>
<td>202036</td>
</tr>
</tbody>
</table>

*It is made on the basis of data [7]. Money indexes are given in actual prices; millions of hryvnias

It gives possibility on authorial methodology to calculate the corresponding indexes of constituents of efficiency of process of formation of gross profit, mixed revenue of Russia and Ukraine, and on this basis to conduct the comparative analysis of constituents of efficiency of the indicated process at intergovernmental level.

In a tab. 3 the indexes of gross domestic product of $V$ and gross profit, mixed revenue of $G$ of Russia are indicated in a dynamics in 2006–2010 years, and also some other indexes are got by means of corresponding formulas.

Table 3
A dynamics of indexes of effectiveness of process of formation of gross profit, mixed revenue of Russia in 2006–2010 years \((J_K = J_G J_{1+D_Z} ; J_R = J_K J_E)\)*

<table>
<thead>
<tr>
<th>Year</th>
<th>(V)</th>
<th>(Z)</th>
<th>(G)</th>
<th>(J_G)</th>
<th>(1+D_Z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>400708.6</td>
<td>231192.4</td>
<td>169516.2</td>
<td>-</td>
<td>1.5769589</td>
</tr>
<tr>
<td>2007</td>
<td>488797.4</td>
<td>321387.1</td>
<td>167410.3</td>
<td>0.9875771</td>
<td>1.6575058</td>
</tr>
<tr>
<td>2008</td>
<td>602810.6</td>
<td>405674.9</td>
<td>197135.6</td>
<td>1.17756</td>
<td>1.6729726</td>
</tr>
<tr>
<td>2009</td>
<td>575237.1</td>
<td>398531.6</td>
<td>176705.5</td>
<td>0.8963653</td>
<td>1.6928126</td>
</tr>
<tr>
<td>Year</td>
<td>(J_{1+D_Z})</td>
<td>(K)</td>
<td>(J_K)</td>
<td>(E)</td>
<td>(J_E)</td>
</tr>
<tr>
<td>2006</td>
<td>-</td>
<td>267320.1</td>
<td>-</td>
<td>1.733226</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>1.051077</td>
<td>277483.6</td>
<td>1.03802</td>
<td>1.520899</td>
<td>0.8774964</td>
</tr>
<tr>
<td>2008</td>
<td>1.009331</td>
<td>329802.5</td>
<td>1.188548</td>
<td>1.485945</td>
<td>0.9770172</td>
</tr>
<tr>
<td>2009</td>
<td>1.011859</td>
<td>299129.4</td>
<td>0.9069957</td>
<td>1.443392</td>
<td>0.9713629</td>
</tr>
<tr>
<td>Year</td>
<td>(R)</td>
<td>(J_R)</td>
<td>(J_{G/Z})</td>
<td>(J_{V/G})</td>
<td>(J_V)</td>
</tr>
<tr>
<td>2006</td>
<td>463326.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>422024/6</td>
<td>0.9108587</td>
<td>0.7104214</td>
<td>1.235177</td>
<td>1.219833</td>
</tr>
<tr>
<td>2008</td>
<td>490068.3</td>
<td>1.161232</td>
<td>0.932896</td>
<td>1.047295</td>
<td>1.233252</td>
</tr>
<tr>
<td>2009</td>
<td>431760.9</td>
<td>0.881022</td>
<td>0.912432</td>
<td>1.064587</td>
<td>0.9542586</td>
</tr>
</tbody>
</table>

*Money indexes are given in middle for a year in roubles on one busy in an economy person; indexes — in the coefficients to previous year; \(V\) is a gross domestic product; \(G\) is gross profit, mixed revenue; \(Z = V - G\).

_Source: research of author_

From a tab.3 (fig.1) evidently, that in 2007, 2009 years observed relative falling of efficiency the process of formation of gross profit, mixed revenue of Russia (accordingly on 8.81; 11.9 pct.; index \(J_R\)) against the relative falling of effectiveness of process (accordingly on 12.25; 2.86 pct.; index \(J_E\)), at the increase of scale of it in 2007 year on 3.8 pct. and falling in 2009 year on 9.3pct. (index \(J_K\)).
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Fig. 1. Indexes of process of formation of gross profit, mixed revenue of Russia and Ukraine in 2007-2010 years:

1 – an index of scale $J_K$; 2 – an index of effectiveness $J_E$; 3 – an index of efficiency $J_R$ process (in the percents to previous year, R – Russia, U – Ukraine). Source: research of author

The relative increase of scale of process in 2007 year took place against influence of part of charges in general products (index $J_{1+D_Z}$) at reduction of gross profit, mixed revenue on 1.24 pct. (index $J_G$), and relative falling in 2009 year – against of reduction of gross profit, mixed revenue on 10.36 pct.

In 2008, 2010 years observed relative increase of the process of formation of gross profit, mixed revenue of Russia (on 16.12; 21.66 pct.; index $J_R$) against the increase of scale of process (accordingly on 18.85; 19.68 pct.; index $J_K$) at reduction to effectiveness of process on 2.3 pct. in 2008 year and increase on 1.66 pct in 2010 year (index $J_E$). Relative increase of scale of process in 2008, 2010 years took place against the increase of gross profit, mixed revenue accordingly on 17.76; 20.48 pct.; index $J_G$ at corresponding influence parts of charges in general products (increase in 2008 year and reduction in 2010 year; index $J_{1+D_Z}$). In Russia there were reserves against gross profit, mixed revenue in 2007, 2009 years (index $J_G$) and against quantitative component of effectiveness in 2007–2009 years (index $J_{G/Z}$) and of it quality constituent in 2010 year (index $J_{V/G}$).
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In a tab. 4 the indexes of gross domestic product $V$ and gross profit, mixed revenue $G$ of Ukraine are indicated in a dynamics in 2006–2010 years, and also some other indexes (money indexes are given on the average for a year in hryvnias as on one busy in an economy person; indexes – in the coefficients to previous year), derived by assistance of corresponding formulas.

Table 4

A dynamics of indexes of effectiveness of process of formation of gross profit, mixed revenue of Ukraine in 2006–2010 years ($J_K = J_G J_{1+D_Z}$; $J_R = J_K J_E$)*

<table>
<thead>
<tr>
<th>Year</th>
<th>$V$</th>
<th>$Z$</th>
<th>$G$</th>
<th>$J_G$</th>
<th>$1 + D_Z$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>26249.04</td>
<td>16503.15</td>
<td>9745.881</td>
<td>-</td>
<td>1.6287147</td>
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<tr>
<td>2007</td>
<td>34476.98</td>
<td>21037.23</td>
<td>13439.75</td>
<td>1.379019</td>
<td>1.6101819</td>
</tr>
<tr>
<td>2008</td>
<td>45205.15</td>
<td>28001.03</td>
<td>17204.12</td>
<td>1.280092</td>
<td>1.6194212</td>
</tr>
<tr>
<td>2009</td>
<td>45234.13</td>
<td>28064.73</td>
<td>17169.4</td>
<td>0.997982</td>
<td>1.6204326</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>$J_{1+D_Z}$</th>
<th>$K$</th>
<th>$J_K$</th>
<th>$E$</th>
<th>$J_E$</th>
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<tr>
<td>2006</td>
<td>-</td>
<td>15873.26</td>
<td>-</td>
<td>1.590547</td>
<td>-</td>
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<tr>
<td>2007</td>
<td>0.9886212</td>
<td>21640.45</td>
<td>1.363327</td>
<td>1.638856</td>
<td>1.030373</td>
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<tr>
<td>2008</td>
<td>1.005738</td>
<td>27860.72</td>
<td>1.287437</td>
<td>1.61441</td>
<td>0.9850839</td>
</tr>
<tr>
<td>2009</td>
<td>1.000635</td>
<td>27821.86</td>
<td>0.9986053</td>
<td>1.611779</td>
<td>0.9986053</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>$R$</th>
<th>$J_R$</th>
<th>$J_{G/Z}$</th>
<th>$J_{V/G}$</th>
<th>$J_V$</th>
<th>$J_Z$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>25247.16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>35465.57</td>
<td>1.404735</td>
<td>1.081804</td>
<td>0.9524578</td>
<td>1.313457</td>
<td>1.27474</td>
</tr>
<tr>
<td>2008</td>
<td>44978.63</td>
<td>1.268234</td>
<td>0.9617357</td>
<td>1.024277</td>
<td>1.31169</td>
<td>1.331023</td>
</tr>
<tr>
<td>2009</td>
<td>44842.68</td>
<td>0.9969774</td>
<td>0.9957168</td>
<td>1.002664</td>
<td>1.000641</td>
<td>1.002275</td>
</tr>
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</table>

*Money indexes are given in middle for a year in hryvnias on one busy in an economy person; indexes — in the coefficients to previous year; $V$ is a gross domestic product; $G$ is gross profit, mixed revenue; $Z = V - G$.

Source: research of author

From a tab. 4 (fig.1) evidently, that in Ukraine in 2007, 2008, 2010 years observed relative increase of efficiency of the process of formation of gross profit, mixed revenue (accordingly on 40.47; 26.82; 17.96 pct.; index $J_R$) against the increase of scale of process (accordingly on 36.33; 28.74; 18.02 pct.; index $J_K$) at the increase of effectiveness of process on 3.04 pct. in 2007 year and reduction of it accordingly on 1.49; 0.16; 0.05 pct. in 2008–2010 years (index $J_E$). Relative increase of scale of
process in 2007, 2008, 2010 years took place in Ukraine against the increase of gross profit, mixed revenue accordingly on 37.9; 28.01; 18 pct.(index $J_G$) at corresponding influential parts of charges in general products (reduction in 2007 year and increase in 2008, 2010 years; index $J_{1+D_z}$).

In 2009 year there was relative reduction to efficiency of process of formation of gross profit, mixed revenue of Ukraine on 0.3 pct. (index $J_R$) at reduction to both the scale of process (on 0.14 pct.; index $J_K$) and effectiveness of it (on 0.16 pct.; index $J_E$). Reduction to the scale of process took place here against reduction of gross profit, mixed revenue (on 0.2 pct.; index $J_G$) at the insignificant increase of influence of part of charges in general products (index $J_{1+D_z}$). In Ukraine there were reserves against the gross profit, mixed revenue (index $J_G$) and scale of process (index $J_K$) in 2009 and against quantitative component efficiency of process in 2008–2010 years (index $J_{G/Z}$) and its quality constituent in 2007 year (index $J_{V/G}$).

Thus, rates of increase of both scale and efficiency and effectiveness of process of formation of gross profit, mixed revenue of Ukraine in 2007–2009 were higher in comparing to Russia, but more low – in 2010 year. For the increase of force of the marked process there is necessity operatively to bring into use hidden reserves against the gross profit, mixed revenue and scale and components of effectiveness of process.

**Conclusions.** 1. Methodology of comparative analysis of efficiency of process of formation of gross profit, mixed revenue is offered in the article at interstate level (on the example of Russia and Ukraine) on the basis of the application of authorial indexes of constituents of efficiency of any economic process. As opposed to consideration of effectiveness of process as concept identical to efficiency, effectiveness is given in the article as a qualitative constituent of efficiency. 2. The application such thesis of author's researches about duality of every process has been established: effects of any process are his foods – as benefit, as losses. A general product corresponds to every process as benefit and as losses, but a scale product corresponds to every process as benefit and
part losses that are proportional to the share of product as a benefit in a general product. 
3. It is pointed, that the indexes of scale product, effectiveness and efficiency of process, 
derived in previous works of author on the basis of constituents of general product, can 
be served as the indicators of force of process. 4. It is defined, that gross domestic 
product of every country is general product of the process investigated in the article; gross profit, mixed revenue is product as benefit this process. 5. Methodology of 
application of its indexes (approved on the example of Russia and Ukraine), derived on 
the basis of the corresponding innovative approaches near the economic and 
mathematical modeling of the marked process, is possible to apply in practice. It leads to 
increase of knowledge about force of process by its results.

Further researches provide for the comparative analysis at interstate level of force 
of other processes, related to the system of national accounts (allocation of primary 
profits, secondary allocation of profits, operations with a capital etc.) on the basis of use 
of the authorial indexes of components of efficiency of process.

References


5. Polishchuk N. V. Funktsionuvannia ekonomichnykh system: mode
li skladovykh rezultatyvnosti: (Functioning of economic systems: models of component of


7. Statystychnyi shchorichnyk Ukrainy za 2012 rik (Statistical yearbook of

8. Yarmolenko V. A., Polishchuk N. V. Measuring of efficiency of work on the
basis of money indicators [Izmereniye rezultativnosti truda na osnove stoimostnykh
pokazateley]. Khraneniye i pererabotka syelkhozyrya – Storing and processing of the
agricultural raw materials. – Moscow, 1996. – No.2, pp. 10–12.

9. Yarmolenko V. O., Polishchuk N. V. Components of efficiency of economic
process: paradigm of quantity and quality [Skladovi rezultatyvnosti ekonomichnogo
protsesu: paradygma kilkosti ta yakosti]. Rynky tovariv ta poslug Ukrayiny v umovakh
ekonomichnogo zrostannia : zbirnyk naukovykh prats mizhnarodnoyi naukovo-
praktychnoi konferentsii, 11.09.2008 (Markets of goods and services of the Ukraine in
conditions of economic growth : complete of scientific works of international scientific

10. Yarmolenko V. O., Polishchuk N. V. Components of efficiency of functioning
of compound systems as simulated objects [Skladovi rezultatyvnosti funktsionuvannia
skladnykh system yak obyekty modelyuvannia]. Visnyk Cherkaskogo universytetu.
Seria Ekonomichni nauky – Herald of Cherkasy University. Series Economic sciences.

11. Yarmolenko V. O., Polishchuk N. V. Financial facility of regulation of
efficiency of economic activity on the macrolevel [Finansovyi mekhanizm
regulyuvannia rezultatyvnosti gospodarskoi diialnosti na makrorivni]. Regionalni
perspektyvy. Naukovo-praktychnyi zhurnal – Regional perspectives. Theoretical and
"QUALITY MANAGEMENT" AS INTEGRATED CONCEPT OF ENTERPRISE MANAGEMENT

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The question of interpretation of the term "quality management of enterprise". Integrated quality management includes all the essential characteristics of quality in relation to the company. It is shown that the evaluation of the quality management can be defined based on key indicators of quality management.

Publications which study the problem of quality, are considering the four major approaches to the use of quality of life, Each of them are based on one of the major conceptual positions:

- quality as a property of products,
- quality as a property of personnel,
- quality of the quality of work;
- quality as quality management.

The key to this approach to the concept of "quality" is that it is closely connected with the concept of the technical level of production (compliance) as the relative characteristics of the product, based on the ratio that determines its technical perfection with relevant baselines.

This approach to quality is dominated by many authors (LM Tkachuk, RI Buryak, AV Martynov and others. [2, 3, 4]), when in the course of analysis, researchers focus only on product quality, stressing that: " The economic aspect of quality is only in the use of consumer products " [3, p.109 ]. It means that "the most important component of the system is the quality of products" [4 , p. 21].
The term "quality management of enterprise" practically studied Ukrainian scientists, resulting in excessive narrowing of the studied concepts. Application of modern enterprise management systems need to provide a broader interpretation of the term "quality management", a broader consideration of compliance management company on the results of its operations. Most studies of economic issues related to the concept of quality, have a narrow orientation related to its specific characteristics.

Define the major categories of quality management company:

1. facility management - providing quality products according to customer requirements;

2. management goal - supporting quality products in accordance with the economic interests of the manufacturer (costs, profitability) and consumer (value for money), and safety and environmental products;

3. subject of management - departments at all levels of the hierarchy of management and persons providing quality products

4. methods and means of management - the ways in which governments affect the elements of the manufacturing process, ensuring the achievement and maintenance of planned and quality products.

Thus, based on the aforementioned categories as above, the term "quality management" should be integrated to include all the key quality characteristics of the enterprise. The property in this case was a "quality management" that should define and regulate the characteristics (attributes) management.

Assessment of the quality management requires the development of key input methods integrated quality management, which is currently one of the priorities of Ukrainian economics.

Among the objective methods for determining quality management, for possible application is the registration and billing methods, and heuristic methods may be applicable only to the expert. Although registration and calculation method are objective methods, they are expert method in the measurement of quality management have some
error. This is especially true expert method which uses qualitative characteristics. The approach is based on the use of expert method to determine the quality of products [5] singled out as a separate discipline Qualimetry (the study of methods of measurement and quantification of quality), which allows to obtain quantitative estimates for the quality characteristics of the product.

As the quality management includes integrated all the essential characteristics of quality in relation to the enterprise and aims to provide quality products to meet the requirements of the consumer, so key indicators are: quality assessment, evaluation of quality management, evaluation of quality sales management, quality assessment of resource management, quality assessment personnel management, quality assessment of operational management, quality assessment of strategic management, evaluation of quality management activities director.

Below we developed a Key indicators for assessing the quality of management (Qualimetry) which are given in Table 1.

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<td><strong>Information Resources</strong></td>
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Also some of the quality management are interdependent, and therefore they can be combined to facilitate the work of experts. Besides the above mentioned indicators,
quality management can also be defined through the coefficients that characterize management system, namely the coefficient of rhythm, the coefficient of efficiency of management, quality factor perform administrative functions, the coefficient of efficiency of management, the coefficient of stability training.

The development of quality management and assessments, should be kept in mind that the calculation of the mathematical method of quality control must necessarily be monetary equivalent basis, and thus performance evaluation of the quality of governance are characterized by financial performance, taking into account the mentioned above factors.

Thus, the term "quality management of enterprise" as a comprehensive integrated economic indicator includes all the main quality characteristics of the company, to ensure product quality to meet the requirements of consumers and the interests of the manufacturer, taking into account safety and environmental products, providing governments achievements and support planned level of production under conditions of hierarchy units and individuals, providing quality products. It should also be noted that in this approach, on the definition of money management company, it is possible to determine the set of key indicators on which it is possible to assess the quality of a management company, which in turn enables a more effective economic analysis and evaluation of the economic potential of the company.

References:


In this paper, we describe the use of main risks the introduction of strategic innovation in bank management. Also, the author identifies the most promising areas of risk assessment management innovation to the strategic goals of the operation and obtaining the necessary competitive advantage in banking.

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Key words: risk, innovation strategy, innovation management

The global economic crisis of recent years have convinced banks of Ukraine and the structure of the loan portfolio of banks should prepare for the challenges ahead. Negative effects of the crisis could have been avoided if the arrival of the crisis in Ukraine, the banking sector was at the proper level risk management and strategic planning.

Question risks associated with innovation in banking, explored the following scientists: Horyukov EV, Koptyubenko DB, Kochergin DA, Kuznetsov VA, Shamraev AV and working committee known international organizations [50], [51], [52], [53], [54], [55].

The risks of banking institutions, the main reasons for their occurrence and methods to minimize adverse effects.

Of course, financial crisis and a sharp drop in income cannot provide absolute certainty. Meanwhile the banks hardest hit during the recent events, not only was no system for tracking key risk indicators, but management denied all possibility of adverse scenarios of Ukrainian banking system. Among the common mistakes bankers in risk management include the following components:

1) Ignoring strategic risks;
2) Respond to critical events after the fact rather than proactive policy.

Therefore, we believe that to ensure better management of credit risk should be actively share information on borrowers with credit bureaus. The common practice today is the cooperation of a bank with two or three bureaus. If three or five years ago were mainly initiated partnerships Bureau, today banks feel the need for better information on borrowers, often initiate such cooperation. This will lead to more quality content the credit history and the emergence of new market information services (such as automatic transfer of data from the credit bureaus in the information systems of banks). With a large customer base and accumulated statistics on it, the bank can
identify customer behavior patterns. However, a bank with a small volume of business will build similar models based on data from the credit bureaus.

Working with a credit history, banks cannot hurt to learn how to use the tool when the bank come to 100 customers, and is unknown which of them will not be able to repay the loan. However, we know with a high probability that these will be 40%. In such cases, if the effective interest rate of 20-25%, the bank refuses to everyone because such issuance will be unprofitable. Nevertheless, do not forget that 60% of these customers would have paid off the loan, although many of them have a bad credit history.

Speaking of urgent banking problems, I would have paid attention to reputational risks, including working with foreign partners. Because of the specific nature of goodwill is one of the most difficult assets less secure and manageable. Creating a good reputation can take many years, but you can lose it in a matter of minutes / hours, so the decision of this problem would be to create their own system of competitive intelligence Bank (Sponsored by consulting companies that have the necessary information and analytical resources). As part of the management of reputational risks widely prevalent practice of image surveys / audits. Meanwhile, the comparison of these polls so far hampered by using different methods. Among well known in Ukraine, there is research «Goodwill-factor" among major banks in the CIS. This study provides a review of five banks included in the group of large and great for NBU classification, and participating industry analysts from 17 investment firms operating in Ukraine. Research Methodology takes into account the knowledge of experts in the following areas:

Factors that form the base cost of the bank;

Better-known reputation audit annually held research-holding Romir. It involves the ranking of the largest Russian banks present in the CIS countries, including Ukraine,
but is more comprehensive. The study is based on a methodology international Global Reputation Index (GRI) and takes into account a set of factors that characterize the level of support environmental financial institution, including knowledge of individual customers banking brands and the quality of the information field. However, a significant drawback is that the data for a particular bank is not always available in the public domain, which means that consumers often do not use the results of the study when referring to a particular bank.

However, not all banks are in the Ukraine, have resorted to minimize risks by curtailing retail and / or due to complete failure of the market. Most are reviewed its organizational structure and centralized operation of existing units. For example, the Forum in 2009-2010 transferred all of its subsidiaries to, accounting, back office and only the balance of the parent bank, created six regional service centers and six corporate business centers - servicing retail business. A similar situation occurred in UniKredytBanku. Before the crisis, there existed a number of departments reporting to each other, but today all units directly subordinate Chairman of the Board. Now, the organizational structure data banks become more simple and mobile, and cost control and the formation of technical provisions - effective.

After the crisis, there is also increasing attention to the Bank established practice of IT-Risk Management. Thus, the fall of 2010, pursuant to the National Bank Basel II has developed guidelines for managing information security risks, and adopted two relevant international standards ISO / IEC 27005 Information technology - Security techniques - Information security risk management. According to the adopted National Bank, banks are required to adjust their Information Security Management System. However, not all Ukrainian financial institutions today is highlighted feature information and such a short time is not enough on its creation. Of course, the control of the Bank will increase IT-budgets banks, but full search or training of specialists in the field of IT-security requires not only time and financial resources, but also an understanding of top management institutions feasibility of this step.
Along with increased attention to issues of IT-security, an effective way to reduce bank risk and insurance may be a number of operational risks. It is noteworthy that in this area recently noted a number of innovations initiated at the controller. Thus, the rules became effective cooperation between banks and insurers associated with lending. The purposes of this document, which initiated the development of the Antimonopoly Committee of Ukraine, is to improve and enhance the quality of insurance and banking services, the promotion of fair practices in competition during the loan agreements and insurance, as well as the development and use of uniform specifications and standards, such as:

- The company must provide to the bank for cooperation in lending;
- Ability to contract insurance to any other insurance company, which has been verified by the bank and meets its requirements, even if it is not included in the list of accredited;
- Bank license requirements included in the list of obligatory placing of funds on deposit insurance of bank accounts;

Currently, the obligation to comply with the new rules of interaction took over Bank Finance and Credit, Alfa-Bank, Privat, OTP Bank, Raiffeisen Bank Aval, Ukrsotsbank, UkrSibbank and insurance companies Orans, Ingosstrakh, Universal, AXA Insurance, Generali Guarantor, Ukrainian Fire Insurance Company and Unica. Many banks, especially international ones, prefer insurance companies with foreign capital, which first determines unequal conditions of competition for other insurance market.

Ukrainian banks that have not joined the new rules of cooperation for risk management have tightened their requirements for indicators of financial stability of insurance companies. At the same time bankers often require partners insurers making
specific provisions in insurance contracts borrowers, and (although less than before) the placement of deposits insurance companies on bank accounts. Many banks impose its own requirements for contracts, some of which are simply imposed (eg, requirements regarding risk insurance, obligations of the parties, settlement procedures and decision on payment). If an insurance contract is not agreed with the Bank, the insurer cannot work with it. There have been cases of interference in the bank rate policy of insurance products - the so-called limit minimum or maximum tariffs. But, nevertheless, we believe that the new rules of cooperation should be mandatory only instrument of cooperation for all market players, and would like to see in violation of these rules to unscrupulous marketers were appropriate sanctions.

With the lessons of the financial crisis banks present in Ukraine, is to advance a number of actions to improve the comprehensive risk management system. These steps could be:

• reviewing organizational structure to identify and eliminate duplicate departments or banking committees;
• introduction of reverse test used models of risk management for the purpose of clarification and revision based on actual data;
• switching attention from the collection of statistical information on selected quality indicators and the development of early warning indicators (key risk indicators);
• improve communication between departments while increasing control over access to it;
• staff training to ensure that each employee understood the nature of the risks and their impact on the bank. It should be noted that this relationship can be worn as negative (eg, in the case of intentional or unintentional action) and positive (monitoring competitors' actions or measures to improve service quality, leading to strengthening the reputation of the bank and the influx of new customers).
Errors can be avoided, not only with the tools of risk management, but also combining this management and marketing, that is, different principles diversify the loan portfolio.

Many leading banks based on the classic, a full statistical approach is risk based pricing, the price of the product depends on the probability of default of the borrower. This reduces the failure in more risky segment by increasing margins and cost of the product for borrowers with low probability of default. If the bank has not accumulated sufficient statistics or does not have the necessary technology, we use the so-called ball model, a simple rule that divide customers into segments with different levels of interest rates. But you can build a different credit processes for the same segment, laying the different prices of the product. Some customers are willing to tolerate the procedure bank for the low price of the product. However, there are those who are willing to overpay because they do not want to waste time on complicated procedures. Having developed suitable products, the bank receives portfolio is divided into three parts:

- risk and low margins;
- medium risk and very high margins.

When communication with the customer is another very simple and effective tool for risk management. The client is on the path of life, it is changing as well as expenses, income and credit load. Bank on it and reacts accordingly. In terms of risk management with the appearance of the customer obligations under the banking model considered prohibitive, to reduce the limit to restructure the loan, grant-revolving products to hedge risk client. In addition, when he pays for the obligations it sold another loan product. In practice, it is not very difficult, but few banks to fully use this technology.

There is another promising approach: PLTV (predictive lifetime value) - the prediction of long-term value. When buying a product, the customer is often willing to buy second and third. Now the system of risk management, making decisions, considers only the yield, which the bank receives the first product. If for larger risks are too great,
the customer will receive a waiver. However, if you calculate the return on other products, some of customers have moved into the category of positive for the bank.

The whole system of management of the bank should be constructed in such a way that necessarily take into account information from the units involved in decision making. Ignoring such information must be some way to fix. Firstly, while staff will promptly inform management about the risks and secondly, such records make bank executives to take educated decisions, increase their responsibility, and often keep from rash steps. Accordingly, any bank required clear and effective corporate standards that help to understand what is happening.

Another step in developing strategic innovations of the bank is to determine the scenario of a commercial bank, defining its main qualitative characteristics. Scenarios of financial institutions may be:

1) Scenario development as "the distance of the bank" - a client rarely or never meet with the staff of the bank. This service may seem impersonal, but the costs are lower than banks with lower degree of automation. Commercial bank for customer tariffs in most cases irrelevant. The future of the automation process all the data, the value of a specialist bank becomes smaller, and the distance between it and the client increases and increases their professional level. Deleted banks will be most competitive, they will be able to significant resource savings and flexibility of operations.

2) Scenario development as "segmented bank". Customers of commercial banks significantly differ, so success of the bank that will be able to best adapt to meet the needs of competitive consumer segments. Perhaps customers will be divided into several groups according to age, income and marital status. In the Bank winner will be the most qualified to conduct segmentation.

3) Scenario development as "bank customer." Bank customers need attention, quality advice and an individual approach. The future of the bank, focused on individual work with clients.
Bank management should select the most faithful, based on experience, available information, and strive to realize the most suitable scenario that will bring the bank to the model of a successful and sustainable commercial bank.

For each of the above strategic scenarios bank should create a special system to provide proof of his position to the consumer and subsequently interact with it. Consequently, the Bank adopted an innovative strategy should have another quality - provide conditions for the organization of several systems and simultaneous development and management. Innovative initiatives for interaction with consumer’s schemes have been developed for four main effects on the client that, in terms of commercial bank may be labeled as:

1. 
2. 
3. 
4. 

In terms of targeting the needs of customers in banking management strategy highlighted the development of innovations that can be focused on demand (rapid response strategy) or to offer new products (strategy offers). Develop and implement innovative strategies - long-term process of targeting controls on innovation management, aimed at innovative organization functioning under the previous development plan.

Success in the banking industry today, more than ever, depends on the ability of financial institutions to find effective ways of customer relationships and build effective business processes. To work in increasingly complex business environments banks of all countries need more efficient business models, you can get them in three ways:

1. Replacement of IT operating model;
2. The introduction of new technology solutions that improve client experience interactions with the bank;
3. A more complete use of business information including tracking customer sentiment.

Nevertheless, in Ukraine, the number of financial institutions willing to radically change their business model or resort to implementing breakthrough IT solutions, yet a little bit. The most common solutions include innovative outsourcing. Typically, the transfer of servicing jobs, office equipment or of ATM / payment terminals. However, recently there were large-scale projects, which provided comprehensive support previously implemented IT solutions such as outsourcing support Oracle Hyperion Planning at VTB, which since November 2011 Ukrainian office staff provide Sitronics Information Technologies. Experts of the company have undertaken updating of metadata, monitoring performance components, optimization of existing and development of new business rules, updating and managing user access budgeting and other tasks. The Bank, in turn, was able to free up resources and achieve real cost savings for maintenance of complex IT systems. Another notable project bank IT outsourcing sold FUIB. The need for a uniform, flexible, reliable, information systems, and optimization of operating costs for IT, especially after the merger with Dongorbank, forced management PUMBa go for relatively routine decision for Ukraine: refer to outsource IT infrastructure support for regional offices. The project partner tasked Bank - System Integration Service. Submission outsourcing initiatives in the banking sector in Ukraine would be incomplete without mention signed in December 2011 ten-year agreement between Ukrsotsbank and IBM to transfer the latter to outsource the management and maintenance of the bank's portfolio of applications, systems, data center, IT networks of ATM and end-user support.

Server the banks will certainly remind themselves as data growth associated with the launch of new products and customer service channels will inevitably increase the burden on an aging equipment. The main problems faced by staff IT departments of banks operating in Ukraine - the need to increase the volume of storage and increased processing power of hardware in small spaces and continuous growth of cyber threats.
this regard, revealing experience UkrSibbanke, completed in summer 2011 upgrade your computer complex in partnership with SI BIS. In considering, possible solutions to the problem in the bank chose two old big replacement servers for more compact and productive. Moving applications to more powerful servers are allowed to increase the computing power of processors almost sevenfold without compromising data security. In addition, the replacement of servers allowed to save space in the server room, lower power consumption and to organize effective air conditioning system that is critical for today's data centers.

Thus, the main objective of transition to outsourced IT services - to reduce direct and indirect costs, and improve quality of service and minimize risks. Improving the overall business model of the bank can be achieved not only through IT outsourcing, but also by introducing new technological solutions, including providing for reasonable use of accumulated customer information. Part of the answer to these questions are contained in a study conducted Ukrainian Association contact centers (vaccine) in August-October 2011 Contact Centres (CC) Ukrainian banks are under intensive development. The annual increase in their number is 20-25%. Large banks are gradually shifting their CC on a distributed system work, bringing new ground in the regions of Kyiv. Changes and technical equipment centers. Previously, as a technological platform chosen solution brands in recent times new centers prefer cheaper solutions based on IP-telephony.

The survey also showed that, despite the crisis, the bulk of Ukrainian banks have not yet joined the fight for the client, based on improving the quality of its service. Most banks will not provide excellent service and customer wishes, but arise only because of their inquiries. In addition, experts say vaccines, high potential technological capabilities banking KC cannot be effectively implemented in the absence of standards, management systems and well-built KPI. However, there are exceptions, including: held at Raiffeisen Bank Aval upgrading contact center with Incom and Zoom International, as well as the design of KC-based Microsoft Dynamics CRM, implemented E-Consulting for
Sberbank, which allowed banks to pay deposits to depositors Rodovid and Ukrprombanka for 24 days with no queues and no problems.

On some success in introducing new technologies and Statistics says use ATMs and payment terminals. Thus, according to the Bank for 2011 residents had settlements through software and hardware self-worth 46.4 bln., That is 2.1 times higher than the previous year. At the same time elevated park equipment payments of financial institutions increased by 27.6% - to 92.4 thousand units. Interestingly, this increase often occurred due to the installation of innovative self-service terminals, through which you can not only pay for mobile communication, Internet, utilities, spend updating electronic wallets and card accounts, but payments to repay the loans.

References:


TO THE PROBLEM OF HIGHER EDUCATION AFFORDABILITY AS A FACTOR OF THE INTELLECTUAL POTENTIAL DEVELOPMENT

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The article analyzes methods to evaluate affordability of higher education, offered by Canadian researchers A. Usher and A. Cervenan in context of the effect provided by the social–economic position of Russia on formation of used indicators. Determined are basic compatibility criteria for the offered methods with the Russian social–economic situation, proposed are formulas to calculate additional parameters and a principally new approach to the higher education affordability in Russia.

Key words: intellectual potential, higher education affordability, possibility of paid education, mastering the higher school academic program, average median income, average cost of training.

For the last year scientists have taken a greater interest in research of processes to form the society intellectual potential. The present definition of intellect is a total ability to cognition and an efficient solution of problems, in particular, when leaning a new circle of vital problems. [1] A more profound definition of the intellect presupposes the system of abilities (mental, creative and intuitive), supported by the system of
knowledge (theoretical, applied and experimental), integrated in the ability to solve applied problems in various branches of the activity.

The notion of “potential” does not mean an immediate realization of available abilities and knowledge, but it presupposes a possibility, by wish or want, to develop them for the following application. Thus, an individual intellectual potential is an ability and possibility to form, develop and improve the system of its diverse abilities, knowledge, skills and techniques used in practice including non-standard situations.

One of the social – economic institutes with an impact on formation and development of the intellectual potential is the system of higher education. Undoubtful is the fact that in countries where higher education is quite affordable for most people, the public intellectual potential has a higher level and as the result such countries are mostly successful in the spheres of an economic and social development.

How is to rate the higher education affordability? Now there is no any recognized method for such rating, therefore different countries consider different aspects of its affordability which make impossible to use a comparative analysis.

The work of Canadian researchers «Global ratings of higher education systems» by A.Usher and A.Cervenan [2] has made an attempt to develop a universal method, at that basic were two types of ratings: rating of countries in terms of possible payment and rating of the higher education affordability.

To rate affordability the authors offer methods based on calculation of four parameters.

1. **Youth involvement in the higher education** – an interest of students in higher institutions to the number of adult population typical for receiving a higher education.

2. **Achieved level of youth education** – an interest of persons with completed higher education to the number of people at the age from 25 till 34 лет (typical age for the end of a higher education).
3. *Index of the social equality in education*, calculated as the ratio of male population at the age of 45-65 with higher education to the share of students whose fathers have a higher education.

4. *Index of gender parity*, reflecting the equality of males and females in affordability of higher education. It is calculated as the ratio of female students to the number of male students.

The work has analyzed 15 countries with a high level of social – economic development: the US, Canada, Japan, Australia, the UK, New Zealand and some highly developed European countries. Unfortunately, Russia was not among analyzed countries. The authors mark out that the choice of affordability rates can be considered optimal due to insufficiency of comparable data. Can such criteria be applied to the Russian reality? To answer this question it is required to analyze a social – economic situation in Russia nowadays in context of its impact on formation of each four indicators.

The first and second indicators are quite applicable to rate affordability of education in Russia, but it is necessary to consider the fact that a typical student age and typical age to complete the higher education in Russia is somehow different from the corresponding rates in developed countries. For instance, an average age of students in EC countries makes 21 years; the standard age for getting the bachelor degree is 23 years, magistracy - 26 years. Such figures are explained by prolonged periods of study in the secondary school, military or civil service of males, frequent practices of short-term breaks in receiving education due to the professional occupation. As compared with most Western countries where the higher education can be received by more adult persons, with a greater labor and life experience, the age of Russian students is considerably less. [3] This fact should be accounted for determining limits of the typical ages: they should be defined for each country separately.

Index of social equality in education reflects affordability of higher education for young people from all social – demographic groups. Surely, in most countries young
people from intelligent families have more chances to get a higher education as compared with children of workers irrespective of costs on education. Unfortunately in Russia there is no required statistic data for education of males in the corresponding age group, but approximately in Russia the index of social equality is less than in most developed countries. [4].

Suitability to consider this index in Russia is not great, as the education level of parents does not always demonstrate the achieved social level, which is mostly conditioned by a low prestige of the so-called “budgetary branches”: medicine, science, education, social services. Parents engaged in these spheres are surely qualified persons but sometimes they can’t pay education of their children. And in contrary, parents without a higher education have managed to form a solid material base for their family and they want to give their children all the best including education. Moreover, an education level of fathers can hardly be analyzed considering a large percent of children without fathers and sometimes even without information of their income and education level. Under such conditions which are mostly provided by a transit situation in the Russian economics, it is impossible to differentiate the notions of social equality and possible payment of education. Though it is probable that in with time the situation will improve and this index will be rated like in most developed countries.

Consideration of the gender parity index in Russia will also be unimportant as in Russia there are no any legislative or socio-cultural restrictions for education of males and females, and deviation of this index from standard is provided only by the gender structure of population. Therefore this index is reasonable to be considered not in terms of education affordability but within the analysis of an intellectual potential need at the labor market when determining “surplus” and “deficient” professions. In fact some professional might have the “gender status” due to which the gender professional aggregation is often detected [5]. For many school-leavers such stereotypes serve the so-called magnet or in contrary, “stop-signal” in choice of the future profession. Nevertheless, in practice this factor does not affect possibility to get higher education.
Rating of countries by possible payment under this method is calculated separately and it is insignificantly connected with the affordability rating of higher education, mostly because the life level and adjusted system of credits in developed countries make possible for most candidates to get education. Moreover, in developed countries very popular is the system of grants provided by various funds which allows talented young people from poor families to get education.

To rate the possible payment of higher education A. Usher and A.Cervenan have used the following indicators.

1. *Ratio of educational costs to population solvency*, at that costs include both payment for education and books, accessories, accommodation and food costs, taxes, etc.

2. *Ratio of support (grants, subsidies, tax benefits) to population solvency*.

3. *Support share in costs on education*.

4. *Ration of educational costs without support to population solvency* – this indicator is the resultant one.

There are some reasons according to which it is difficult to apply these indicators for rating the situation not only in Russia, but in many other countries. Firstly, it is rather difficult to characterized extra costs for education. For instance, books can be bought, taken from the library, from friends, etc. There are no any standards to use accessories; services of Internet-providers can be used both for learning and personal needs, accommodation costs can be minimized when the student lives with his parents which in Russia unlike developed countries is a typical situation. Naturally, an amount of extra costs can be varied within a vast range, and its average might be valued only approximately. The minimal amount of extra costs on education is included in the living wage of Russian people.

Rather difficult is to rate compensation for educational costs: in Russia, for instance, it is expressed in the system of benefits which can be hardly comparable with western standards. For example, it is problematic for Russian students to get loans for
education and loan terms make this service affordable only for the social layer of people who do not need it. Not long ago citizens were given an opportunity to compensate partially costs on education as benefits on income tax, but at the same time each year there are less and less students receiving payments from the grand fund of Russia. Sometimes students know nothing about those documents which given them benefits and social warranties and can’t realized their rights. Thus, the total amount of taxes and benefits for an average student under the contract form of study will equal to null. Undoubtful in developed countries the state support of students is at a higher level: beneficial loan terms, serious discounts on any type of transport, much tax benefits are given to students despite that fact that they are adults, often working and getting salary at the satisfactory level.

Mostly difficult is to rate the welfare of Russian people. As an indirect income rate to measure the possible education payment researchers from Canada used GDP rate per head. But this figure can be only an approximate value of the national welfare, as it does not consider some important factors, in particular, how evenly incomes are distributed between citizens of the country, and they ignore unobserved economics, which in Russia approximately takes about 25% GDP. [6]

Russian researches have also made attempts to calculate affordability of education in terms of its payment, at that used was the following calculation formula: ratio of the average salary to the average cost of education. [7] Such approach is not correct at all, as the typical age of Russian students learning full-time is 17-22 years, who are mostly not an economically active population, and educational payments are covered by parents. We think that a more exact result to evaluate possible payments can be received by calculating this index for the subject RF under the following formula:

\[
I_{boo} = \frac{AMIH_i^* - LW_i^*}{ACE_i},
\]

where \(AMIH_i^*\) – average median income per head for the typical standard age of i-subject RF;
Required are the comments that the an average median income per head is the sum dividing the regional population strictly in halves: one half is with a greater part of this sum, and another half is with less sum, that is a more informative rate than an average arithmetic mean of the salary. In Russia, according to recent data, the median salary makes about 72% average arithmetic means. [8] Calculation of the average educational cost is proposed not as median but an average weighted value due to the fact that the cost of education unlike income is a more stable value, often without any territorial coefficient, and the school-leaver can choose specialization (direction) which can’t be said about income. Moreover the basic criterion to open paid positions in the higher school is solvency of population; consequently, an average cost of education will tend to be median one.

An average weighted cost of education is calculated under the following formula:

$$ACE = \frac{\sum_{i=1}^{n} x_i \cdot P_i}{\sum_{i=1}^{n} x_i},$$  \hspace{1cm} (2)$$

where $P_i$ – education cost for i-specialization (direction);

$x_i$ – Number of paid positions for i-specialization (direction)$^1$.

Analyzing an affordability of education, it is also required to consider possibilities to get higher education by means of a non-commercial training form.

As to 2011 among the total number of students (6490 thousand persons) only 37, 83% (2455, 2 thousand persons) students were trained for the budget funds; the rest 62, 17% - with full redemption of education costs, that is at the expense of parents or at the own expense. For comparison – in 1980 the number of students in higher schools was 3045,7 thousand persons, and the training was paid from the state budget. Comparing these data with a demographic situation we’ll get the following: in 1980 the population of the Russian Federation (without republics of the former USSR) was 138,1 million

---

$^1$ Similar specializations (directions), offered by various higher schools with various costs should be taken as different specializations (directions).

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persons, from them students made 2.2%; in 2011 the population of Russia made 142,9 million persons\(^2\), from them there are 4.54% students, at that only 1.72% were trained from the state budget. [9] That is despite the seeming affordability of Russian education, payment plays an important role in this process and it depends on the life and income level of Russian people. Due to that informative is the share of budgetary students in the total number of students in the subject RF:

\[ I_{\delta\delta} = \frac{NS_{Bi}}{NS_i}, \]  

where \(NS_{Bi}\) – number of students trained from budgetary funs in i-subject RF; \(NS_i\) – total number of students in i-subject RF.

Development conditions of the present Russian economic makes the problem of qualitative education more important. At present popular is the remote form of training which excludes the direct contact of students and professors. Use of such educational form is provided by a set of factors including necessity to make education affordable for people living in remote economic areas. Nevertheless, full-time training is still considered more qualitative and much demanded. Therefore now almost in each settlement with the city status there are branches and representations of largest Russian higher schools. Due to that it is required to consider the factor of territorial remoteness, which characterizes it and to use the index of population territorial structure calculated under the following formula:

\[ I_{mcu} = \frac{CP_i^*}{TP_i^*}, \]  

where \(CP_i^*\) – the number of city population at the standard student age in i-subject RF; \(TP_i^*\) – total population at the standard student age in i-subject RF.

But under the decreased number of higher schools (and as the result, their branches) due to the present policy in the sphere of education, the territorial factor will

\(^2\) Decrease in population started since 1992; for the period since 1980 till 1991 the population of Russia increase up to 10.2 million persons; since 1991 till 2011 the number of population decreased in 5.4 million people (According to Rosstat).
become more and more important and the rate characterizing territorial remoteness needs to be improved.

One can’t help considering another important problem connected with the higher education rating: a high level of affordability needs a principally new approach to organization of the study process at all stages of getting education. Not all students who have entered the higher school will graduate from it: rather high is the percent of dismissals. Based on researches made in the MSU the most important reason which results in dismissals, according to students, is individual qualities – an inability to study, adapt to loads, a lack of self-discipline and laziness. In other words, graduates can be students with good basic knowledge, diligence and crave for learning. [10] Following that, it is reasonable to concretize the notion of “education affordability” dividing it into «entrance affordability» and «training affordability». The most important factor influencing on the possible training is simplicity of learning the higher school program.

We think, it is required to use the system of affordability indicators – the rate characterizing the possibility of education with a view to simplicity of learning the study program. Indicator of the higher education completeness can be determined as the sum ratio of the graduates in i-flow ($NG_i$) to the total number of school-leavers accepted for the 1st year in i-glow ($NS_i$):

$$I_{30} = \frac{\sum_{i=1}^{k} NG_i}{\sum_{i=1}^{k} NS_i}$$

Complexity to calculate the offered indicators is provided by a lack of comparable statistic data which makes difficult the process of rating the higher education affordability in Russia, and consequently, a comparative analysis. To make the rating acceptable for all countries it is necessary to use the generally recognized methods to rate the higher educational affordability, and the development of such methods needs participation of researchers from various countries.

References:

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10. E.V. Donets, I.G. Teleshova, O.S. Chudinovskiy. Affordability factors after graduating from the elite higher school (by example of the Moscow State University of M.V. Lomonosov) http://ecsocman.hse.ru/text/16211746/

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UDC 336.6(470.58)

Milyar O. A., Rybas L. A.
ASSESSMENT OF THE POSSIBILITY OF BANKRUPTCY IN AGRICULTURAL ENTERPRISES AND BUSINESSES OF KURGAN REGION BASED ON METHODS OF RUSSIAN LEGISLATION

Kurgan Agricultural Academy of T. S. Maltsev

With the introduction of anti-crisis legislation in Russia, it is actively developing such line of research as assessment methodologies of the financial status, including, in terms of features of insolvency businesses. Popularization of theme among modern authors draws attention to the legislation of the country in the issue of methods to identify and assess ways to bankruptcy.

Keywords: agricultural enterprises, financial status, insolvency (bankruptcy), legislation, assessment methodology

In the current economic situation, organizations operating in various sectors of the economy, carrying of responsibility in decision and implementation of management decisions are evaluated of financial condition, special component of which is the degree of solvency of the enterprise, because this information is needed as economic entity as external user groups. The anti-crisis monitoring helps to identify the premises and the genesis of the crisis itself, to assess its extent, to identify the cause.

Since the study of methods of assessing the financial condition at present in Russia is one of the most popular themes, useful to refer to the methods of detection of bankruptcy, which are enshrined in the law of the country to compare results and determine the degree of compliance with the current situation during the study period.

By Order of Ministry of Economic Development № 175 from 18.04.2011 “On approval of the methodology for the analysis of the financial condition by the person concerned to establish the threat of signs of insolvency (bankruptcy) in the case of a lump sum payment of tax by that person” approved the following estimates [2]:

- the degree of ability to pay under current obligations (short-term liabilities reduced for the sum of deferred income to the average receipts);
- current ratio (the ratio of current assets to current liabilities, reduced by the amount of deferred income).

If the first parameter is less (or equal) 3 months and coefficient more (equal) 1 than the organization has no a threat of insolvency. Failure to comply with regulations entails a more advanced analysis to the study of short-term borrowings and accounts payable, net profit, cash receipts in a bank accounts in the last 3 months, the amount of tax on which possible providing deferral, and the relation of these parameters.

“Methodological position to assess the financial condition and the establishment of an unsatisfactory structure of balance” approved by order of the Federal Office of insolvency (bankruptcy) at the State Property Committee of the Russian Federation from 12.09.1994 № 31 provides for assessment on the basis of current ratio and own funds regulations for more than 2 and 0.1, respectively. In this case, the current ratio characterizes the provision of working capital, necessary for the conduct of the economic entity and repayment of current liabilities. It is calculated as the ratio of current assets as inventories, finished product, cash, receivables and others negotiable to current liabilities in the form of loans, credits and accounts receivable. Own funds ratio describes the organization as financial stability defined as the ratio of the difference of equity and non-current assets to current assets of organization in the form of inventories, finished product, cash, receivables and others.

In the case of inconsistencies calculated indicators to regulatory values - determined ratio to restore the solvency in the next six months (1):

\[ K_3 = \frac{K_{1ф} + 6 \times (K_{1ф} - K_{1н})}{T} , \]

(1)

where \( K_{1} \) - the actual value (at the end of the reporting period) of the coefficient current liquidity (K1);

\( K_{1н} \) - coefficient of current liquidity at the beginning of the reporting period;

T- reporting period in months.
If there is excess of the standard value calculated indicators that determined by the ratio loss of ability to pay in the coming 3 months (2):

\[
K_4 = \frac{K_{1ф} + \frac{3(K_{1ф} - K_{1н})}{T}}{2}
\]

(2)

Threshold of these coefficients is a unit. If you do not achieve the desired result at a rate of recovery of solvency the company is classified as critical. If the ratio of loss of solvency takes a value less than 1, organization in the coming quarter retains the ability to lose independence [3].

Currently, there is Government Decision № 52 from 30.01.2003 “On the implementation of Federal Law “On Financial Recovery agricultural producers”. According it provides methods for assessing the financial condition of business entities based on six factors [1]:

1. Absolute liquidity ratio expected as the ratio of liquid assets to short-term liabilities of the organization, accounts payable and other current liabilities.

2. Coefficient of critical assessment which is calculated as the ratio of liquid assets to marketable and short-term liabilities, accounts payable and other current liabilities.

3. Current ratio, determined as the ratio of current assets to current liabilities, accounts payable and other current liabilities.

4. Own funds ratio calculated as through the ratio of the difference of own capital, non-current assets and current assets;

5. Financial independence ratio, which reflects the proportion own funds in the total amount of organization's liabilities;

6. Financial independence ratio as formation of reserves and expenses, estimated as the ratio of equity to sum reserves and value added tax on acquired assets. The value of the calculated coefficients estimated in points according to the method.

The cumulative result allows related to the provision to one of five groups of
financial stability with various of embodiments debt restructuring. Estimating the probability of bankruptcy in agricultural enterprises on the basis of the summary of the annual reports in Kurgan region using the presented methods is presented in Table 1.

Thus agricultural organizations had obvious problems with the threat of a bankruptcy occurred in 2007 and 2010, based on a calculation by the method of The Ministry of Economic Development. According to the degree of solvency standard is not met during the whole period. This indicates that it's necessary additional research on the functioning of business entities, which can't be made in the absence of specific information. Such information includes data on the amounts, of funds entered to a bank account in the last 3 months, amounts of restructured taxes and fees etc. Based on the current ratio and own funds defined in the application methods of the Federal Office for insolvency (bankruptcy), we can conclude that region's agricultural enterprises had the necessary resources for the conduct of business and other financial commitments in 2009 and 2010 years, while financial stability was observed only in 2010.

The coefficient of loss of solvency in the next 3 months indicates a stable position of business entities during the period. In 2007 and 2011 calculated coefficient of restoration of solvency taking a critical value, which indicates the presence of a threat of bankruptcy for organizations. Based on the assessment of the financial condition of score agricultural producers can be attributed to the financial stability of three groups suggesting that there is a threat of insolvency moderate. In this case the restructuring of debt provides circuit for deferral of repayment of debt for 6 years, followed by installments within 5 years.

Table 1

<table>
<thead>
<tr>
<th>Index</th>
<th>Result and assessment</th>
</tr>
</thead>
</table>

Methodology approved by the Ministry of Economic Development № 175 18.04.2011 y.
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<table>
<thead>
<tr>
<th>The degree of ability to pay its current obligations</th>
<th>5.75</th>
<th>5.93</th>
<th>5.25</th>
<th>7.13</th>
<th>7.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of current liquidity</td>
<td>0.89</td>
<td>1.03</td>
<td>1.14</td>
<td>0.93</td>
<td>1.01</td>
</tr>
<tr>
<td>The threat of insolvency</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

The methodology adopted by order of the Federal Office for insolvency (bankruptcy) under State Committee of Property Management RF № 31-p 12.09.1994 y.

<table>
<thead>
<tr>
<th>Ratio of current liquidity</th>
<th>1.83</th>
<th>1.99</th>
<th>2.56</th>
<th>2.20</th>
<th>1.92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of own funds</td>
<td>0.03</td>
<td>0.07</td>
<td>0.08</td>
<td>0.11</td>
<td>0.07</td>
</tr>
<tr>
<td>The coefficient of restitution of solvency</td>
<td>0.98</td>
<td>1.04</td>
<td>1.42</td>
<td>-</td>
<td>0.89</td>
</tr>
<tr>
<td>The coefficient of loss of solvency</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.06</td>
<td>-</td>
</tr>
<tr>
<td>The threat of bankruptcy</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Methodology approved by the Government RF № 52 30.01.2003 y.

<table>
<thead>
<tr>
<th>The absolute liquidity ratio</th>
<th>0.09</th>
<th>0.12</th>
<th>0.24</th>
<th>0.24</th>
<th>0.13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of critical assessment</td>
<td>0.56</td>
<td>0.59</td>
<td>0.62</td>
<td>0.63</td>
<td>0.59</td>
</tr>
<tr>
<td>Ratio of current liquidity</td>
<td>1.84</td>
<td>1.99</td>
<td>2.57</td>
<td>2.21</td>
<td>1.92</td>
</tr>
<tr>
<td>Ratio of own funds</td>
<td>0.03</td>
<td>0.07</td>
<td>0.13</td>
<td>0.13</td>
<td>0.07</td>
</tr>
<tr>
<td>Ratio of the financial independence</td>
<td>0.48</td>
<td>0.49</td>
<td>0.46</td>
<td>0.47</td>
<td>0.46</td>
</tr>
<tr>
<td>The financial independence ratio with regard to the formation of reserves and costs</td>
<td>1.32</td>
<td>1.28</td>
<td>1.32</td>
<td>1.33</td>
<td>1.18</td>
</tr>
<tr>
<td>The total score</td>
<td>41.4</td>
<td>41.4</td>
<td>48.4</td>
<td>48.4</td>
<td>41.4</td>
</tr>
<tr>
<td>Group of debt restructuring</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
The situation doesn't change in the analyzed period in the context of improving the financial condition of region's businesses. We can talk about the specific differences in calculation of current ratio and own funds, that gives the difference in results. In whole method of Ministry of Economic Development provides a comprehensive assessment and gives the least accurate result, because requires specific information.

The optimum position of businesses in the region in 2010 observed in the comparison of the results due to the highest level of government support of region's producers against the background of the extremely unfavorable conditions for agricultural production (the share of government support in net sales in 2010 amounted to 23% and its average volume for 2007 - 2011 - 14.8%). Calculations by the methods proposed by the Federal Office for insolvency (bankruptcy) under State and Government of the Russian Federation showed similar results of the assessment according to which there is a crisis situation of agricultural enterprises and organizations of the Kurgan region during the analyzed period. But in our opinion, the methods applied have the disadvantage in predicting bankruptcy and just state a fact a certain moment. As a result, the diagnosis of the financial situation of agricultural organizations in the region is heterogeneous but it is the basis for the application of anti-crisis measures on a conclusion of critical situation. That's why needed such interpretation, which will optimally combine the accuracy and features of the business environment of enterprises and organizations of the agricultural sector.

We believe that the considered methods can be complementary to the factor models, proposed by the Russian and foreign authors, which determine the degree of influence of each parameter on the result of estimating the probability of bankruptcy of enterprises, which is not observed in the methods laid down in legislation of the country. Feasibility of combination based on the fact that they allow to predict the crisis situation in the future with sufficient degree of probability, few of it applicable to certain sectors of economic entities including agricultural because they take into account
the specifics of activities, seasonality of production and other factors in the functioning of each enterprise and organization.

References:


This paper deals with a methodical approach to the selection of indicators of technological competitiveness of Ukraine. Proposed set of indicators identified by comparative analysis of international and domestic analytical and statistical sources. Substantiates the importance of the research of technological competitiveness at the national level as a basis for integrating the national economy into the global international space.

Keywords: technological competitiveness, technology transfer, innovation, technological modes.

In recent decades, the characteristic features of modern economic development became knowledge-intensive industries, grown the role of intangible forms of wealth (intellectual property), increasing role of human intellectual resources. At the forefront of non-price competitiveness factors, which are caused by the novelty of products, their quality, research intensity and high technological competitiveness. Naturally, there is a need for a set of criteria and indicators to assess this phenomenon.

The experience of the most developed countries shows that technological competitiveness is achieved through a number of conditions, including: 1) the accumulated scientific and technical potential, 2) institutional incentives innovation processes, and 3) the presence of large high-tech companies. Thus, the main feature of scientific and technical potential as a factor in long-term competitiveness lies in the fact...
that its creation and accumulation requires decades, including a headstart in R & D contributes to the creation of new technologies and on their basis - industries. Examples are the United States, where for a long period of increased investment in science and technology performed both state and private sector.

Today, in Ukraine the main problem is the lack of a sufficient number of methodological and theoretical developments that should help understand and evaluate the technological competitiveness of the national economy. Therefore, there is an important and urgent issue of identification of indicators and their adaptation to the peculiarities of the national economy and statistics.

Question of increase economic competitiveness of the state based on the use of advanced technology and high-tech industries are the subject of constant attention of Ukrainian and foreign researchers. Among them L.Fedulova, V.Denysyuk, M.Zhurovskyy, V.Sidenko, Yu.Polunyeyev, V.Heyets, L.Lihonenko, O.Shnypko, O.Salihova, A.Porter. A number of international organizations such as the International Economic Forum (including statistical report "Global Competitiveness Index 2012-2013."), Institute of Management in Lausanne (statistical report "World Competitiveness Yearbook 2012."), The World Bank and the Georgia Institute of Technology (USA ) offer development to improve the methodology for assessing the technological development of economic systems. In spite of continuous research, metrics for assessing competitiveness in view of the technological factor requires clarification and specification in terms of its adequacy for national statistical measurements.

The aim of the paper is the identification and selection of indicators to assess the technological competitiveness of the economy of Ukraine.

For countries with an innovative type of economy is characteristic of a large proportion of exports with high degree of processing, and a large proportion of exports of technology in total exports of goods. Today, these countries ensures competitiveness of the national economy by forming the fifth and sixth technological structure, by high-tech manufacturing and high-tech goods. Promotion such products in the global market
allows the country to realize its comparative innovation advantages, in particular through the appropriation of technology or intellectual rents.

In Soviet times, the development of science in general and technology in particular on the territory of modern Ukraine took place in a highly centralized system, which has made some adjustments to the understanding of technological development. Thus, in the mid 50-ies of XX century, the term "technology" had a double meaning. First, understanding the technology like a production process, the set of all skills and ways of relating to the extraction, refining and processing of various materials, and secondly, it is considered as the science that describes the manufacturing processes, means of production, raw materials, fuel, studies the properties materials. At the same time especially emphasized that technology is a product of heavy industry, which was associated with the so-called "Soviet gigantism." This in turn led and continues to influence the technological development of both Ukraine and other former Soviet republics [1].

Since Ukraine gained independence and status to independently conduct its internal and external economic activity sharply raised the question of integration into the global space economy. However, the main barrier is functioning households in different "coordinate systems".

Technology in the broadest sense is scientific and technical methods to achieve practical goals. It is the result of intellectual activity, based on a scientific and technical knowledge. On the one hand, technology is a means of affecting change in the conditions of production and trade in goods produced with its help, the other - it is the subject of development and trade. In this regard, the World Intellectual Property Organization (WIPO) defines technology as "systematic knowledge about the manufacture of a product, the application of a process or the provision of a service, regardless of whether this knowledge is reflected in inventions, industrial designs, utility models, or new technological installation, or technical information or skills, or the services or care provided by specialists in design, installation, management and
maintenance of industrial plants, or the management of the industrial or commercial enterprise or its activity " [2].

Evaluation of international experience in the formation of modern technological competitive environment has become an important issue for its measurement. It should be noted that some difficulties arise in the researching due to lack of a unified methodology and methodological framework. If we look at statistical compilations and reports of foreign colleagues, you can see the widespread use of sub-indexes that help understand some metric properties of common and when reduced in complexes to describe the phenomenon as a whole. As an example of the use of sub-indexes and comprehensive evaluation of competitiveness are statistical collections "Global Competitiveness Index 2012-2013." (International Economic Forum) [3] and "World Competitiveness Yearbook 2012." (Management Institute in Lausanne) [4].

Well-known researches in the chosen subject area are held at Georgia Institute of Technology (USA), which are periodically since 1987, led by Alan L. Porter, analyzes the technological competitiveness of countries [5]. For this researching the economy of each country is considered as black box with its inputs and outputs. By this method the characteristics of technological competitiveness indicators serve the following groups: 1) the state of technology, 2) export of high-tech products and services, as well as synthetic characteristics and indicators (tab. 1).

Table 1.

<table>
<thead>
<tr>
<th>№</th>
<th>Title</th>
<th>Characteristics and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National focus on achieving technological competitiveness</td>
<td>- Support authorities, policy entrepreneurship;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Support competitiveness, carried on the development and application of technology;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Investment risk;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Evaluation of the national development strategy;</td>
</tr>
</tbody>
</table>
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| | - Development of technological entrepreneurship;  
| | - The ratio of the economic environment and public institutions to technological development. |

Continuation of Table 1

| 2 | Socio-economic infrastructure | - The existence and condition of national institutions that can attract and maintain the necessary resources;  
| | | - The efficiency of the capital market;  
| | | - Rate of accumulation;  
| | | - Investments;  
| | | - National investments in education. |

| 3 | Technological infrastructure | - The existence of institutions that provide economic and social support for the promotion to market of technologies;  
| | | - The quality of technical education;  
| | | - The level of technological base;  
| | | - Protection of intellectual property.  
| | | - The number of researchers employed in R&D;  
| | | - Number of connections R&D with manufacture;  
| | | - Sale of databases. |

Source: [6]

The problem of comprehensive evaluation of the technological competitiveness of the economy of Ukraine is the lack of metrics in the methodology of national statistics. Given this, for the summary and adaptation of indicators used by international organizations, the first stage should be to conduct a comparative analysis. For this analyze it is necessary to build the appropriate information matrix (matrix fragmentary reflected in the tab. 2).

Structurally matrix consists of four main columns: the first contains the name of the source, which was investigated, the second - contains the names of those groups of indicators that has the appropriate source, the third - reflects indicators that are used, the fourth - brings analogs of national statistics, which can perform calculations. Overall, it was possible to identify 27 indicators based on four key research sources, as reflected in the first column of the matrix, which can describe the technological competitiveness.
### Table 2.

Matrix of a selection (identification) indicators of technological competitiveness of Ukraine *(extract)*

<table>
<thead>
<tr>
<th>Source</th>
<th>Title group of indicators</th>
<th>Components of indicators</th>
<th>Analog in national statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2. Number of subscribers of fixed telephony</td>
<td>2. Available of basic telephones household (per 100 households units.) (Statistical Yearbook &quot;Transport and Communications of Ukraine 2011&quot;)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Number of users of mobile telephones</td>
<td>3. Number of mobile subscribers (thousands) (Statistical Yearbook &quot;Transport and Communications of Ukraine 2011&quot;)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Number of computers per 1,000 people in the country</td>
<td>4. Availability park computing (units) Statistical Bulletin &quot;Computing in Ukraine 2009&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Innovation</strong></th>
<th><strong>Technology</strong></th>
<th><strong>World Bank [14]</strong></th>
<th><strong>Assessing the impact of innovative Matrix input data to</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The ability to innovate</td>
<td>1. Number of scientific and technical publications</td>
<td>1. Expenses on technological</td>
<td>1. Expenses on technological innovation.</td>
</tr>
<tr>
<td>2. Expenses of private and public institutions in R &amp; D</td>
<td>2. Expenses on research and development (% of GDP)</td>
<td>2. Expenses on technological innovation.</td>
<td></td>
</tr>
<tr>
<td>15. The ability to innovate (number of enterprises engaged in innovation activities) (Statistical Yearbook &quot;Research and Innovation in Ukraine 2012&quot;)</td>
<td>20. Number of publications by region (Science and Innovation Action ENG 2012 s. 141)</td>
<td>21. Should be calculated using data from GRP each region (mln.) (Statistical Yearbook &quot;Regions of Ukraine 2012&quot; Part II)</td>
<td></td>
</tr>
<tr>
<td>13. The introduction of new technological processes in industry by region (Statistical Yearbook &quot;Research and Innovation in Ukraine 2012&quot;)</td>
<td>16. The expenses for implementation of scientific and technical work by type and region (Statistical Yearbook &quot;Research and Innovation in Ukraine 2012&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: developed by the author using sources</td>
<td>2. Number of companies that have implemented innovative products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The production of innovative products</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23. Number of industrial enterprises that have promoted innovative products by region (Statistical Yearbook &quot;Scientific and Innovation in Ukraine 2012&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24. Number of industrial enterprises that have promoted innovative products, by region, outside Ukraine (Statistical Yearbook &quot;Research and Innovation in Ukraine 2012&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25. Number of industrial enterprises that implemented innovations by region: 2011 (mastered the production of innovative products) (Statistical Yearbook &quot;Research and Innovation in Ukraine 2012&quot;)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluate regional innovation activity in 2004.

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<table>
<thead>
<tr>
<th>activity of industrial enterprises on the socio-economic development of the regions of Ukraine [2]</th>
<th>innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Indicators for assessing the technological competitiveness of the economy of Ukraine is analogous indicators adopted and recognized internationally. Thus, the obtained original data to assess technological competitiveness is sufficient to conduct further research and is the basis for metric calculations.

Based on international experience and national research in the area of exploration of the technological component and its impact on the competitive environment, the author identified and proposed indicators to assess the technological competitiveness of Ukraine.

Based on a comparative analysis was selected number of indicators, the calculation of which will help assess the level of technological competitiveness, both domestically and internationally. By selecting indicators based on generally accepted approaches, appears opportunity to more accurate and current comparison of country to any other country in the world in terms of technological competitiveness. This researching is of great strategic importance and helping to identify potential competitors and own strengths and weaknesses sides of the economy.

This information will be useful in developing strategies for technological modernization of the economy, the choice of priority industries and evaluation of technological security. Future researches will be aimed at the practical application of selected indicators and assessment of technological competitiveness of countries, regions and relevant international comparisons.

References:


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STRUCTURALISM (POST-MODERNISM) ABOUT THE ECONOMIC CONTENT OF THE SIGN

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In this paper we describe the basic theoretical principles of political economy of a sign (structuralism, post-modern in the economy) and their development in the theory of power based on the work of Jean Baudrillard's «Critique of political Economy of mark». A comparison of the main provisions of structuralism and non-political Liberalism is given.

Key words: structuralism, post-modern, Baudrillard, non-political liberalism, exchange, symbolic, exchange.

The political economy of a sign (structuralism) this new direction of development of the economic theory which introduces the economic maintenance of a sign into scientific circulation, information, an exchange, a symbolical exchange, requirements which didn't enter earlier into a subject of political economy. Relevance of the appeal to features political a sign and their refraction in the theory of the power is explained, first, by that in a scientific and teaching community wasn't developed yet adequate opinion to this direction of development of modern political economy. And, secondly, that in connection with emergence of the new direction of political economy again there was a requirement to rethink essence and the maintenance of the power in the economic theory.

Jean Baudrillard with the book «Critique of political Economy of mark» published in 1972 and translated to Russian in 2007 [1] became the bright representative of a postmodern (adaptation of earlier formulated theoretical provisions of a modernist style to modern realities) second half of the XX century. The structuralism is a postmodernism synonym. According to a postmodernism the
social relations and the phenomena it is signs (marks). Originally the reality governed people through signs, signs and reality are corresponded each other. Today the principles of simulation rule us instead reality rules principles of. Signs indicate any more things, and other signs. Everything becomes colorable, even work which doesn't make any more but only socializes the person, transfers it to a sign. In simulation the individual including the authority, deals with abstractions and forms, simulacras, instead of with real people, structures and the relations.

Thanks to reproduction of subjects/signs reproduction of social structure of society is carried out. Thus as signs can be considered not only things and money, but also mathematical formulas linguistics structures, people, activity

Initial theoretical category of political economy of a sign is the exchange. J. Baudrillard proceeds from exchange definition as some operation between two divided terms separately existing to an exchange and as double coercion - to give and coercions to take coercions [See: 1, page 79]. Such definition doesn't correspond to classical treatment of an exchange as a freedom of choice of the buyer. More it corresponds to classification of forms of an exchange, that gave Polany: gift, distribution, commodity exchange.

J. Baudrillard focuses attention to functionality of an exchange – whether the exchange for consumer value or for confirmation of the social status of the exchanging parties is made. And J. Baudrillard reasons that the exchange is carried out, first of all, for confirmation of the social status of the exchanging parties. According to J. Baudrillard behind all superstructures of purchase at accumulation and consumption of subjects always there is a mechanism of social demonstration, distinction, honoring. It isn't requirements and a choice of the benefits for from satisfaction, and not in consumer cost, and in the symbolical value of an exchange, social demonstration, the competition, in a limit of a class distinction. [See: 1, page 14].

According to J. Baudrillard, in modern market economy consumer value anywhere don't find themselves. But the logic of a subject/ sign works. [See.:1, page 105]
J. Baudrillard considers that expenditure, status consumption, demonstrative consumption characterize the power and ruling classes. And the necessary product is of secondary importance in comparison with expenditure of demonstrative consumption. The power will disorganize an exchange [See: 5, page 96]. It is inclined to expenditure and demonstrative consumption. In it the socialist and capitalist countries don't differ from each other.

J. Baudrillard opposes the statement about rationalizing function of the power. In his opinion, the power is the myth about economic rationalization of production and consumption. Production internally expediently and doesn't need rationalization and, therefore, the power. J. Baudrillard considers that ruling classes from the very beginning provided the domination by costs/signs (archaic and traditional societies). In a capitalist bourgeois societies order to which J. Baudrillard carries also the socialist countries, ruling classes glorify the economic privilege to make decisions in the privilege of signs. The property has no value for the adoption of domination of an exclusive class, as well as a way of production of goods. The main thing – who exercises control over to express social process in a sign [See: 1, page 150].

J. Baudrillard makes few practical recommendations. We will formulate recommendations by the own words, having referred to the corresponding page.

1. The constant attention behind motivation system as strategic mechanism of the power is necessary. Dialogue support. Authoritativeness and monologue control. [See: 1, page 102, 103].

2. To the technical problems formulated in scientific definitions and the equations, it is necessary to treat not only as a combination of processes, but also as forms of the signs reflecting the social relations and founded in the society [See: 1, page 237].

3. Communications have to be exempted from coercion by sense. Communications have to be mutual [See: 1, page 234-235].

4. It is necessary to be exempted from absolute randomness meaning at establishment of signs action and their mutual compliance [See: 1, page 281].
It is difficult to disagree with these recommendations. The value of political economy of a sign is in Baudrillard's version that it enters in a row economic categories such concepts as consumer value, consumption, information, adoption of administrative decisions, ideology, the power, an exchange, a symbolical exchange, the requirements, meaning and meant which didn't enter earlier into a subject of political economy.

We took A.P.Davidov's work «Not political liberalism in Russia» for an assessment of non-political liberalism/ Non-political liberalism is opposite to structuralism (postmodern). (3).

Non-political liberalism is the concept of public progress on the basis of dialectic synthesis of society and the personality, history and productive forces, national and global, the personality and the people, the internal circle of the person and his environment, a sign and sense.

Non-political liberalism compares the person innovator and the person of archaic, traditional type. A.P.Davydov considers that the person moves from one sense to another in search of the existence of the answer adequate to threats.

A.P.Davydov gives an ambiguous assessment to Baudrillard's conclusions about a symbolical exchange. On the one hand, he agrees with Baudrillard that the creative person sends traditional culture, norms and institutes to for own self-affirmation in emptiness. The innovation of the creative person ruthlessly removes historically developed cultural tradition on the periphery of a public and individual reflection. But, on the other hand, this conclusion is immoral and rectilinear.

In a modern Russian symbolical variety three currents are noticeable: liberal commitment to the West (orientation to West values), liberal democratism (orientation to the Russian traditions with recognition of value of the personality), democratic centralism (orientation to the Russian traditions with recognition of submission of will of minority to will of the majority). The western symbolical system finds broad support among the population upon. At the same time growth of peripheral consciousness (the population perceives the country as European, but the peripheral power) amplifies.
Non-political liberalism raises a question of the symbolical content of public interaction as a question of the sovereignty of the country. The task consists that own national signs, meanings and structures of values have to be synthesized with the Western liberal values, to be acquired, instead of are appropriated. But thus new values and signs shouldn't be anti-liberal. Otherwise Russia would appear in a century before last. The value of the West synthesized on the basis of Russian have to accumulate the Russian historical experience, and also today's vision of world questions from Russia as sovereign country.

Without own symbolical world citizens lose the participation in the state and collective community, cease to belong to itself, become moral slaves. Civil society is people who establish and support state in a capable condition the by means of signs, values and meanings.

The structuralism (postmodernism) and non-political liberalism give importance to system of signs and institutes in realization of the personality. In it their unity.

**Literature**


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**UDC 330.341.1:338.432**

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**INNOVATION MARKET OPERATION IN THE SYSTEM OF AGRICULTURAL MANAGEMENT**

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This article deals with theoretical conceptions of innovation market operation in Ukraine’s agriculture, innovation potential of agrarian sector. The author analyzes the amount of foreign investments to the agriculture of Ukraine and agricultural production profitability.

Key words: innovation market, Agro-Industrial Complex, innovation activity, investments.

In modern conditions, stable long-term economic development mostly depends on innovation activity of the state but not on the limited resources potential.

Achievements in agrarian science and technologies development, improvement of labor tools, approaches to agricultural production management and their unification contribute to new inventions and their promotion into farming production in the form of innovations.

Modern stage of economic development of different countries is characterized by accelerated rate of scientific technical advance. Intensive realization of researches and elaboration of new technologies on their basis, their access to world markets and establishing of international integration in scientific-production field has actually become the strategic pattern of economic growth for the developed countries. It will be observed that intellectual resources together with modern technologies have determined both economic upturn and high rate of economic independence as well as country’s welfare and its national status.

Generalized index of agricultural production economic efficiency may be considered as index of profitability. Profitability means revenue position of an enterprise.

It is reasonable to examine profitability rate of agricultural output in Ukraine. (fig.1).
The given figure illustrates that the profitability of animal production increases, though not notably, but we can’t say this about plant production – profitability rate has the similar tendency to increase and to decrease.

The provision of facilities for profitable agricultural output management by the way of price, tax, and finance and credit system improvement (factors of the external economic environment) by no means contradicts to the fact that it is necessary to carry out the most effective usage of agrarian resources potential and reserves.

Having considered the profitability of agriculture, further we propose to analyze sales income (revenue) of agricultural products (fig.2).
Competitive ability of agricultural producers depends directly on the income rate, part of which, as a rule, is addressed to production improvement: use of new selection achievements, achievements in biotechnologies, agrotechnologies, and gene engineering etc.

Having analyzed the data from fig.2 it is safe to say that the sales income of agricultural production has positive trend to be on the increase and that fact has positive effect to the Agro-Industrial Complex of Ukraine.

It is obvious that innovative development of the Agro-Industrial Complex is impossible without sufficient financial supply. Now under unstable recessionary conditions the key problem is to attract investment resources to innovation development and their rational use. Possibilities of further economic advance of agricultural production will depend on its solving. We may see it by the experience of such countries as Japan, China, Czech Republic, Slovakia which achieved notable success in economic development due to employment of 35-40% of GDP for investment necessities [2, p. 641].

To recreate economic potential of agrarian area it is badly necessary to attract all possible amounts of foreign investments (fig. 3).
Data of figure 3 testifies to positive dynamics of attracted foreign investments to Ukraine’s agriculture. But in spite of that a lot of foreign investors refrain from investing to agrarian market. The main reason of this is incompleteness of legislative regulation, excessive tax pressure, inobservance of contractual commitments and other factors that form the investment environment of Ukraine.

In developed countries considerable resource of investment processes appears to be enterprises’ own capital: depreciation funds, part of income that is directed to renovation and enlargement of production. But under modern conditions enterprises’ own financial resources for investment processes in agriculture are substantially limited. It is determined by the low rate of production efficiency and cost of fixed capital (and thus the amount of amortization charges).

The important source for investments is crediting. Unfortunately, in Ukraine the system of agrarian economy crediting is formed basically by commercial banks, but their crediting programs are mostly short-time programs. And thus in order to pay back the loan producers must sell their production urgently at low prices and...
consequently the rate of their incomes decreases. Such circumstances prevent effective development of agrarian market.

And now the main goal of governmental policy on agriculture development must be advance of investment attractiveness of the branch both for domestic and foreign investors. This will be facilitated by purchasing capacity of agricultural producers, protection of home producers from foreign products competition on domestic markets, rising of consumer demand of population [3, p. 17].

In reference to enterprises of Agro-Industrial Complex innovations mean utilization of research and development results into agricultural activity, namely: new plant varieties, new breeds and animal species and poultry crosses, new or improved food products, materials, new technologies in plant selection, animal breeding and processing industries, new fertilizers and crop and animal protecting agents, new preventive and treatment methods for domestic animals and poultry, new managerial and organizational modes in different branches of economy, new approaches to social conditions which allow to increase production efficiency.

For the purpose of detailed research of particular innovations their classification by different characteristics is used (tab. 1).

Table 1

<table>
<thead>
<tr>
<th>Classification of subject</th>
<th>Innovations Aspect</th>
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<tr>
<td>1</td>
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<tr>
<td>Biological</td>
<td>new varieties and hybrids of agricultural plants;</td>
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<tr>
<td></td>
<td>new breeds, types of animals and poultry;</td>
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<tr>
<td></td>
<td>development of diseases and pests resistible plants and animals also resistible to</td>
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<td></td>
<td>unfavorable factors of environment;</td>
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<tr>
<td>Technical</td>
<td>employment of new kinds of machines and equipment;</td>
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<tr>
<td></td>
<td>new technologies of agricultural plants treatment;</td>
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<tr>
<td></td>
<td>new technologies in animal-breeding;</td>
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<tr>
<td></td>
<td>scientifically proved systems of arable farming and animal-breeding;</td>
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Innovative development of agriculture is based on promotion of progressive technical-technological, organizational-economical, and managerial decisions which are directed to products quality improvement, efficiency and compatibility of production.

Characteristic property of stable agrarian field key determinants is quality increase of human capital and social assets, employment of intellectual potential of agrarian science, forms and methods of agricultural management, production, processes innovation, modernization of institutions etc. The main criterion of this sphere stability is increase of the agricultural producers and rural population living standards and thus the living standards of the whole nation on the basis of its life-supporting complexes [4, p. 19].

Innovative potential of agrarian sphere is the totality of actual resources and the opportunities of the state which are necessary to realize innovative activity and guarantee of competitive advantages of agricultural sector by the way of development and introduction of innovations (fig. 4).

<table>
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<th>I</th>
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<tbody>
<tr>
<td>Technological</td>
<td>new resource-saving technologies of agricultural produce production and storage; ecologization of arable farming;</td>
</tr>
<tr>
<td>Chemical</td>
<td>new fertilizers and their systems; new means of plant protection;</td>
</tr>
<tr>
<td>Economic</td>
<td>new forms of organization, planning and management; new forms and arrangements of an enterprise innovative development</td>
</tr>
<tr>
<td>Social</td>
<td>provision of favorable conditions for life, labor and leisure for rural population</td>
</tr>
<tr>
<td>Management innovations</td>
<td>new forms of labor organization and incentive new methods of effective human resources management new market segments approach</td>
</tr>
<tr>
<td>Marketing</td>
<td>products quality improvement and diversification of products new capacities of products distribution</td>
</tr>
</tbody>
</table>
Structure of innovation potential of agrarian sphere is presented as the totality of human, production-technological, financial-economical and scientific-technical resources which are used or may be used for the realization of investment activity or the general development of the agrarian sector [5].

The transition of the Agro-Industrial Complex of Ukraine to the innovative way of development can be carried out only on the basis of the integrated alliance of science, scientific attendance and innovative infrastructure. Agrarian science is a managerial device of innovative activity aimed to support permanent fundamental and applied researches which make the basis for innovations and system of knowledge to provide the acceleration of scientific-technical progress in the Agro-Industrial Complex.

The necessary requirements for creation of the conditions for innovative processes in different spheres are:

- accessibility and authenticity of information;
- sufficiency of financial resources including venture capital;
- quality and impartial scientific-technical expertise;
• intellectual property formations protection;
• information and innovation experience distribution;
• organization of training and advisory service;
• solution of other different problems.

To provide the development of innovation processes in agrarian sector of the Agro-Industrial Complex it is necessary to realize the following tasks:

• to improve organizational and economic management in the process of production;
• to introduce challenging forms of production and management;
• to improve training system, personnel development and labor incentive;
• to improve the products realization system;
• to perfect credit and financial system, tax system and pricing policy for agricultural production;
• to improve the system of planning, management, control and accounting over production using new informational technologies;

Summary. Innovation activity is an important part of system of measures concerning acceleration of agriculture development. Innovative development of agriculture is based on agrarian and investment state policy realization aimed at promotion of novelties as priority-oriented part of general strategy of national compatibility increase. As in general in Ukraine farms function more efficiently than agricultural enterprises and the experience of leading countries of the world shows the advantages of small agricultural enterprises over giants it is reasonable to aim the state support specifically to small and medium producers.

One of the main approaches to competitive recovery of the Agro-Industrial Complex on the regional level, as the world’s experience testifies, is creation of clusters with combination of production processes and scientific-innovative activity.

Literature:
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Motovits R.V., Motovits T.G.

MECHANISM FOR THE IMPLEMENTATION OF THE CONCEPT OF DEVELOPMENT OF BOLSHOI USSURIYSKY IN KHABAROVSK KRAI

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Bolshoi Ussuriysky Island administratively belongs to the city district city of Khabarovsk and is of great socio-economic importance to the development of not only the city but the entire Khabarovsk region. The territory of Great Ussuri island has an elongated shape from West to East, with length of 38 km and a maximum width of 10 km. The area of the island ranges from 330 to 350 sq km, as it depends on the level of the rivers. The island is bordered by the Jewish Autonomous Oblast in the West, and Heilongjiang province (people's Republic of China (PRC) to the South. Bolshoi Ussuriysky island has a unique and rich diversity of species of rare plants and animals. Bolshoi Ussuriysky island is home to valuable fur-bearing animals,
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artiodactyls diverse waterfowl, etc. According to experts, around the islands of Bolshoi Ussuriysky many species of fish, among them State-protected species-black Cupid and Chinese Mandarin fish, perch, and more importantly, about the island passes migration fall CHUM salmon and lamprey. Also on the island is a specially protected Bolshoi Ussuriysky State natural area, a place of historic graves čžurčženej IX-13TH centuries. At the Lake Podkovnoe, which is included in the Red Book, LotusFlower wetlands (near the village of Aspen River) is a colony of grey herons, which are protected by the State.

In developing the strategy for the development of the Bolshoi Ussuriysky Island, an integrated approach to its development, and has developed a comprehensive project of development of the Russian part of the island, Bolshoi Ussuriysky, which is linked to the development of incoming and internal tourism of Khabarovsk Krai to the 2013-2017 years.

For realization of the project "integrated development of Bolshoi Ussuriysky" requires considerable financial resources, the Ministry of regional development of the Russian Federation recommended that as public support to use the investment fund of the Russian Federation for construction of the bridge, dam and shore protection structures, roads, water supply, heat supply, power supply (takes about 10-12 billion roubles).

Also today there are suggestions to attract foreign partners (PRC) to finance the construction of infrastructure facilities on the island, Bolshoi Ussuriysky. The Russian side will continue directing the project and supervisory functions, and the Chinese side will provide low-skilled and labour-intensive construction and Assembly work.

China has already started to actively develop its part of the island, Bolshoi Ussuriysky (Hèjsâczydao). The Chinese Government has approved a master plan for the development of the island by the English engineering exploration Institute on the basis of the five projects developed by institutes in United States, Japan, China and the UK, which provides for the allocation of public funds to create a full system infrastructure for the development of trade and tourism ties.
So, are two-kilometer long road bridge to the island worth 240 million Yuan (35 million dollars), and at the same time, the island is are 36 km of motorway; Airport $ 300 for internal messages million Yuan (44 million dollars); built dock and deep-water cargo port for vessels with a maximum capacity of up to 5000 tons; ; are golf courses; built helipads, exhibition business and shopping centers, hotels and the Museum of the Eastern Pagoda (the easternmost point of the people's Republic of China). On the shore in the area with the construction of the Kazakevičevo. "The Sun".

On the Chinese side of the island, Bolshoi Ussuriysky erect building customs and border crossing points, as well as shopping malls for wholesale and retail trade, cargo terminals. It is planned to build a railway from the village Fuyuan to jiamusi city, then connect the new railway line from far eastern Fujian railway in Russia, located on the opposite bank of the Amur River in Russia. The Chinese side also involves the creation of the National Park, the Botanical Garden.

The amount of planned investments with the Chinese side to 8 billion yuan (about 1 billion dollars), but this amount does not include the cost of building energy infrastructure on the island, the construction of the ring road. It should be noted that the Chinese side the bridge on its part of the island was opened September 27, 2012 year.

CHINA to finance its part of the island, Bolshoi Ussuriysky gives priority to public investment, in Russia-long-term development programmes on a public-private partnership.

The problem to be solved as soon as the Russian side is to find a "point of interest" for big investors.

It should be noted that the development of free zones and active cross-border cooperation was possible in China after the Chinese Government launched the implementation of public construction programs and clearly formulated the thesis that more than 80% of all expenditure on the creation of an integrated infrastructure of these areas (communications, roads, bridges, tunnels, housing estate, office buildings, hotels, social sites, etc.) the State takes over, and foreign investors should only
implement their production programme and it is world practice in the development of free zones.

So the Russian side should be aware that foreign investors will not invest in the development of SEZS is an integrated production and social infrastructure of these zones and areas of cross-border cooperation. Therefore, in Khabarovsk Krai, investors are in no hurry to develop first into the free zone and a zone for cross-border cooperation, and develop their business.

But despite the difficulties, the Russian side already by 2013 year is set to be the first span of the bridge on the island, Bolshoi Ussuriysky. The estimated cost of the bridge and 4.2 km of access roads is estimated at 5.7 billion rubles. and will be funded from the federal budget. Then, after the completion of the construction work on the bridge, on the Russian island, Bolshoi Ussuriysky will begin development of its road map, including the construction of a road to the village of Ussuriysky.

You should note that there are several sources of financing the activities of border areas: investments, which come from the State structures to finance capital-intensive infrastructure projects; the major private investors; funds from various international business structures and organizations; small business tools, mostly in the field of tourism.

Thus, the Bolshoi Ussuriysky island is one of the very promising "growth points" of the Khabarovsk region, which will contribute to the creation of more jobs, increased revenue in the budgets of all levels, create conditions for active relaxation and the inhabitants of the province, it is a unique form of cross-border cooperation for establishment of a new centre of cultural and economic cooperation between Russia and China.

The island development project Bolshoi Ussuriysky has important political and socio-economic importance both for the Russian Federation and the people's Republic of China. Its implementation will contribute to the strengthening of friendly relations between the two countries on the principles of equality, mutual benefit and good-neighbourliness and enhance the investment attractiveness of the Khabarovsk region. Establishment on the island of tourist-and-recreational complex of
international importance will increase the flow of Russian and foreign tourists in the Khabarovsk region, replenish the income part of the budgets of all levels.

One of the perspective directions of development cooperation in free economic zones in border areas, is the creation and development of joint enterprises for processing raw materials proceeding from the specificity of the region. An analysis of global experience shows that trading costs to sell the products in these areas are optimal, i.e. to the development of effective cooperation between the countries.

You must create a "Pilot zone of development and openness on the island, Bolshoi Ussuriysky", which will show: 1. the openness that would link nearby and the internal territory of Khabarovsk, Khabarovsk Krai; 2. openness is reflected in the need to move from the socio-economic situation of border crossing points on the island, Bolshoi Ussuriysky to comprehensive, optimal development and deployment of production and services on the island; 3. openness in the field of regional cooperation, which will allow participation in international collaborative projects go to the establishment and implementation of a common strategy among States and countries; 4. openness is reflected in the dynamics of cooperation in selected areas in the border areas to create a multi-tiered partnership.

Thus, the island may be the Bolshoi Ussuriysky testing ground for new forms of regional cooperation mechanisms in Northeast Asia and could become a major pilot project involving the development not only of Russian-Chinese investment, but also the resources of international financial institutions, to support regional initiatives and projects of cooperation. As a limited area can be formed complex of international tourist-and-recreational orientation, which will be provided with the necessary infrastructure, institutional support systems, modern mechanisms of financial security. An important factor in the development of the island, will be the opening of the crossing points.
SOME ISSUES IN THE DEVELOPMENT OF MUNICIPAL INFRASTRUCTURE OF KHABAROVSK TODAY

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Currently, the city of Khabarovsk is rapidly developing as an industrial and economic centre in the far Eastern District. As a result of an increase in the pace of construction in the city of Khabarovsk was the need for more intensive development of engineering infrastructure in order to avoid a shortage of facilities of transportation resources. As of January 1, 2010 quarterly physical deterioration of heat networks was 60%, water-supply, 56.14-63%. Share local and vnutridvorovoj drainage system that needs replacing, at the beginning of 2010, reaching 78.2%. Unaccounted water costs and losses make up 21.7%, heat-24.1%. Excessive losses of electricity-8.15% (20.1% at the norm of 12.95%).

In the "Programme for integrated development of communal infrastructure of city district city of Khabarovsk on the 2011 -2015 years on the municipal unitary enterprise of Khabarovsk" heat networks "are very significant to the development of heating systems, so the technical re-equipment of the enterprise plays a key role in carrying out the task before 2015, the city. The plant provides heating for most of the consumers of Khabarovsk, conveying heat energy through 456.7 km of heat networks (double-tube version). The average is 60% networks wear that leads to a decrease in the quality of public services to the population and threatens the sustainability of heating networks.

In order to ensure the ability to connect additional thermal capacity, improve the reliability of operation of heating systems and improve the quality of service provision for the transfer of thermal energy to the consumer has developed a program of development of the municipal unitary enterprise of the city of Khabarovsk "heat networks" on the development of community infrastructure, used in heating, in the 2011-2015 period. To meet the challenge of sustainable and efficient functioning in housing and communal services the following activities is development of heat
supply in municipal infrastructure: improving the security and quality of heat supply; to connect additional loads in the construction of new residential buildings; reduction of wear of quarterly thermal networks; reduction of heat loss during transport; building blocks of heat networks, in accordance with the maximum heat load of residential and public buildings designed of quarter (district), the city-planning the scientific-methodical section citywide programme of development and modernization of infrastructure services; heat supply facilities, building of new neighborhoods in the city of Khabarovsk, It is intended to attach to district heating networks through central heating units (TSC), the building blocks of heat and drainage networks, individual heating units (ETC)-planned capacity-88.25 Gcal/hour; construction and modernisation of blocks of heat networks, taking into account the current and prospective maximum thermal loads and specifications issued by regions.

With the rapid growth rate of housing, office buildings, objects of social sphere, each of which must be connected to the centralized heat supply and create a comfortable environment for living, development of networks has no time for an active and not always orderly construction. As a result, there are problem areas with unsatisfactory heat supply. In order to ensure the legal parameters of heat transfer in heat networks Program planned quarter various works on modernization of heat supply schemes at 11 sites.

The existing network of underground thermal shim under groundwater underflooding and technological waters are highly corrosive. In order to increase the service life of heat networks, heat loss reduction Programme for construction of drainage networks in volume 155.8 km with the use of concrete pipe conditional average diameter 200 mm. Recovery insulation-4000 p. m annually; major repairs of heating mains-10 km annually using high-efficiency insulation materials and technologies and replacement of 700 units. valves annually. Construction of drainage networks-37.5 km.

In order to ensure economic operation of heating systems, reducing heat loss, water leaks, you must complete the entire scope of work using high-efficiency insulation materials and technologies, including: use of "industrial pipe with thermal
insulation of polyurethane foam in the plastic casing (pipes in industrial polyurethane insulation is governed by the requirements of GOST 30732-2001); use foam "shell"-9000 m, in order to reduce heat loss in pipelines air gaskets; tap water networks of the gutter channel thermal network.

Tariff for the service release of thermal energy from boiler company is based on the standard fuel consumption of thermal energy generation, but, despite this, is significantly higher than the rate set by the district heating service. In 2011, the fare from local source heating (boiler house) was 1865 rubles for a Gcal, and from a centralized source of 798 rubles, which is 2.3 times less.

In order to reduce the cost of government funding for grants to people and paying for heat budget organizations need to perform activities for switching consumers to the central heating boiler, as well as to perform construction work on the heating system and boiler house building refurbishment in Central heat (TSC) installing the automation, to upgrade existing central heating units and pumping stations in accordance with the programme of development of CBM Khabarovsk "heat networks". All these activities the program svideleštstu that CBM of Khabarovsk "heat networks" is constantly in the area of responsibility of the city administration of Khabarovsk.

The main activities to develop the infrastructure of mue «heat networks "is financing the modernization of boiler, central heating units and pumping heat supply in the amount of 468.311 million rubles, an energy-saving activities that are funded in the amount of 4073.38 million rubles, as well as the construction and modernization of heating mains blocks new developments, which will be funded in the amount of 3345.0 million rubles. Implementation of measures for the modernization and development of the heat supply system will allow Khabarovsk will: provide sufficient heat energy with particular characteristics; ensure the continuity of supply of thermal energy; ensure that the interests of consumers by reducing the number of unplanned outages; be able to connect new consumers by increasing system capacity of main heat networks and boiler-houses in the city; shortage of thermal energy in the planning areas of the city; improve the ecological condition of the city through
modernization and replacement of worn equipment (use of new technologies that reduce emissions of polluting substances); increase the level of investment appeal of the industry.

In the "Programme for integrated development of communal infrastructure of city district city of Khabarovsk on the 2011 -2015 years on CBM Khabarovsk" heat networks "are very significant to the development of heating systems. Therefore, 1) application of the systems of heat supply make-up water stabilizing treatment technologies (boiler room of Krasnaya rechka); 2) separation of contour and water (boiler room at St. Trekhgornaya, 59); 3) installation of heat energy accounting units (UUTÊ), individual heating units, thermostats in order to improve energy efficiency will increase the efficiency of the city until 2015.

Thus, CBM "heat networks" in the boiler room of Krasnaya rechka installed six boilers "DE 25/14GM», in separate rooms, eight heaters type vodovodânyh PV-2-14, eight of steam-water heaters type Fg1-53-7-2. Application of antinakipina SC-110 in Khabarovsk heat networks will inhibit crystallization of salts from heated water in the hot-water boilers, which will increase the service life of the equipment, the high profitability.

In the boiler room at St. Trekhgornaya, 59, of Khabarovsk two German hot-water boilers of the Vitoplex 100 and one steam boiler brands DKVR 4-13. I believe that in the mue heat networks ", you must install the heat exchangers to separate circuits of boiler and water and install additional pumps to path of boiler water. The effect will be achieved by reducing the intensity of deposits on the inner surfaces of heating boilers and repair costs of heating surfaces and water supply network. Service life of the plate heat exchanger is estimated at 20-25 years. The profitability of the event will amount to 26.1% and the payback period is 3.8 years, showing economic efficiency.

Installation of heat energy accounting units should be carried out simultaneously with the overhaul and modernization of the internal systems of heat consumption. Blocky AITP is an automated package installation for connection to centralized heat supply systems for heating systems of individual buildings, practically eliminates
corrosion and deposits in the heating system at home, the necessary quality of hot water, you can virtually eliminate overheating and peretopy. According to specialists when installing AITP and thermostats in thermal energy costs the average family of 4 people in the average two-bedroom apartment reduced by 22%. Thus, the additional cost of comfort will pay off in the first heating season and in the future will yield very substantial savings. It is suggested to use for heat type Logic 9943-U4 "based on Ultrasonic Flowmeter SONO 2500 CHURCH and teplovyčislitelâ TPB 943.1, profitability of this activity is very high.

Thus, the development of communal infrastructure of Khabarovsk in the heat should go towards modernization of the heat supply system MPIS "heat networks" that will reduce the number of unplanned outages; the ability to connect new consumers by increasing system capacity of main heat pipelines, it is particularly important that this will improve the ecological status of the city.

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ACTIVE TOURISM INSURANCE

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The paper considers the problems related to the need for active tourism insurance, which is now very popular among Russians. Statistics of outbound tourism in 2012 shows an increase of 6%. More than 15.3 million Russians went abroad as tourists. Insurance is designed to provide protection of tourists on holidays.

Keywords: active tourism, insurance, certificate of insurance, insurance money.
Active tourism is sport of courageous people. Overcoming difficulties they temper their nature, participating in expeditions to remote places of the earth, prove inexhaustible possibilities of a person [4].

Active tourism is a form of travelling in weak changeable environment with the use of active ways of transportation. Active tourism is divided into: adventure, sports, extreme and health-improvement.

Adventure is mostly individual (in small groups) travelling in little explored, pristine natural sites of our civilization, in amazing places of our planet, this type of tourism combines all the travels related to the active ways of transportation and recreation in nature in order to gain new experiences, impressions, improving tourist fitness. Sports tourism is aimed at the implementation of certain standards. Depending on the difficulty of overcoming the obstacles district hike, autonomy, originality, length of the route and a number of his other indicators specific to a particular type of sports tourism, trekking tours are divided into tours on a weekend, category and non-category tours.

The similarity of extreme and tourism sports is obvious, but the main and essential difference between them is in the form of objectives and implementation. Extreme tourism - is the focus on overcoming obstacles, the desire to find out the limits of their own physical capabilities. Sports tourism involves consistency and regularity of employment and is focused on achieving athletic performance, discharge, etc. Adventure tourism is focused on having fun, experience and knowledge when it is not possible to get them in traditional methods.

Health - improvement tourism is a type of recreational tourism: tours and travels in areas with favorable climatic conditions for health. The purpose of these trips is the treatment and prevention, recovery of strength from the constant stress and impaired mode in everyday life, cleansing the body from the effects of air pollution and unhealthy food. A person chooses opportunities to combine vacation near the sea, mountain or spa resorts with spa services and sports.
But as at the time of employment by active forms of tourism with tourists may occur a variety of adverse events, travel companies as legal entities use some of the services of insurance companies.

Insurance in tourism is a special type of insurance that provides insurance protection of property (material) interests of citizens during tourist trips, routes of various complexity, thematic journeys. It relates to risk types of insurance, the most prominent feature of which is their short duration (less than 6 months), a large degree of uncertainty of time of the insured event and the magnitude of possible damage (loss).

Nowadays, the insurance industry in the tourism sector provides more than a dozen types of insurance services. A tourist visiting another city or a country for many more local people vulnerable to adverse risk factors.

At the conclusion of the insurance contract the insured amount is chosen according to the country of destination and is classified according to the minimum required coverage.

On average, the usual tourist travel insurance is up to 1.5 U.S. dollars a day. And when you consider that there are tourists in the world, more than half a billion, with an average length of stay of 5-7 days, it is possible to estimate the amount of money circulating in the insurance industry of tourism.

On average, the tourism statistics an accident befalls an every 100 m tourist. It should be noted that not all the happened circumstances recognized by the insurance company for the assignment of the case to the insurance and paid.

Travel agency can ensure the provision of emergency medical care to their customers only if the insurance contract and issued a medical insurance policy were concluded.

In the tourism industry, there is mandatory and voluntary types of insurance.

To the compulsory insurance in accordance with the current legislation belong: insurance of civil liability of vehicle owners and insurance of motor travels.

Insurance in the tourism system is classified into the following types:

1. Travel Insurance and its property;
2. Risk insurance of travel companies;
3. Insurance of travellers abroad during travels;
4. Insurance of foreign tourists;
5. Liability insurance;
6. Insurance of civil liability of vehicle owners;
7. Accident insurance to medical expenses.

The travel Insurance and its property includes responsibility for loss of or damage to property of the tourists. The action of this contract begins after the date when the insured with a permanent place of residence, and ends with the return. Insure such a treaty can travel and personal property, which the tourists have of themselves. Under luggage means registered and unregistered tourists things. In addition, the things shall be insured that are on his clothes and body, as well as acquired during a trip abroad.

Types of insurance are: accidents, fires, explosions, natural phenomena of nature, robberies, thefts and other deliberate and malicious acts, acts of war, etc.

Risk insurance of travel companies includes financial risks, liability risks for tourists, their relatives or a third person. Among the financial risks are:

1. Commercial risks (non-payment or delayed payment, the penalties for non-recognition of their counterparty circumstances of the breach of the contract by force majeure);
2. The bankruptcy of the firm;
3. Changes in the customs legislation, exchange control, passport control, customs and other formalities;
4. The occurrence of circumstances of force majeure nature;
5. Political risks, etc.

Travel insurance in foreign tourist trips usually includes:

1. Providing emergency medical tourists during a trip abroad with a sudden illness or an accident;
2. Transportation to the nearest hospital capable of spending quality treatment under appropriate medical supervision;
3. Evacuation to the country of permanent residence under proper medical supervision;

4. Nosocomial monitoring and informing the patient and family;

5. Providing medication if it can not taken on the on-site;

6. Consulting services of a specialist (if it is necessary);

7. Payment of transportation costs for the delivery of a sick traveler or his body in the country of residence;

8. The repatriation of the remains of a tourist;

9. Legal assistance in the investigation of the tourist civil and criminal cases abroad.

Another very common type of insurance during the traveling abroad is the insurance of civil liability of the vehicle owner "The Green Card". At this time the system of "green card" includes 46 countries from Europe, Asia and Africa - all countries of Europe, including Russia (since 1 January 2009), as well as Turkey, Israel, Morocco, Tunisia and Iran [2].

Accident insurance with a tourist abroad is usually done within agreed in the contract of insurance premiums and compensation shall be paid upon the occurrence of:

1. Disability Group 3 - 50 % of the sum insured;

2. Disability Group 2 - 75 % of the sum insured;

3. Death - 100 % of the sum insured.

Insurance costs for tourists imperfect trip is realized on the basis of an agreed amount in the contract of insurance (indemnity), which is paid in whole or in a part, when the failure of the trip occurred for the following reasons:

1. Sudden impairment of health or death of a tourist, or a member of his family or close relatives;

2. Damage of property as a result of tourist impacts the environment or actions of third parties;

3. Participation in the tourist trial at the time of the alleged trip;

4. Getting the call for military duty;
5. Failure to obtain a visa if all the requirements for registration of documents;
6. Other causes that are recognized in the agreement.

Also, voluntary types of insurance in tourism are [1]:
- Insurance in case of untimely departure;
- Insurance in case of bad weather in the place of temporary residence;
- Insurance against non-receipt of visas;
- Insurance is not "fishing" or "not shooting the animals on the hunt";
- Reimbursement of expenses under penalty canceled the tour (in the case of illness a tourist or a close relative, lawsuits, etc.).

Specific rules (conditions) of travel insurance for each type of insurance are developed independently by each insurer - in the framework of existing laws and regulations. So before you sign a contract with an insurance company, a potential tourist should study these conditions and observe them on the trip.

When engaging in different forms of tourism are mainly used two schemes of travel insurance, either separately or together. In the first scheme (compensation) when the insured pays a tourist himself for their medical, legal, administrative or other service, and he returned to his homeland, makes the necessary documents (insurance act, bills, checks, etc.), the insurance company, which was a contract of insurance. And if an accident is confirmed by authentic documents and complies with the rules (conditions) of this type of insurance, the insurance company makes a decision on the insurance payment. In case of failure of the insurance payment a final decision can be made general civil court.

The main drawback of the compensation scheme of insurance is that the traveler should always have a supply of currency "just in a case". The second drawback is the lack of guarantees that the tourist will receive an insurance payment upon return to their homeland. Insurers can find a reason not to proceed with the payment of insurance coverage or indemnity (this breach of security.) Because of this, the insurance on the first scheme was called "pseudo-insurance" and, in recent years, is seldom used. Finally, on active routes travel group, usually located away from
populated areas, and can get help, especially in emergency situations, only by calling customer service or ministry.

In the second (service) insurance scheme by entering into an agreement or a contract with the insurance company, just call one of these dispatchers, informing their policy, the name and the victim will be given the necessary assistance [3].

Thus, the impetus for the development of tourism in the Russian insurance requirements of a number of countries served the mandatory presence of Russian citizens health insurance policy for the duration of residence in their territory. For example, the embassies and consulates of countries such as Germany, France, the Netherlands, Finland, Czech Republic, Estonia, and some others, do not issue entry visas to Russian citizens without a corresponding policy. However, there is a number of countries, such as Cyprus, Ukraine and some others that do not require a Russian citizens visa for entry into their territory. Accordingly, they do not need the availability of health insurance. And this leads to the fact that a significant part of Russian tourists traveling to these countries, go there without buying a health insurance policy. Also, there is almost no practice insurance Russian tourists traveling in Russia. Another challenge in adventure tourism insurance is insurance fraud on the part of insurers, policyholders and medical companies [5].

In our view, as the travel insurance in Russia began to develop relatively recently, all indicated above problems will be solved with time, it is necessary to inculcate the Russian insurance culture and strengthen the legal basis of insurance.

References
4. Adventure tourism. Available at: www.7ya.ru/articles/8549/
THE DEVELOPMENT OF BANKING SECTOR IN THE REGION: CURRENT STATUS AND PROSPECTS

Oryol State Agrarian University, Russian Federation, Oryol, General Rodin Street, 69

The article outlines the main directions of banking sector development in the region, in particular, it specifies the provision of banking services, the sources of the resource base, the dynamics of the credit institutions and affiliated branches, as well as the main reasons that caused a negative impact on the functioning of the banking community in the region.

The key words are banking sector, affiliated branch, banking services, credit institutions, resource base.

The implementation of activities, reflected in the Banking Sector Development Strategy of the Russian Federation until 2015, contributed to consolidation of the positive trends in the dynamics of formation and development of the banking system and promoted significant expansion of the banking services market. As a result of the anti-crisis measures, taken by the Central Bank of the Russian Federation, during the financial crisis, the collapse of the banking system was prevented and favorable prerequisites for further activities of credit institutions were created. Reduction of credit institutions is not so much the result of the impact of the financial crisis as it is just the qualitatively new phase of the banking system reform (tab.1) [1].

Table 1

<table>
<thead>
<tr>
<th>Region</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia, sum total, including</td>
<td>1108</td>
<td>1058</td>
<td>1012</td>
<td>978</td>
<td>956</td>
</tr>
</tbody>
</table>
Central Federal District | 621 | 598 | 585 | 572 | 564  
Northern Federal District | 79  | 75  | 71  | 69  | 70   
Southern Federal District | 115 | 113 | 47  | 45  | 46   
North Caucasian Federal District | н/д | н/д | 57  | 56  | 50   
Volga (Privolzhsky) Federal District | 131 | 125 | 118 | 111 | 106  
Ural Federal District | 58  | 54  | 51  | 45  | 44   
Siberian Federal District | 68  | 62  | 56  | 54  | 53   
Far Eastern Federal District | 36  | 31  | 27  | 26  | 23

The development of banking sector in the Oryol Region corresponds to national trends (tab.2).

Table 2
The Number of Credit Institutions and Their Affiliated Branches, Operating in the Oryol Region

<table>
<thead>
<tr>
<th>Indices</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of credit institutions, units.</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>The number of affiliated branches, sum total, units</td>
<td>22</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>14</td>
</tr>
</tbody>
</table>

The current stage of development of the global market economy is innovative, that stimulates toughening competition and introduction of advanced technology in all its spheres. The same holds true for the banking sector. So, this situation has led to some changes in the expansion of the scope and range of provided services, enhancing the quality of customer service, as indicated by the following statistics, presented in table 3 [1].

Table 3
Provision of Banking Services in the Oryol Region

<table>
<thead>
<tr>
<th>Indices</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional saturation with banking services (by population)</td>
<td>0,77</td>
<td>0,80</td>
<td>0,81</td>
<td>0,84</td>
<td>0,82</td>
</tr>
<tr>
<td>Institutional saturation with banking services (by assets)</td>
<td>0,37</td>
<td>0,36</td>
<td>0,40</td>
<td>0,41</td>
<td>0,40</td>
</tr>
</tbody>
</table>

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To implement credit policy, banking sector should have a sufficient resource base, which is formed by means of its own sources, as well as borrowed funds (tab.4).

Table 4

The Resource Base of the Banking Sector in Oryol Oblast

<table>
<thead>
<tr>
<th>Resources</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Its own sources</td>
<td>1228,1</td>
<td>1053,1</td>
<td>832,3</td>
<td>2078,2</td>
<td>555,5</td>
</tr>
<tr>
<td>Borrowed funds</td>
<td>34338,1</td>
<td>35818,3</td>
<td>42304,5</td>
<td>48733,5</td>
<td>59490,0</td>
</tr>
<tr>
<td>Resource base, sum total</td>
<td>35566,2</td>
<td>36871,4</td>
<td>43136,8</td>
<td>50811,7</td>
<td>60045,5</td>
</tr>
</tbody>
</table>

The resource base of credit institutions and affiliated branches has been expanding over the years. The increase in borrowed funds is mainly stipulated by the increase of all the components, but the major factor is the increase in household deposits, the share of which accounts for about 80% [3].

The increase in customer accounts did not affect the change in their structure. As usual, deposits with a maturity of over one year take the largest part, 32% - deposits with a maturity of 31 days to 1 year and the deposits «on demand» and deposits with a maturity of up to 30 days constitute only 1%.

Depository banking services for population had a high diversity of proposed terms and interest rates. In 2012 in the deposit market there were about 250 types of deposits. The main reason contributing to the growth of deposit operations was the increase in interest rates. The interest rates on ruble deposits ranged from 1.5% to 11.2% [2].

Implementation of a large-scale investment program of credit institutions on the banking services market is managed through lending. Banking institutions in the
region, regardless of its affiliation, issue loans both to the real sector of economy and to population (consumer loans) (tab.5).

Table 5

The Dynamics of Loans Granted by Banking Institutions in Oryol Oblast’

<table>
<thead>
<tr>
<th>Indices</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sum of credits, billion rubles. including</td>
<td>27,3</td>
<td>27,5</td>
<td>88,8</td>
<td>107,1</td>
<td>108,1</td>
</tr>
<tr>
<td>- to the real sector of economy</td>
<td>18,7</td>
<td>24,7</td>
<td>79,5</td>
<td>90,9</td>
<td>83,5</td>
</tr>
<tr>
<td>- consumer loans</td>
<td>8,6</td>
<td>2,8</td>
<td>9,3</td>
<td>16,2</td>
<td>24,5</td>
</tr>
</tbody>
</table>

In 2010 and 2011 there was a drastic increase in the amount of loans (in all areas of crediting). This is bound to the fact that lending to the real economy was carried out in the framework of the credit policy of banks, as well as of federal and regional programs through credit lines, "one-time" (individual) credit agreements and "overdraft" loans. The new lending programs, such as small and medium business lending programs, agro-industrial lending programs, including individual farms and household plots, were introduced. However, despite the increased lending to the agribusiness, their share in aggregate loan portfolio is insignificant and as of January, 2013, it accounted for 15%. Trading occupies the dominant position – 53% [2].

Table 6

The Structure of the Loan Portfolio of the Banking System in the Oryol Region, Depending on the Type of Economic Activity, %

<table>
<thead>
<tr>
<th>Indices</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sum, including</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>- industry</td>
<td>28,0</td>
<td>27,0</td>
<td>12,0</td>
<td>14,0</td>
<td>12,0</td>
</tr>
<tr>
<td>- agriculture</td>
<td>13,3</td>
<td>12,2</td>
<td>11,0</td>
<td>9,0</td>
<td>15,0</td>
</tr>
<tr>
<td>- construction</td>
<td>6,5</td>
<td>8,5</td>
<td>4,0</td>
<td>6,0</td>
<td>5,0</td>
</tr>
<tr>
<td>- trading</td>
<td>0,5</td>
<td>1,0</td>
<td>54,0</td>
<td>51,0</td>
<td>53,0</td>
</tr>
<tr>
<td>- other activities</td>
<td>18,2</td>
<td>20,5</td>
<td>19,0</td>
<td>20,0</td>
<td>15,0</td>
</tr>
</tbody>
</table>

In 2012 there was an increase in lending to small and medium businesses. The share of loans to small and medium businesses in the volume of loans to non-financial sector increased on average by 14.8%. Consumer lending market continues...
to develop, its structure is still dominated by emergency loans and loans on bank (credit) cards. Mortgage loans are still in demand, so in 2012 3081 agreements were concluded for mortgage loans of 3,560 rubles, that is almost 2 times higher than in 2011, both in number and volume [2]. Despite the intensification of the management of assets and liabilities during the year 2012, the banking sector in the region obtained the negative financial result. Deterioration in the consolidated financial position of banking sector reflects the impact of the following factors:

- growing risks and their impact on economic activity in the real sector of economy;
- insufficiently high level of profitability of the financial and economic activities of the non-financial sector of economy;
- deterioration in the calculations due to the growth of overdue receivables and payables

To expand the banking services market and to create conditions necessary for formation and development of a stable banking sector, it is pivotal to monitor the factors, that affect its activities negatively. Elimination of these factors will contribute to increasing the attractiveness of banking operations, both to the public and to the enterprises of the real sector of economy.

Literature:

Grosheva N.B., Bobkova N.G.

ANALYSIS OF INNOVATION ACTIVITIES OF THE IRKUTSK REGION ENTERPRISES

Federal State-Supported Educational Institution of Higher Vocational and Professional Education “Irkutsk State University”

Introduction

Although the high level of innovation activity is considered to be highly important for companies’ competitiveness in the innovative economic conditions, Russian enterprises are reluctant to innovate on a regular basis so far. Many innovation activity indicators in Russia lag behind the similar indicators of the developed and some developing countries. The proportion of innovation active firms in Russia is only 9.5%, whereas in Germany the same indicator equals to 79.9%. Moreover, in Russia innovation activity levels vary significantly depending on the region. The purpose of this article is to analyze innovation activities of the Irkutsk region enterprises. Official statistics is used for the analysis.

1. Innovation Activities of the Irkutsk Region Enterprises in 2012

In 2012 thirty three firms undertook some form of innovation. Among them are joint stock companies Irkutskenergo, Angarsk Petrochemical Company, and Sayanskhimimplast. The main objectives for the firms to engage in innovation activity are to improve product quality, extend product range, lower production costs and open up new markets.

Regarding the types of innovation that enterprises engage in, Figure 1 shows number of firms broken down by four categories of innovations: product, process, organizational and marketing innovations. The proportion of firms that innovate tend to focus more on process innovation that is generally less resource intensive. Increasing prevalence of organizational innovations can be linked to improvements and increases in strategic decision making.
The total expenditure on innovation activities for the firms in 2012 equaled to 7,452.3 mln. Rubles, including product innovations - 4,131.8 mln. Rubles, process innovations – 3,317.0 mln. Rubles, organizational innovations – 3.5 mln. Rubles. Innovation expenditure is mainly financed by firms’ own funds (94.7% of total amount). Private companies tend to be more innovative. Moreover, companies that process oil and produce coke and chemicals are the most innovative.

The main innovation activities of the Irkutsk region enterprises are presented in table 1. Acquisition of new technologies was prevailed. 13 companies acquired new machinery and equipment. 4 enterprises bought new technologies abroad.

<table>
<thead>
<tr>
<th>Types of innovation activities</th>
<th>Number of enterprises engaged in these activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>acquisition of machinery and equipment for technological innovations</td>
<td>21</td>
</tr>
<tr>
<td>research and development of new products, services and new production methods</td>
<td>11</td>
</tr>
<tr>
<td>other technological innovations</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 1
Modern scientific research and their practical application. Vol J21317

- acquisition of software 10
- tooling up, industrial engineering, industrial design and production start-up 5
- training linked to innovation activities 4
- other activities in connection with the launching of technologically new or improved products 3

In 2012 twenty one firms undertook organizational innovations (table 2).

### Table 2

**Organizational Innovations**

<table>
<thead>
<tr>
<th>Innovation activities</th>
<th>Number of enterprises engaged in these activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- implementation of advanced management techniques</td>
<td>15</td>
</tr>
<tr>
<td>- implementation of new quality control procedures, methods and standards</td>
<td>14</td>
</tr>
<tr>
<td>- introduction of new or significantly changed organizational structures</td>
<td>12</td>
</tr>
<tr>
<td>- personal development</td>
<td>11</td>
</tr>
<tr>
<td>- outsourcing</td>
<td>11</td>
</tr>
<tr>
<td>- implementation of corporate knowledge management systems</td>
<td>6</td>
</tr>
<tr>
<td>- introduction of new or significantly changed corporate strategy</td>
<td>5</td>
</tr>
<tr>
<td>- new methods for distributing responsibilities and decision making among employees for the division of work within and between firm activities</td>
<td>3</td>
</tr>
<tr>
<td>- implementation of new logistic system</td>
<td>3</td>
</tr>
<tr>
<td>- creation of specialized R&amp;D department</td>
<td>3</td>
</tr>
<tr>
<td>- new ways of organising relations with other firms or public institutions</td>
<td>2</td>
</tr>
</tbody>
</table>

Marketing innovations were undertaken by 5 firms (table 3).
### Marketing Innovations

<table>
<thead>
<tr>
<th>Innovation activities</th>
<th>Number of enterprises engaged in these activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>implementation of a new marketing method involving significant changes in product or service delivery</td>
<td>4</td>
</tr>
<tr>
<td>implementation of a new marketing method involving significant changes in product placement</td>
<td>4</td>
</tr>
<tr>
<td>implementation of a new marketing method involving significant changes in pricing methods</td>
<td>4</td>
</tr>
<tr>
<td>implementation of a new marketing method involving significant changes in product design</td>
<td>3</td>
</tr>
<tr>
<td>implementation of a new marketing method involving significant changes in product packaging</td>
<td>3</td>
</tr>
<tr>
<td>new marketing strategy to better address customer needs and opening up new markets</td>
<td>3</td>
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<tr>
<td>new ways of product positioning on the market</td>
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</table>

Also, many companies were engaged in ecological innovations to develop environmentally friendly products, cut production costs, and meet technical and ecological standards.

During the last three years 54 firms had ready to use innovations, including technological innovations – 49 companies, organizational innovations – 21 companies, and marketing innovations – 5 companies.

In 2012 only 16 companies produced innovative products and render innovative services. It is important to mention that the companies tend to produce significantly changed or totally new products rather than improved products. In total volume of produced products and services they constitute, respectively, 60.9% and 39.1%. Twenty enterprises were involved in 86 joint collaborative R&D projects. The volume of shipped innovation production equaled to 7,759.2 mln. Rubles, including production shipped abroad – 8.1 mln. Rubles.
104 innovation projects were not realized. 41 of them were seriously delayed. 24 projects were aborted. 39 projects were not started at all.

2. Analysis of Innovation Activity Level of the Irkutsk Region Enterprises

Table 4 shows the main indicators of innovation activity of the Irkutsk region companies in 2010-2012.

<table>
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<th>Table 4</th>
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<tr>
<td><strong>Main Indicators of Innovation Activity in 2010-2012</strong></td>
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<tr>
<td>2010</td>
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<tr>
<td>Number of innovation active firms</td>
</tr>
<tr>
<td>Number of companies having ready-to-use innovations during the last 3 years</td>
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<tr>
<td>Volume of shipped innovation production, mln. rubles</td>
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<tr>
<td>Expenditures on technological innovations, mln. rubles</td>
</tr>
</tbody>
</table>

The number of innovation active firms in the region didn’t change significantly, except in the year 2010 (figure 2). At the same time the number of firms that have ready-to-use innovations during the last 3 years increased. The level of innovation expenditure between 2011 and 2012 increased by 52.8%. In addition, in 2012 the volume of shipped innovation production increased by 58.7% compared to the volume of the previous year.

![Figure 2: Number of innovation active enterprises](image-url)
Also, the volume of shipped innovation products significantly raised in 2011 in comparison with the same volume in two previous years. In 2012 its level was almost the same as in 2011 and equaled to 2.9% of total goods shipped (figure 3).

![Figure 3: Proportion of Innovation Products in Total Volume of Goods Shipped in 2006-2012](image)

The National Association of Innovations and IT Development ranked each Russian region based on evaluation of three groups of factors: environment for innovation development, production and use of innovations, legal environment. In 2011 the Irkutsk region was on the 52\textsuperscript{nd} place in this rating. In 2012 there was a positive change in innovation activities and the region received a high rating (the 48\textsuperscript{th} place out of 89). Overall, the level of innovation activities was characterized as moderate.

The Fund named “Petersburg Politics” together with Russian Academy of National Economy and RBK daily also carry out an innovative activity rating of Russian regions on the basis of an expert assessment of key events in the sphere of innovations, and innovative activity of regions, authorities and institutions. In 2012 spring rating the Irkutsk region was among top ten regions (the 7th place) for the first time. At the Government level the special investment committee was created to make the regional investment climate more attractive to potential investors. Plans on nanocenter creation were announced. In addition, uniqueness of a product of "Vinizol" developed by scientists of National Research Irkutsk State Technical University was noted.

Looking at a number of innovation-related indicators, the Irkutsk region firms performed relatively well. The overall innovation activity level can be characterized as moderate.
Main factors hampering innovation activities are too high costs, too long pay-off period of innovation and excessive perceived risks.

**Inferences**

1. The Irkutsk region companies are engaged in all types of innovation.
2. Implementation of process and organizational innovations is prevailing.
3. Private companies are more innovative.
4. Technological innovations are the most capital intensive.
5. During the last several years the level of innovation activity was stable.
6. The volume of shipped innovation production increased.
7. Looking ahead, there are still challenges faced by firms in the Irkutsk region, notably high risks and costs of innovation, which may hamper future innovation.
8. Overall, innovation activity of the Irkutsk region companies can be characterized as moderate.

**References:**

MANAGEMENT CONTROL OF BALANCED INTENSIFIED INNOVATIVE DEVELOPMENT OF NATIONAL ECONOMY FACTORED IN ECONOMIC RISKS

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The theory of research and management methodology of innovation and investment-balanced development of export-oriented regions and sectors of the national economy is improved. Methodical approaches that allow improving the management control of the final product operation flow of export-oriented regions and sectors of the national economy on the basis of optimized output are proposed.

Keywords: national economy, scientific and technological process innovation, investment, intensification, innovation and investment development, and technological progress.

Statement of the problem. State program of economy revitalization assumes that the national economy has to take its rightful place in the competitive global market because it is the only way to improve the welfare of citizens to the level of economically developed countries. In this regard, primary key objectives of the Government of Ukraine are to attract the widest possible investment for the creation of a modern production, to implement new knowledge, technologies and managerial principles, to increase employment [1]. Therefore, the shift to a new economic system that meets modern scientific and technological conditions and the prospects for global civilization is only possible through the development of innovative mastering. Focusing on innovative development path in the transition to a market economy...
requires a radical restructuring of domestic enterprises in the management system which is based on innovative approaches [2]. In this regard, issues of innovation and investment balanced development of export-oriented regions and sectors of the national economy are raised. They are particularly relevant for Ukrainian industry [3, p. 22].

The main objective of the study is to improve the management control of sustainable development in view of the macroeconomic adjustment targets of Ukrainian industry in terms of resource limits.

According the objective, the tasks of the study are to summarize the methodological approaches for improving the management control of innovation intensified balanced development of the national economy of a region or sectors in conditions of intensifying growth of technical progress (TP) for the effects of economic risks.

Material presentation. In principle, the management control of any macroeconomic system at the industry level is characterized by two main components: a management subsystem and object management (including economic, technical-economic, socio-economic macro processes). Thus, the main feature of economic management control process at the industry level is in its united and interrelated components, which provide the feedback. Management control is carried out in a closed loop, and information about the state of the object in management control via feedbacks to the object of comparison of macro system for providing necessary adjustments in the management efficiency of its operating activity.

It is clear that the issues of economic growth of Ukraine should be settled starting with optimization of the balance of production and business processes at the level of sectors of national economy, where the matrix of economic- mathematical model will be presented as an interproduct balance model.

Both in case of product and matrix of inter-industrial macroeconomic model the vector correction of a final product, where economic risks are taken into account, is carried out on the basis of Euclidean distance for determining the differential
operational margin in modeling of intensified final product \( (y_{i}^{NIS}) \) according to contribution of intensified investment in its production:

\[
\Delta E_{IBR}^{(I)} = \left( y_{i}^{NIS} - d_{i} \right)^{2},
\]

where \( d_{i} \) – is intensive proportion of inducing technological progress for a stative period of time.

Consequently, on the basis of the adjusted vector of the intensified final output, the efficiency of investment in intensified development of TP export-oriented regions and sectors of the national economy can be determined. It identifies the contribution of innovation development in the globalization of national economy.

Thus, assessment of investment efficiency into innovative intensified development of TP export-oriented regions and sectors of national economy, which characterizes the ratio of the intensified final product of macroeconomic system \( y_{\Delta E_{R}}^{(Y/T)} \) to its gross output \( (X) \) in an integrated form, can be represented as follows:

\[
E_{TII}^{(I)} = \frac{y_{\Delta E_{R}}^{(Y/T)}}{X} \times 100\%
\]

**Conclusions.** For this reason, the essence of the proposed approaches to the modeling and management control of macro-economic functioning of the system is that investments in innovation should provide intensification of TA and on the basis of optimization of production intensified gross output and impact of economic risks, should streamline the production of the final product of the national economy, region, sector.

At the same time, the issues of importance which concern the improvement of the final product release of macroeconomic system on the basis of optimization intensification process of TC development at various levels of export-oriented regions and sectors of national economy with limited resource costs.

Meanwhile, challenges of further research are in the developing of the methodology and recommendations on certain thresholds indices to measure the efficiency of investments in innovative intensified development of TP of export-
oriented regions and sectors of national economy as a macroeconomic system of the modern world economy.

References:


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IMPROVEMENT OF METHODOLOGICAL APPROACHES TO ASSESSING COST EFFECTIVENESS ANALYSIS OF ECONOMICAL ACTIVITY AT MINING PROCESSING PLANT

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A possibility of ensuring increase of efficiency of a mining enterprise at the expense of implementing increased profit reserves from its operational activity is also considered by the authors; methodological approach to determining the economic efficiency of concentrate production costs for a mining enterprise, related to its operational activities, is based on the theory of statistical tests.

Keywords: economic efficiency, economic efficiency indicators, resources, income, operating expenses, uncertainty.
Statement of the problem. To provide effective management control of organizations in present-day market economy is a difficult issue as industrial and economic activity takes place in a dynamic business environment, business entity experiences the effect of a lot of unpredictable diversified vectors factors. In this regard, scientists attend to research definition of the actual problem of modern economic theory and efficiency which characterizes the relationship between the magnitude of the result of the enterprise and the number of spent or invested resources in the production. However, issues of effectivization are studied in details, in particular, which can be achieved by using fewer resources to produce the desired end result of industrial and economic activities of mining enterprise (ME) or by using the same amount of resources or a higher manufacturing with relatively fewer resources for creating larger enterprises outcome [1, p. 50].

The purpose of the study is to improve generalized cost-effectiveness index-number of heads production at ME. Accordingly the purpose, the main objective of the study is to develop a methodical approach for determining the economic efficiency of cost production of heads manufacturing, which are related to operating business.

Material presentation. Relevantly the estimation of outcomes and costs on the basis of analysis of the economic literature, in [1, p. 10] it is indicated that among numerical proposals according to defining efficiency there is resource, resource-cost-approach, cost approach, which should be emphasized as three fundamentally distinctive approaches.

All discussed above approaches are quite effective. However, according to a particular purpose and objectives of this research, in our opinion, it is advisable to use the resource-cost approach.

When we take into account the resource-cost approach for determining the effectiveness, while annual result is correlated with cost inputs and current production costs, the qualitative assessment of that as opposed to quantitative assessment, is determined by comparing the economic impact to its costs. It also
characterizes the efficiency of that in contrast to the economic impact, which is the absolute value of the efficiency and is a relative measure [2, p.450].

Thus, economic efficiency determination is an integral part of enterprise management control on the whole or of its separately-run business units. Taking a managerial decision of any process must be based on the results of the analysis.

Keeping in mind that economic value of mineral raw materials is determined by combination of many factors, among which are geological, technological, mine technical, geographical, organizational, technical, where economic is the basis for their comparison, the conditions on the stock iron ore raw materials (IORM) are the synthesizing parameters of economic valuation. The way we see, primary important economic indicators, which are the subject to confirmation during operation-oriented distribution of iron ore stock, are the following: increase in output of iron ore heads from ore (%), production and value of marketable heads (UAH), reducing unit costs per 1 ton of commercial heads (UAH) on the basis of achieving the highest possible levels of performance in a series of crushing equipment and ore by individual modes of production lines and mixed strategies of enterprises, gross and net profit.

The methodology of statistical tests allows predicting adequately the technical and economic parameters of flow of ore, existing stocks of iron ore and the performance indices of ME, which are characterized as random variables with normal or random distribution under uncertain conditions and they are interpreted as the results of active experiment [3, c.338].

Thus, it is possible to obtain additional positive financial result from operating activities (ΔFR) due to the projected increase in heads output as conventionally modified, developed to value of the planned heads.

Therefore, the overall index of efficiency of heads can be a diluted index of cost-effectiveness [3, p. 340] related to the operating activities of the enterprise:

$$E = \frac{FR + \Delta FR}{\sum (Z_f + Z_a + OPR) + E_i - \Delta E_i} \rightarrow \text{max}$$ (1)

where $FR$ – is finance result of operating activity; $Z_f$ – is costs of main workshops; $Z_a$ – is costs of spinoff shops; $OPR$ – is general expenses of production;
Conclusions. Economic efficiency determination of ME is a part of enterprise management control on the whole or of its separately-run business units. To provide efficiency increase of the whole enterprise, revenue reserves increase and real investment should be firstly implemented at the expense of its operating activity. Theoretical approaches to the definition of economic efficiency of ME, which are considered in this study, should take into account the peculiarities of the usage of iron ore raw materials (IORM), generally accepted principles of mining investment projects processing, key technical and economic indices of the iron ore prospection and end-use requirements at ME.

References:


RESEARCH ON STABILITY OF INVESTMENT PROCESS AT A REGIONAL LEVEL

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The article deals with the stability characteristics of the investment process in different regions of Ukraine and the comparative analysis of the investment process in different sectors at the regional level. Conclusions are made in regard of the possibility of implementing sustainable interregional investment projects that use favourable economic patterns of development of different regions.

Keywords: investment process, government investment policy, regional aspect, sustainable development.

Introduction. A relatively small number of studies of common problems of structural optimization of the investment process, analyzing the macroeconomic aspects of this complex phenomenon, is caused by the fact, acknowledged by most researchers, that the driving force and economic nature of the investment process are already defined in sufficient detail, while there is practically no quantitative understanding of the laws that bind the parameters of investment activities and socially significant macroeconomic indicators such as the dynamics of GNP (GDP), unemployment level, inflation and so on. The problem of establishment of such laws is moreover complicated by the cyclical and vibrational nature of behaviour of macroeconomic indicators as well as the uncertainty of the economic environment, which leads to transformation of the nature of implementation of these laws.

It should be noted that the methodology of constructing the empirical “images” of certain laws, that bind such parameters in the form of correlation and regression relationships, is also unavailable. The existing situation on this issue can be described as a crisis of conditionality, i.e. the contradiction between the abilities to observe and to control processes within the global economic system. This greatly hinders forcing of the investment structure, which at the national and regional level should provide opportunities for efficient investment. As it was noted above, the dynamics, stability
and efficiency of economic development of the entire country is possible only in conditions of a uniform and balanced socio-economic development of all regions.

Therefore the question of finding theoretical approaches to determining of criteria for ensuring the stability of the investment process at the regional level (meso-level of the national economy) that is raised in this paper is very important and urgent.

Considering general theoretical formulation of the issue of stability of the investment process, such methods as scientific abstraction, comparison and statistical analysis are applied in the article. In addition, the method of scientific generalization is applied in the analysis of foreign experience of ensuring stability of the investment process.

The main material. Development of the regions of Ukraine in modern conditions is largely determined by flexibility of the regional investment policy and the extent of use of the investment potential that is inherent in a single regional entity. The effectiveness of the latter for improving the development of the region and ensuring economic stability depends on the optimal ratio of powers of local authorities in the establishment of a regional investment policy and the influence of the central government through creation of a comprehensive investment strategy of the entire country. The current stereotypes, which consist in applying mainly administrative management of a region, lead in many cases to long-term stagnation and even recession, lower investment performance at the regional level and, in consequence, to the emergence of significant disparities in economic development of regions and territories. In such circumstances the problem of creation of an economic mechanism for a regional investment potential management, becomes more and more urgent [1-3].

In Ukraine the policy of “alignment” of regional development, is applied as the main ideology of governmental influence on economic processes in separate regions including the investment processes, which is rigidly administered from the center. It is well understood that this policy is implemented concerning different economic processes and different groups of parameters in different scales, but in all cases it
takes the form of direct or indirect control of regional development by the state, which is aimed at the active adjustment of the natural course of economic processes (including investment) occurring in the regions. In order to achieve efficiency in this process of “alignment” in regard to the development of investment processes, it is necessary to ensure integrated and mutually consistent policy of state regulation in the interregional section, which should function as organizational and legal system that operates according to clearly defined principles of compensation. In the opposite case, unsuccessful attempts of alignment will lead to new sources of uncertainty, which is a negative factor in terms of stability and efficiency of the investment process.

The conducted analysis of structural changes in investments showed that the financial and economic crisis had a major impact on stability of the investment process both at the national and regional level. The structural shift of investment from high-tech industries to mining is a very negative fact.

Conclusions.

15. In order to achieve efficiency in the process of alignment of regional development, including the development parameters of investment processes, it is necessary to ensure integrated and mutually consistent policy of state regulation in the interregional section, which should function as organizational and legal system that operates according to clearly defined principles of compensation. In the opposite case, unsuccessful attempts of alignment will lead to new sources of uncertainty, which is a negative factor in terms of stability and efficiency of the investment process.

16. In view of the financial crisis, there is another problem of spraying cash flows when Ukraine continues to output the cash flows from the real economy into the shadow area and even abroad. Financial resources derived abroad, are then returned as foreign investments which are protected by the Ukrainian legislation.

17. The use of all level budgets as a source of investment for innovative programs is quite problematic. There has been a steady decline in fixed assets investments, financed at the expense of budgetary funds. The reason is the growth of
the state debt, which accelerated during the crisis, as well as weaknesses in collection of taxes and sequestration of costs. Real accumulation of own resources of business entities practically does not occur. One of the main reasons is the rate of inflation, which led to depreciation of amortization assets and current assets of enterprises. A lot of enterprises do not even have enough financial resources to support their production volumes, and especially for technical re-equipment or increase of production volumes. In its turn, the drop in production volumes leads to reduction of the income required for accumulation of investment resources.

List of References:

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MODELING OF FINANCIAL CONDITION OF ENTERPRISE BASED ON MONITORING

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The author considers a possibility of providing increased efficiency of industrial enterprise by improving the monitoring of financial condition. A model for determination of production volumes maneuvering area on the basis of the theory of fuzzy sets is suggested.

Keywords: economic efficiency, financial condition parameters, monitoring, the
theory of fuzzy sets, volume of production.

In an unstable economic environment and increased competition, presence of an effective mechanism for financial monitoring is essential for survival and success of any enterprise. By forming an operational information based on systematic analysis, monitoring provides a framework for making optimal management decisions, evaluation of their impact prior to implementation and forecasting of further development of an organization.

We see financial monitoring as a system of continuous monitoring, analysis and forecasting of financial condition of a company meant to provide making tactical and strategic decisions at appropriate level, as well as evaluating the effectiveness of such decisions.

In the process of modeling of financial condition of enterprise and its monitoring it is necessary to consider the impact on its financial condition of such factors as volume of production, resources, accounts receivable, current assets, accounts payable, loans and credits, equity, revenues from sales of goods, products, works, services, self-costs, etc. [1].

Assessment of probability of bankruptcy risk should be carried out in the face of uncertainty, incompleteness of information. To solve this problem it is suggested to apply mathematical tools of fuzzy set theory. Financial analysis and forecasting of bankruptcy of enterprise was carried out by using the matrix method based on the apparatus of fuzzy sets suggested by O.A. Nedosyekin [2].

Each financial parameter, included into this research $X_i$, acquires a linguistic variable $B_i$ “level of $X_i$ parameter”. Constructing a set of particular parameters $X = \{X_i\}$ with a total number $N$, which on the one hand affect the assessment of bankruptcy risks, and, on the other hand, assess parameters different by their nature. Each of $X_i$ parameters acquires a corresponding level of its significance $r_i$. Parameters are ranked in order of decreasing. Weight of $i$ parameter is determined by the Fishburn formula:

$$r_i = \frac{2(N-i+1)}{N(N-1)},$$

and current value of risk level parameter $g$ is determined in the following way:

$$g = \sum_{j=1}^{N} g_j \sum_{i=1}^{N} r_i \lambda_i. \tag{1}$$

For further development of the model, we introduce some assumptions. Revenue from sales $H(y)$ is shown by a corresponding additional semiaxis. Zero action corresponds to the absence of production. The function of production expenditures is not decreasing, continuous, convex and differentiable, and the expenditures $c(y)$ of selected zero action are equal to zero. Strategy of an enterprise is determined by the choice of production volume. In this formulation, the function $H(\cdot)$ of profits is concave (property of decreasing marginal utility), the function $c(\cdot)$ of expenditures is convex (marginal costs increase with an increase of action). Obviously, the optimal level of production volume is located on a straight line $AB$, where $H(y)-c(y)$ has the maximum value. Taking into account the risk parameter $g$ on a segment $AB$, we obtain the value $g^* = g(H(y)-c(y))$, which determines the allowable interval of production volume ($y_{*\text{min}}^*; y_{*\text{max}}^*)$ shown in Figure 1.
Figure 1. Maneuvering Zone in the Task and Production Volume Management

So in order to solve the problem of determining the optimal volume of production taking into consideration the allowable maneuvering zone it is appropriate to apply the theory of fuzzy sets with corresponding membership functions. The topic of further research is analytic definition of the interval $(y^*_{\min}; y^*_{\max})$.

References:


QUALIFICATIONS ASSESSMENT AND CERTIFICATION IN RAILWAY INDUSTRY

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The paper deals with the basics of the system of qualifications assessment and certification in the area of railway transport; the institutional elements of the systems and areas of their interaction have been outlined.

Key words: railway transport, qualifications assessment, qualifications certification, centre for qualifications assessment and certification

International experience testifies unambiguously that true competitiveness in the breakthrough areas is achieved through setting up modern centres which are internationally competitive in the labour and knowledge markets and are naturally integrated into the programs for innovative development of national elite cadre, as well as being capable of designing mechanisms to modernize the national system of vocational education through its integration with academic science and hands-on experience.

The system of qualifications assessment and certification was set up within the framework of Agreement on Cooperation between the RF Ministry of Education and Science and the Russian Union of Industrialists and Entrepreneurs as of June 25, 2007, and in compliance with the respective regulations [1,2,3,4,5,6].

In July 2009 the Minister of Education and Science and the President of Russian Union of Industrialists and Entrepreneurs enacted a document which provides the guidelines for running the system of independent assessment of professional education and prescribes certification of graduates’ qualifications as one of the primary objectives of educational institutions, as well as awarding qualifications certificates to other groups of citizens who do part-time and correspondence courses of professional education [7].
The directly applicable document, approved by the RF Ministry of Education and Science and the Russian Union of Industrialists and Entrepreneurs provides the regulatory framework for the national system of qualifications assessment and certification covering graduates of professional education institutions, as well as those who have done part-time and correspondence courses of professional education [8]. The regulation establishes goals and objectives, areas of application, and the constituent elements of the system of qualifications assessment and certification.

In compliance with the above document, the following bodies have been set up and started operating in the area of railway transport: experimental Centre for Expertise and Methods (CEM) and experimental Centre for Qualifications Assessment and Certification (CQAC).

Within the framework of qualifications assessment and certification, CEM makes and issues decisions on organizational and methodological matters to ensure the system performance, organizes activities aimed at making up the requisite papers and certification- qualimetric materials, trains experts in the qualifications assessment and certification, exercises supervision, reviews and evaluates the results achieved.

The object of management is the logical chain channeling information flow from CEM to CQAC. Logistical approach to management is described by some typical functions such as: planning and forecasting, accounting, analysis, adjustment, etc. Logistical type of management in the qualifications assessment and certification model focuses on optimizing the amount of resources involved at each stage. Such approach makes it possible to take account of individual needs of businesses and applicants, and ensure their correct placement in innovative economic space. The efficient operation of the model is provided by well-thought-out resources provision in combination with up-to-date methodological support, scope of coverage, educational background of applicants, etc.

In the environment which is described by complex socio-cultural trends and shortage of resources, the development of each of the centres can be enhanced by mutual exchange, complementation, support and, hence, by entering into a constructive dialogue. Conceptualization, accumulation, transformation related to
assimilation, as well as scientific and pedagogical support for the implementation of innovative teaching practices shape the way along which local innovations are to be transformed into the aggregate resource for the development of the qualifications assessment and certification in the railway industry.

Centre for Expertise and Methods in the railway industry is a standing active and independent centre aimed at shaping and supporting the creation of organizational, methodological, and information environment to ensure continuous independent assessment of professional qualifications of the railway personnel in order to satisfy the demand for high-quality qualifications certification. Proceeding from the above, the principal aim of the CEM is to ensure reliable methodological support for the operation of the system of qualifications assessment and certification for a specific area (type) of activity or areas (types) of activity. The basic documents for the system in question determine the industry-specific character of the CEM operations.

In the course of analysis the following distinctive features of the CEM activity in the area of railway transport have been identified:

– organization of interaction between branch organizations and unions of employers (all-Russian, interregional, regional ones), business-companies, professional communities and other parties concerned, on the issues of methodological support for the system of qualifications assessment and certification in a particular area within railway industry;

– organizational, methodological and expert support for the operation of centres for qualification assessment and certification in a particular area within railway industry.

The CEM set up in the railway industry implements the following major functions:

– development and introduction of organizational and methodological support for the process of qualifications assessment and certification;
development and verification of methods, qualimetric materials and qualifications assessment criteria, expert assessment of the latter and updating thereof through cooperation with the stakeholder employers;

– compiling and updating the bank of assessment tools;
– development of training program for experts in qualifications certification and providing support for the given register of experts.

The active center for expertise and methods carries out the following:

– planning the activity and outlining the prospective areas of development;
– ensuring interaction between railway transport institutions, companies and agencies:
  – soliciting the faculty, research and clerical staff of educational institutions to solve the questions within the jurisdiction of the centre;
  – developing and improving the methods and techniques for training experts in the area of qualifications assessment and certification, as well as professional qualifications assessment and certification;
  – participating in working out some common approaches to information support in the area of qualifications assessment and certification;
  – organizing procurement for the process of professional qualifications assessment and certification.

The organizational structure of the center for expertise and methods includes the following departments to perform its major functions: operations and methods department, expert department, analytic department; information and technical management department, procurement department. The operations and methods department provides support in terms of methods and organization of professional qualifications assessment. The expert department deals with training experts in qualifications assessment and certification. The analytic department focuses on the development and improvement of support for the CEM in the area of methods and organization. The information and technical management department is in charge of all information flow and services within the CEM. The procurement department shapes the physical infrastructure of the CEM.
Thus, the railway industry has seen the creation of a functional unit responsible for the qualifications assessment and certification - the experimental centre for qualifications assessment and certification. Its major goal is the development of the system of railway industry personnel certification and organization of sustained corporate development of railway professionals for the priority growth areas.

The key objectives for the qualifications assessment and certification centre are:

– implementing domestically marketable procedures of voluntary qualifications assessment and certification of applicants (irrespective of the way the applicants acquired these), the former being objective, trustworthy, and transparent;

– ensuring that once the qualifications of the certified professional have been confirmed, they comply with the established requirements, rules, standards and generally recognized procedures of qualifications assessment and certification.

The CQAC is entitled to carry out qualifications assessment and certification both in one or more areas of activity.

In the course of analysis the following areas of the CQAC activity have been identified:

– implementing the established procedures of qualifications assessment and certification in the area of railway transport;

– keeping the general public and institutional stakeholders informed as to the availability of qualifications assessment and certification;

– organizing interaction between branch organizations and unions of employers, business-companies, professional communities and other parties concerned, on the issues of shaping the policy and creating the means of ensuring the trustworthiness of qualifications assessment and certification procedures.

The CQAC implements the following functions in the area of railway transport:

– carrying out the procedure of the applicant’s qualifications confirmation and certification;

– suspension, cancellation or extension of the issued certificates;
– selection of candidates for experts, and their training and keeping record of the register;
– setting up appeals boards;
– updating papers dealing with organizational and methodological issues;
– giving counseling within the scope of competence;
– submitting progress reports to the federal agency for qualifications assessment and certification, as well as to other agencies concerned, within the scope of competence.

Centre for Qualifications Assessment and Certification follows the policy and procedures ensuring the credibility of qualifications assessment and certification, including standardized methods, certification-qualimetric materials (means of assessment), as well as the criteria for qualifications assessment, regulations and standards, organizational and methodical documents on organizing and holding the qualifications assessment and certification.

Both the procedures and policy make up the normative system, within which the centre for qualifications assessment and certification develops and monitors the effectiveness of its activity, and enhances public awareness of the centre’s independence.

The experts of the centre for qualifications assessment and certification with considerable hands-on experience of carrying out assessment and certification, have taken part in developing the assessment procedures, as well as in expert assessment and beta-testing of assessment methods and organizational methodical materials related to the functional processes of the system in question. As well as that, the beta-testing enabled the experts to develop standards for experts and build a pool of new experts.

A survey of the CQAC operation in the area of railway transport has shown that the centre can meet the demand of employers, job applicants and educational institutions in so far as it refers to the implementation of the system of qualifications assessment and certification. The requirements of employers (unions and organizations of employers) and professional communities are as follows:
authority of the centre to act on behalf of the All-Russian system of qualifications assessment and certification;
availability of information about the principles guiding the operation of the centre, and procedures of qualifications assessment and certification;
professional experts on the staff of the centre, whose are in charge of assessing and certifying qualifications;
availability of information as to whether the qualifications and competencies of applicants (namely, the personnel pool of the railway industry) are in line with the professional standards and other qualification requirements within the industry;
availability of information about the centre’s performance results, including those of qualifications assessment and certification in a specific area:
generalization and making available for the consumers and concerned parties of the information concerning the quality of the acknowledged qualifications of the professionals (applicants) who have been certified; the information concerning the quality of professional standards, qualification requirements and other documents which establish standards for qualifications assessment and certification, as well as the documents requiring regular qualifications update;
supplying consumers and concerned parties with the information on the results of conformity assessment and on nostrification opportunities.

The requirements of residents (applicants), interested in their qualifications acknowledgement or nostrification, are as follows:
acceptance (acknowledgement) of the certificates issued by the centre, by individual employers, unions and organizations of employers, and by professional communities;
impartiality and competence of experts in the course of assessment and certification and their impartial and informed (competent) judgement while taking decisions;
confidentiality and protection of personal information while carrying out certification procedures;
liability of the centre for the decisions made and certificates issued;
– zero discrimination while considering applicants’ papers, carrying out assessment and certification procedures, as well as in case of appeals and complaints;
– transparency, expedience and objectivity in considering appeals, including complaints brought against the centre, its branches or officials.

The requirements of educational institutions are as follows:
– carrying out independent qualifications assessment for the graduates of full-time professional education institutions, as well as for those who have done part-time and correspondence courses of professional education, and deciding whether their qualifications comply with the requirements of the professional standards;
– ensuring the objective and impartial process of assessing and certifying the qualifications of educational institutions’ graduates in terms of their compliance with the requirements of the professional standards as well as other qualification requirements;
– generalisation of information concerning the results of graduates’ qualifications assessment and certification and making these data available for the public;
– generalisation of information concerning the all-Russian system of qualifications assessment and certification and making these data available for the public;
– supplying information on nostrification procedures.

The head of the centre is an official authorized to carry out an immediate operation of the centre. Apart from the major ones, the head fulfils the following functions:
– organizes and coordinates the centre’s operation;
– approves the organizational and methodic documents of the centre;
– sets up examination boards, certification and appeals commissions;
– approves the requirements for the competencies of the experts who carry out qualifications assessment and certification;
– selects prospective experts and organizes their training;
– confirms the validity of certificates and suspends, cancels, extends the
certificates already issued;

- informs the parties concerned of the changes the centre is planning to introduce into the requirements and procedures;
- ensures the centre’s financial operation and record keeping;
- delegates authority to commissions or officials in case they need to act on behalf of the centre;
- approves accounts and records of the centre;
- Interacts with the head agency for qualifications assessment and certification, with centres for expertise and methods, as well as with centres for qualifications assessment and certification;
- prepares proposals on updating professional standards;
- prepares proposals on updating organizational-methodic documents related to qualifications assessment and certification.

The organizational structure of the Center for Qualifications Assessment and Certification includes the following departments to perform its major functions: department for administrative examination of application documents, department for methods guidance, department of information support, department for certification, appeals commission.

Department for administrative examination of application documents: files and processes applications; examines the individual’s documents and signs contract with the service receiver; provides the applicant with an information pack; is in charge of holding an interview with the applicant (involving a panel of experts) in order to develop a schedule for and course of assessment and certification; prepares the requisite facilities and administers theoretical and practical exams.

Department for methods guidance is in charge of organizational and methodical support for the procedures of professional qualifications assessment. Department of information support: provides information and technical resources required to administer theoretical and practical exams; maintains the database (a segment of the register), keeps the register and personal files, updates information services of the centre, including the centre’s internet-resources.
An individual assessment commission is set up in each area of activity of the centre in terms of qualifications assessment and certification. An individual certification commission is set up in each area of activity of the centre in terms of qualifications assessment and certification.

The principal aim of the centre’s interaction in the area of information is creating a single information space through the use of most recent information technologies, improved quality of interaction, as well as integration into a common information space.

The existing experience in setting up common internet information server shows that working in the common information space as aimed at shaping a long-term architecture and strategies of employing information and communication technologies in the area of qualifications assessment and certification, at ensuring the operation of the media for remote-controlled process of qualifications assessment and certification, at enhancing the operational quality at every level of the system due to the employment of information resources consolidated in a common portal site.

Within the framework of dealing with the above mentioned aspects the following objectives are accomplished in the course of the centres’ interaction:

- setting up a corporate network for the system of qualifications assessment and certification in order to ensure a technologically coordinated access of the centres to global information resources with the help of both traditional and innovative technologies;
- consolidation of information flow between CEM and CQAC and its monitoring;
- development of the system of remote-controlled process of qualifications assessment and certification as part of the system corporate network operation;
- development of the system of organizational and methodical, as well as technological support for the introduction of information-communication technologies into the process of CEM-CQAC interaction.
A network of centres for qualifications assessment and certification ensures the implementation of the said objectives, the centres being responsible for organizing and coordinating activities in terms of qualifications assessment and certification in the area of railway transport.

Displayed in Figure 1 is the chart which shows the ways support is provided to the centres for qualifications assessment and certification.

Fig. 1. Major structural elements of CEM-CQAC interaction

The principal supervision and decision-making functions are vested in the chief executive officers of the centres, and respective heads:

- within CEM it is the head of operations and methods department;
- within CQAC it is the head of the department for administrative examination of application documents, as well as the heads of certification body.

Register updating monitoring takes place within the system of CEM-CQAC interaction. The interaction network in question reflects the CQAC procedures in
passing decisions on issuing certificates to the applicants whose qualifications were assessed according to the selected pattern and by means of respective certification-qualimetric materials, incurring the requirement to submit information on the updates done to the given elements of the registers, which is done by CEM. Moreover, CEM is in charge of training experts in qualifications assessment and certification. This activity also requires monitoring and updating the respective register.

The project currently spearheaded by the RF Ministry of Education and Science – “Development and beta-testing of the package of measures aimed at integrating the state-run and corporate networks dealing with training the cadre of regular labour force and technical professionals within professional schools and colleges in order to meet the demand of priority sectors of the economy” – makes provision for the creation of the system of qualifications assessment and certification, within the framework of which certain institutional structure is going to be set up in order to ensure CEM-CQAS interaction with the federal and regional executive bodies, educational institutions, participants of certification procedure (consumers). The interaction aims at developing mutually beneficial relations of the centres of qualifications assessment and certification with companies/ businesses, training units of companies/ businesses in order to maximize the use of government and private business resources in the course of meeting the staffing needs of railway transport.

Being developed within the system of qualifications assessment and certification, proposals for the integration of state-run, regional and corporate networks focus on the development of the system of continuous professional education, which aims at ensuring continuity of all forms of obtaining and building up qualifications, and employs both state-run and independent sectors of personnel training. The operation of CEM and CQAC becomes especially vital within the framework of the currently created territorial-sectoral clusters, which encompass degree-granting institutions, technical schools and other agencies which mutually complement and strengthen the competitive edge of the sectoral system of qualifications assessment and certification.
Within the framework of clusters in which CEM and CQAC operate, it is possible to make conclusion about the most active exchange of resources, developments, technologies, because this area concentrates unique and/or expensive resources, equipment, tools, materials, and enables the collective consumption thereof by the institutions which implement related programs of professional development. In the longer term, centres for expertise and methods can establish sectoral chains - “bunches” of branch centres for qualifications assessment and expertise, interacting with the head centre. Some other organizational patterns may be developed at the level of the constituent entities of the Russian Federation, for instance, when the centre for assessment and certification, supported by respective region, is created as a multidisciplinary one and interacts at the same time with various centres for expertise and methods in their respective branches (the so called “cross-coupling” links).

Pooling the efforts of government agencies, unions and organizations of employers in the course of shaping the system of qualifications assessment and certification is based on the following principles: concern of employers and society at large for highly-qualified work; concern of applicants for reliable assessment of their qualifications; organizational independence and commitment of the structural units within the system of qualifications assessment and certification; compatibility of results, obtained by the structural units within the system of qualifications assessment and certification, with their external assessment.

The principles mentioned above underlie the overall composition of the system’s network. As well as that, we do not rule out the situation, in which, due to some irregularities in the social and economic development of the RF constituent entities, the network of interacting CQACs will be coordinated by a single CEM (or several CEMs) in the respective areas of activity.

Sources:
1. Federal Law № 307-ФЗ “On amendments to individual regulatory acts of the Russian Federation, granting the unions of employers the right to take part in the
development and implementation of government policy in the area of professional education” as of 1 December, 2007

2. Enactment of the RF Government № 1015 as of 24 December, 2008 “On the approval of the Rules for the participation of the unions of employers in the development and implementation of government policy in the area of professional education”, paragraph 3

3. Enactment of the RF Government № 667 as of 18 August, 2009 “On the approval of the Enactment on the carrying out in 2009–2014 of an experiment in the area of developing applied baccalaureate programs in colleges of professional education and degree-granting institutions of professional education”


5. Executive Order of the RF Government № 1662-p as of 17 November, 2008 “Vision for the long-term social and economic development of the Russian Federation for the period of up to 2020”


7. “Statute on the setting up of the system of independent quality assessment of professional education”, № АΦ-317/02 as of 31 July, 2009

8. “Statute on the qualifications assessment and certification of graduates of professional education institutions and other groups of citizens who have done part-time and correspondence courses of professional education”, № АΦ-317/03 as of 31 July, 2009
ACCOUNTING ASPECTS OF THE FORMATION OF INFORMATION ON AGRICULTURAL LAND IN PEASANT FARMS


The article discusses aspects of the formation of accounting information in peasant farms on agricultural land.

Keywords: accounting, land, accounting policy, agricultural organizations.

Introduction. An important aspect of each farm is a business accounting. Importance and the need for the country farms is due, on the one hand, the need for information on available on the farm property, costs, production volumes and revenue generation from the sale, on the other hand, the responsibility for providing information to users on the performance of the economy.

The organization of the records in the peasant (farmer) facilities are especially important now, as the specificity of this form of management, the uncertainty of the legal status of these business units complicate the choice of forms and methods of accounting, which largely depend also on the scale and type of activity.

Economic reform in the agricultural sector related to the transfer of agriculture with the administrative and management planning on a free market basis, had a direct impact on the entire system of land relations. In the process of economic reforms in the system of land relations were formed and were developed entirely new objects of land relations in the form of agricultural land, with the ability of the free market turnover and new actors in the form of legal and natural persons having rights in the prescribed manner of use, possession, and disposal of land.

Consequently, there is an objective need to adjust the guidelines and methods to integrate the implementation of the land reform, the development of measures to stabilize agriculture. Accounting problems of land and land relations is of paramount importance, as the determining factor.
Land, as the object of accounting, considered in ancient Greece. Method of accounting of land was described in a treatise Luca Pacioli 'accounts and records. "In the last quarter of the XIX - early XX century in Russia was carried out accounting of land, the researchers aim was to calculate the result in crop activities in the context of each rotation, and cultural fields, indicating that a development of his technique.

Plots in the private and public property are non-current assets. In accordance with applicable regulations, plant and equipment organizations are a set of logistical values - part of the property used as a means of labor in the production of goods, performance of works (services), or to manage an organization and acting in kind.

According to paragraph 5 of the Accounting Regulation 6/01, "Accounting for Fixed Assets" land accounted for as fixed assets.

Features of the land, in contrast to most of the fixed assets is that they are not subject to amortization. This is due to the fact that they are an asset, consumer properties of which over time does not change.

Fixed assets and investments accounted for land reclamation (drainage, irrigation and other reclamation work).

The unit of accounting of fixed assets is the inventory item.

Plots of land are recorded at cost.

In Section 8 of the Accounting Regulation 6/01 of the original value of land purchased for a fee, the sum of actual expenses of the organization for the acquisition, construction, and manufacturing excluding VAT and other recoverable taxes (except as provided by the legislation of the Russian Federation).

Actual costs for land acquisition are:
- amounts paid under the contract to the supplier (seller);
- amounts paid to organizations for the implementation of works on land reclamation;
- amounts paid to organizations for information and advisory services relating to the acquisition of land;
- registration fees, stamp duties and other similar payments made in connection with the purchase (receipt), registration of land rights;
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- payment for organizations that manufacture documents cadastre of real estate;
- land surveying;
- payments for the provision of information on registered rights;
- payment for the competent authorities to assess the land, construction documents and technical accounting inventory (inventory) of real estate;
- non-recoverable taxes paid in connection with the acquisition of land;
- interest paid by the intermediary organization through which the acquired land;
- other costs directly attributable to the acquisition of land.

Capital investments in land reclamation are included in fixed assets in the amount of annual expenses related to the adoption of the accounting year in operation areas, regardless of the date of the entire work.

Despite the fact that the value of land is growing, it is believed that its consumer properties over time does not change. Therefore the land is not subject to any depreciation or revaluation.

For the organization of the primary accounting with agricultural land assets, organizations can use the instruments developed independently. Thus, we have proposed as a sensitive analytical accounting in accounting practice to use the farm inventory card account land.

Inventory card should include the following information: name of the legal document of ownership, use or lease land category, type of land, sub-species, year of initial recognition, initial cost, natural performance, synthetic account, subaccount and analytical account.

The card credentials to be grouped into the following sections: land reclamation, increasing the value of land and the cost of improving the land, disposal of land, the carrying value of the land at each reporting date, the use of land.

In the reclamation work, increasing the value of land and land-tion costs for improvement appropriate to reflect the following information: name, number and date of the original document to the reclamation work or of fertilizers, the name of the work, or fertilizers, the amount (in tonnes of active ingredient); sum in rubles; correspondence accounts.
Disposal of the land is reflected in the third section of the land records of inventory card. The reason for disposal may be a sale, gratuitous transfer, the transfer of the founder in the event of his company with his contribution (land), and in the case of transformation into other types of land (for example arable land in the pool.)

In the inventory card should reflect the name of the document on disposals (both legal and accounting). You should also indicate the reason for retirement, the number of hectares of land in the retired, because it can happen not only disposals of land, but only part of it, the amount of thousands of rubles and accounting record.

The final section "Use of land" should contain the following data: name of the crop, the application of mechanization (conditional reference acres, amount, and other factors), labor costs per man hour and sum terms; otne ¬ hay this year on production costs, the cost of mineral oil (active ingredient / amount) and organic (tonnes / amount) fertilizers of all costs; yield in kind and in cash, yield (kg per hectare) and revenue.

When filling out cards accumulate data on arable land in the context of the fields, and on the hayfields and pastures also on arrays that correspond to the analytical accounts.

Accounting in organizations of agriculture is conducted in accordance with the plan of accounts for financial and economic activities of enterprises and organizations in agriculture and guidelines for its application, approved by the order of Ministry of Agriculture of the Russian Federation of 13.06.2001, № 654.

Based on the above chart of accounts and guidelines for its use organization claims the working chart of accounts, containing a complete list of synthetic and analytic (including sub-accounts) accounts required for accounting.

To reflect the business operations of agricultural organizations should be guided by the recommendations of the instructional correspondence accounts for financial and economic activity of agricultural organizations, approved by the order of Ministry of Agriculture of the Russian Federation from 29.01.2002 № 88.

According to the Plan accounts for financial and economic activities of enterprises and organizations of agriculture and guidelines for its application,
approved by the order of Ministry of Agriculture of the Russian Federation of 13.06.2001 № 654, the fixed asset is carried on the accounts: 08 "Investments in non-current assets", 01 "Fixed Assets", 001 "Leased assets", 011 "Fixed assets leased."

Agricultural land is generally used as intended by the agricultural organizations (farmers). Therefore, they make out with the flow of industry characteristics established for the agricultural sector.

Accounting, taxation, and documentation of receipt of the farm land depends on how they are received.

Analytical accounting of land should be maintained in hectares and established their value - by type of agricultural land (arable land, fallow, perennial plants, grazing, etc.).

In accounting, the sale (other retirement) reflect both land disposal of fixed assets.

Please keep in mind that in cases of disposal of land open to the account 01 "Fixed assets" separate sub "disposal of fixed assets" is not necessary. This is explained as follows. This sub is used to form the residual value of a disposal of the property (Description for chart of accounts). Land is not depreciated and are not carried. Therefore, they have no replacement, no residual value.

Revenue from the sale of land in accounting are recognized when title passes to the buyer - in the amount agreed by the parties. Time of transfer of ownership is determined by agreement of the parties and a contract for the purchase and sale of land.

Inference. Our study of the provisions of the accounting organization of agricultural land led to the conclusion and suggestions for further improvement of the accounting of land in peasant farming.

Part of land assets accounting organization must provide a reflection of land use, land tenure and size of organizational and legal form of organization. These features should be reflected in the accounting policies management.

Development of accounting policy relating to the registration and movement of land is regulated by the relevant regulatory framework.
Registration of land is organized, if his cut is made and put into action by the head of the organization of the accounting policies are written for the employees of the accounting department job descriptions defined working chart of accounts designed provision of accounting services, as well as the schedule of documents.

In our view, it is appropriate in a separate document and approves an application to the accounting policy management for accounting purposes slotting.

Accounting, taxation, and documentation of receipt of the farm land depends on the method of their production - in the ownership or use.

As part of capital investments accounted for agricultural organizations work on land reclamation. Analytical accounting of land should be maintained for each lease the land.

In our opinion, for the balance of land appropriate to reflect on the account 013 "Development land for agricultural purposes", which must be provided in a plan of management accounts.

Literature:


Implementation of the government social functions, which include providing citizens with affordable and comfortable housing, construction and repair of roads, health, education, support, housing and communal services, etc. is complicated by the limitation of the state budget.

Today, every state, regardless of affiliation to developed, developing or third world countries, faces difficulties in the development of its infrastructure, which requires huge financial investments, and a leaving this theme without attention ensures a reduced competitiveness of the country and the pace of its development. Vector of solutions to this problem is directed to the field of interaction between government and the private sector, implemented by using the tools of public-private partnership, – legally drawn up mutually beneficial cooperation between government agencies and business, carried out in order to secure more effective implementation of major public and social projects, based on a risk-sharing between the partners.

The article examines the international experience in assessing the effectiveness and efficiency of public-private partnerships, compared with the traditional procurement. The possibility of applying the most common international practice assessment tool, - the public sector comparator (PSC) in the Russian Federation was revealed.

Using the tools of public-private partnership has a number of advantages over conventional methods of infrastructure development (public order or direct execution of the public sector):

- acceleration of construction;
- transfer design, construction, management and operation risks to the private partner;
• on-time and on-budget delivery;
• reducing costs;
• focus on improving the quality of infrastructure services.

Maximizing the productive use of public funds is central subject of programs and framework conditions for tools of public-private partnership between developed and developing countries. In the international turnover this concept is called «Value for money». Achieving a better balance of value and money, or, to put it another way, improved services for the same amount of money, as the public sector would spend to deliver a similar project [3], is the main reason why the government enters into these relationship.

Assessment of value for money gains the highest weight in the area of public infrastructure, where the best value can be defined as the optimum combination of the full cost of the project and the quality characteristics required to meet the requirements of its users [2, 5, 7].

Selection of the optimal value for money as the main indicator of the effectiveness of public private partnership raises the question of how to assess this indicator. It is obvious that the process should include two components: a quantitative assessment and qualitative assessment.

There are a number of qualitative factors that take into account the viability, achievability and acceptability of the use of public-private partnerships. These factors must be considered, along with the quantitative factors when deciding whether a public-private partnership is the most appropriate way to build infrastructure. Among these factors [3, 9]:

• Material costs (including risk) that are not capable of being quantified;
• The identity, credit standing and proven reputation of the bidder;
• Differences in the service provision between bids that cannot be quantified;
• Any wider benefits or costs that may flow, for example social benefits;
• The accuracy and completeness of the information used to compare the project with the traditional way of creating infrastructure;
• The level of service and operational requirements;
Interaction partners and project management;

The range of design solutions.

Evaluation of quantitative factors in the overall assessment of optimum value for money of public-private partnership is a quantitative comparison of the cost of using public-private partnerships to build infrastructure facility with creation of such object in more "traditional" way, for example, by government itself.

In international practice, the most common method for assessing the value for money of public-private partnership is to use the comparison tool, called «Public sector comparator (PSC)», which can be determined as comparison tool, which compares efficiency between implementation of the project in two alternative ways - traditional public procurement and the use of public-private partnerships [6, 11]. This tool enables public sector to determine whether the use of public-private partnership is more effective [10]. Public sector compares resulting model (PSC) with the base model of public-private partnership and, if the model of public-private partnership demonstrates a higher efficiency - run the process of competitive procedures [11]. The basic model of public-private partnership is based on the calculation of the total cost of the project, its revenues and risks, discounted using a discount rate of the public sector. This information is used to calculate the net present value of the project, which is then compared with the net present costs (including risks and costs, which reserves the public sector), carried out by the public sector in the case of a public-private partnership.

Fashioning the PSC performs the following roles [3]:

- It promotes full costing at an early stage in project development.
- It provides a key management tool during the procurement process by focusing attention on the output specification, risk allocation and comprehensive costing.
- It provides a means for testing value for money.
- It provides a consistent benchmark and evaluation tool.
- It encourages competition by generating confidence in the market that financial rigour and probity principles are being applied.
Evaluating the effectiveness of the comparator should be made taking into account the same factors used to assess the effectiveness of the project, implemented by public-private partnership. Among these factors [3]:

- **Timing.** The PSC assumes the same commencement date and project term as the PPP.
- **Funding.** The PSC assumes the capital funds are available for the up-front investment required to deliver the same output specification as the PPP;
- **The costs of establishing infrastructure facility.** Costs of the comparator should only include costs directly related to the creation of the infrastructure object, while the costs of public-private partnership organizing should not be taken into account;
- **Output specifications and standards.** The comparator must be designed in accordance with the same standards offered by public-private partnerships, regardless of the fact that these standards, according to experience, unattainable by the public sector.

In both the UK and Australia, PSCs are generally categorized into four core elements: raw PSC (base costs), transferable risk, retained risk and competitive neutrality [3].

Raw PSC (base costs) is a combination of capital and operating costs. It allows a full and fair evaluation of all public sector expenditures associated with the traditional way of creating infrastructure project on the same scale, level of performance and residual values that are required for private sector in public-private partnership.

Risk allocation (transferable and retained risk) plays a key role in all projects implemented through public-private partnerships, as it allows to transfer responsibility for maintenance of the specific risks to the party that can better control them. In the case of the PSC it is appropriate to include in its cost of all the risks which will be distributed between the parties in the case of public-private partnership. It provides more accurate determination of total project costs. At the same time, the evaluation of the project, implemented by public-private partnership, shall not
include the risks transferred to the private partner, as the responsibility for their maintenance in this case does not connect with public sector. Thus, from the point of view of the public partner only retained risks will participate in the comparative evaluation of the effectiveness of public-private partnership and PSC.

Competitive neutrality removes of any competitive advantage that can be in the public sector.

Considering given assumptions, there is a calculation of the net present value and net present cost of PSC and public-private partnership. After that comparison of the results takes place to find out whether the use of public-private partnership is beneficial for procurement and whether it can have a positive impact on the value for money, which is achieved if the total costs of public-private partnership are lower than the total discounted costs of the project, carried out by the public sector alone, adjusted for retained and transferable risks and competitive neutrality. Fig. 1 shows the expected efficiency or expected value for the money between the comparator and the public-private partnership [3].
The selection of infrastructure projects that can be implemented by a public-private partnership in the Russian Federation, can be analyzed on the example of the application of formation and use rules of the Investment Fund in the Russian Federation. According to normative act, the investment project may qualify for the Investment Fund support if it meets the following criteria [12]:

- There is an investor who confirmed their willingness to participate in the project;
- Project objectives meet the goals of socio-economic development of the Russian Federation and public investment in the medium term, as well as industry development strategies.
- Implementation of the project contributes to the achievement of positive social effects;
- There is justification that project cannot be implemented without the participation of the Investment Fund;
- The cost of the projects is not less than 5 billion rubles - for national significance projects, and at least 500 million rubles - for regional investment projects;
- Project budget funding corresponds the lowest level of co-financing;
- Matching tasks to be solved by the implementation of the project, the tasks defined the strategy of socio-economic development of the Russian Federation, approved in the established order;
- The period of budget provision of the Fund does not exceed 5 years.

Projects that meet the specified criteria are checked further for their financial, fiscal and economic performance, as well as social impact.

The economic efficiency is defined as total gross regional product, which can be provided as a result of the implementation of the project.

The financial efficiency of projects is defined as the net present value of projects and internal rate of return projects.
The indicator of budgetary efficiency projects is defined as the ratio of the discounted tax revenues to the budgets of various levels due to the implementation of these projects and the discounted amount of the budget allocations of the Fund.

Indicators of social effect achieved as a result of regional investment project are:

- raising the employment rate;
- increasing the level of availability of modern housing;
- improving the environment;
- improving the availability and quality of public services in transport, health, education, physical education and sports, culture, housing and communal services.

In this case, the basic condition for project financial efficiency is positive amount of net present value of the project. Thus, the public sector, making a decision about participation in the public-private partnership does not account direct effectiveness of such participation, that is, the effect of the fact that the project will be implemented in cooperation with the private partner, not the public sector itself. Focusing only on the positive net present value of the project public sector, by contrast, may face negative consequences in the long run, because in this case there is no information on the net present value of a similar project, but implemented by the public sector itself. After all, it may be higher than that, which is reflected in the proposals of potential private partners, and therefore this method of implementation of the project may be more effective.

According to that author proposes to use the concept public sector comparator (PSC) in Russian Federation. This instrument in order of determination the feasibility of a public-private partnership to build the infrastructure or any other investment project needs to examine the effectiveness of the proposed private sector projects at the initial stage of implementation with the efficiency of a similar project, but carried out by the public sector itself. In other words - to compare their net present values. If the net present value of one or more of the proposed projects is higher than the PSC one - these projects are moving to the next stage of evaluation, where the best one is chosen among them on a common basis according to the criteria set out above. If the
net present value of any of the proposed projects does not exceed the PSC one - the decision on the fact that the project is not recommended for implementation by public-private partnership is made.

It is advisable to measure the comparative effectiveness of PSC and PPP.

The difference in the efficiency of PSC and the most efficient PPP:

\[
\Delta NPV^{PSC-PPP} = NPV^{PSC} - \max(NPV^{PPP_1}; NPV^{PPP_2}; \ldots; NPV^{PPP_n}),
\]

where \( \Delta NPV^{PSC-PPP} \) = the difference of net present value of PSC and PPP;

\( NPV^{PSC} \) = net present value of PSC;

\( NPV^{PPP_n} \) – net present value of PPP\(_n\).

The main condition for the admissibility of the proposed projects for consideration for the possibility of using public-private partnership is:

\[
\Delta NPV^{PSC-PPP} < 0
\]

Veracity of this condition indicates that among the proposed projects there is a project with net present value larger than PSC one.

It is also appropriate to offer an assessment of the relative deviations of the effectiveness of each of the proposed projects in relation to PSC. To do this, it’s proposed to calculate the efficiency ratio of the net present value:

\[
NPV^{PSC-PPP_n}_E = \frac{\Delta NPV^{PSC-PPP_n}}{NPV^{PSC}} \times 100\%,
\]

where \( NPV^{ΓΚ−ΓΠ_n}_E \) = effectiveness ratio of the net present value of the proposed project \( n \).

\( \Delta NPV^{ΓΚ−ΓΠ_n} \) = the difference of the net present value of PSC and project \( n \).

The sufficient condition for the adoption of the project \( n \) to consider would be:

\[
NPV^{PSC-PPP_n}_E \geq 0.
\]

**Literature:**


5. Jackson P. Value for money and international development: Deconstructing myths to promote a more constructive discussion // The OECD Development Assistance Committee. – URL: www.oecd.org/dac/effectiveness/49652541.pdf


12. Government decree N 134 dated 01.03.2008 "On approval of the formation and use rules of the Investment Fund of Russian Federation» // URL: base.consultant.ru/cons/cgi/online.cgi?req=doc;base=LAW;n=141643
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MAIN DIRECTIONS OF IMPROVING STATE REGULATION OF GAS PRICES IN THE REPUBLIC OF SAKHA (YAKUTIA)

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This paper discusses the current issues of state regulation of prices for natural gas. It proposes the main directions for the improvement of state regulation of gas prices and the principles of regional tariff policy in the natural gas industry in the Republic of Sakha (Yakutia).

Key words: the state, the economy, the fuel and energy sector, gas market, gas production, population, consumers, price, wholesale price, government regulation, principles, pricing policy, cross-subsidization.

The Russian government adopted a policy of liberalization of gas prices back in 1992. Since 2008, the Russian Federation has demonstrated more rapid growth in natural gas prices, due to the reduction of cross-subsidies between export and domestic prices. It was also caused by the need to reduce cross-subsidies between the prices of natural gas for households and other consumers. Currently, in most regions of Russia gas price for households is lower than the prices for other consumers.

In order to improve the energy efficiency of the national economy and balance the demand and supply of gas in the medium and long term, in the late 2006, the country’s leadership decided on a phased achievement of the level of wholesale prices for gas sold to customers in the Russian Federation, providing equal yield of gas supplies the domestic market and for export, and also developed a 3-year

As a limiting maximum level for wholesale gas prices for consumers until January 1, 2011 regulated wholesale gas prices are established on the basis of the average growth rate of wholesale prices determined by the Government of the Russian Federation and increased in 2007 by 60%, in 2008 - by 50% from January 1, 2009 – by 40%, from July 1, 2009 - by 30%, from January 1, 2010 – by 20% and from July 1, 2010 – by 10%, and after January 1, 2011 the wholesale price of gas has been used, determined by the federal executive authority in the field of regulation of prices (tariffs) on the price formula based on the established minimum and maximum price levels, calculated by the above formula, increased by 10% [1, 3].

A number of federal agencies declare a gradual increase by 2011-2014 gas prices within the process of alignment of prices in the domestic and foreign markets. It is emphasized, that it should provide a smoothed trajectory of rising gas prices in order to prevent price shocks for domestic consumers of gas, and therefore reduction in the rate of output growth and higher inflation.

The Republic of Sakha (Yakutia) is one of the subjects of the Russian Federation, whose gas industry should be developed within the general federal market, and any further curbing of prices for its products will lead to the deceleration of the development and reduction of reliability both of gas production and transportation of gas to consumers. Gas production and gas transmission systems of the Republic have a localized character: they consist of three local units - the Central, Western, Srednetyungsky, all of which operate independently of each other.

Due to this localized character gas supplies are highly monopolized in the territory. In such circumstances, price dynamics in localized markets and the sale of gas should be under state control. In this industry, competition is impossible or cannot be developed efficiently. Therefore, to prevent the subjects of natural monopolies from overpricing and charging too high tariffs for their products, and to avoid the decline in production, it is necessary to establish state regulation of gas prices.
The area of activities of natural monopolies, regulated by the state, including pricing policy, is determined by the Federal Law “On Natural Monopolies” (of August 17, 1995 No. 147-FZ).


In the current economic situation in Russian, the possibility of relatively independent regional pricing in the gas industry and other regulated industries in the fuel and energy complex (FEC) is objectively limited. Possible range of solutions by Regional Energy Commissions (RECs), local authorities, voluntary agreements are strictly regulated by the existing legal framework in the field of regulating prices of natural gas, as well as the plans and intentions of the Government of the Russian Federation on the systemic stabilization of strategic sectors of energy and housing and utilities infrastructure. Fuel supply markets, including natural gas markets are being developed in the region under the conditions of systemic changes, which in the future will be gradually stabilizing.

According to the minutes of the meeting of the Government of the Republic of Sakha (Yakutia) and the Federal Service for Tariffs on cooperation in the sphere of state regulation of prices (tariffs) of July 6, 2006 The Government of the Republic of Sakha (Yakutia) submits to the Federal Tariff Service of Russia proposals on the level of tariffs of businesses regulated at the federal level [2]. For many years, the Republic of Sakha (Yakutia) has been conducting coordinated pricing policy with
enterprises, both regulated and non-regulated at the federal level, which enables it to balance the level of prices with the indicators of the economy and the budget.

Proposals of the Government of the Republic of Sakha (Yakutia) to index the price of gas production are consistent with the parameters of the socio-economic development prognosis for the medium term in regard of setting limits on the growth index for tariffs of natural monopolies. The proposed indexation of gas prices at the level of the prognosis of the RF Ministry of Economic Development provides natural gas industry of the republic with sufficient investment sources.

State-regulated price of gas production is set on the basis of economically justified costs, where there are rules and regulations of costs, and where, for objective reasons, they are not available or cannot be used to establish rates, the method of “cost plus” or the “indexation method” is used, so the level of cost of gas is a significant but not the only factor influencing the level of prices. Social and political factors often have a more significant impact on the price level of gas industry enterprises of the Sakha Republic (Yakutia).

The Federal Tariff Service approves the wholesale price of natural gas produced by OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”). OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”) is engaged in the production of gas and sells it at the entrance of the main gas pipeline system transporting organization of OAO “Sakhatransneftegaz”, which sells gas to the end consumer at wholesale prices. The main purpose of OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”) is to ensure reliable gas supply to the central region of the Republic of Sakha (Yakutia) to meet current and future needs.

The price for natural gas produced by OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”) is defined as the difference between the wholesale price and the cost of transportation of natural gas according to the established rate.

In recent years, the wholesale price for gas produced by OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”)
has been increasing at a faster rate compared with the average Russian indices, and in 2007 it reached the level of the national average wholesale price.

In the republic there is no cross-subsidization between the prices for households and other consumers. Also, the existing reserves of the Srednevilyuiskoye field are quite significant, so there is no need for the development of new fields. In this regard, the indices of growth in natural gas prices may not match the indices of the Russian Federation. However, in 2013 the growth rates of prices for natural gas in the Republic of Sakha (Yakutia) are predicted to be above the level of inflation.

Also the results of our analysis of state regulation of gas prices for the period of 2010 to 2012, demonstrated the sufficiency of the level of approved natural gas prices for OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”). In recent years the company has a profit from regulated activities, as evidenced by the balance sheets and analyzes provided by the economic department of the company. Over 2008 to 2012, sales profit ranged from 311.6 m to 508.93 m rubles, and positive return on sales - from 32% to 34%. The results of the analysis of state regulation of gas prices for 2008 to 2012 demonstrated the sufficiency of the level of approved natural gas prices for OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”).

But at the same time, the existing system of state regulation of natural monopoly sectors in the fuel and energy complex (FEC) of gas producing companies in the Republic of Sakha (Yakutia) does not ensure the balance of interests of businesses and consumers of gas, and prevents the forming of stable conditions for the functioning and development of innovative economy in the north region. Particularly acute is the problem of tariff regulation on the natural gas market, there is no effective mechanism of state regulation of gas prices, which leads to the need to improve it and to develop effective methods of pricing in the gas-producing companies, taking into account the peculiarities of their functioning and gas supply in the energy isolated Russian territories.

As is shown by the practice of state regulation of tariffs within the framework of deterrence in the gas industry of the country, the growth rates of gas prices are higher
than the increase in prices of other industries of the Republic of Sakha (Yakutia). And, despite the outward prosperity, the gas industry of the republic faces some serious problems, the key issues of which include a high degree of depreciation of fixed assets, insufficient geological exploration, especially the lack of an integrated gas transportation system, lack of investment. These problems could be solved by improving the efficiency of state regulation of pricing of natural gas.

The need to improve state regulation of gas prices and the development of an effective pricing model in gas-producing companies in Russia’s energy isolated territories predetermined the urgency of solving these problems.

In our opinion, the main directions of improving state regulation of prices for natural gas production in the Republic of Sakha (Yakutia) are:

- Ensuring a balance between the growth in regulated prices for natural gas, produced by OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”), the state budget and the forecast of socio-economic development of the country, so that there should be guaranteed payment for fuel and energy resources, including gas, which is the main task of the Government of the Republic of Sakha (Yakutia) and the State Committee for pricing - Regional Energy Commission of Sakha (Yakutia);

- Preservation of state regulation of gas prices by the Government of the Russian Federation represented by the Federal Tariff Service of Russia for all providers in coordination with the Government of the Republic of Sakha (Yakutia);

- Formation of economically sound domestic gas prices for consumers, with continuing high rates of gasification of the republic and the increase in gas production;

- Carrying out by the regulatory authorities of the analysis of the validity and the final price of gas and the formation of normative analysis of the reasonableness of costs in the approved cost using the method of factor analysis of the costs affecting the price;

- Developing mechanisms to attract private investment for the development of the oil and gas industry in the Republic of Sakha (Yakutia);
- Use of a new type of state regulation of gas prices by the method of invested capital, which will set the price of gas in the long term, and will ensure the necessary investments to create technological reserve of gas distribution networks in order to prevent accidents and shortage of gas supply;

- Transition to the formation of the fuel and energy balance not only on the basis of fuel type, but also on basis of the territorial principle of production and consumption of energy resources in order to provide stimulation of the processes of energy saving. In this case, the primary fuel and energy balance should be formed at the level of a community in the Sakha Republic (Yakutia);

- Providing and encouraging new pricing policy in the gas industry of the Republic of Sakha (Yakutia), the processes associated with the implementation of energy saving, alternative energy and renewable energy sources.

We believe that, in the conditions of development of regional economy pricing in the gas industry in the Republic of Sakha (Yakutia) should be based on the following principles:

- Balancing the interests of different types of providers and consumers of energy resources, in the view of the following factors:
  - Ensuring the energy security of the region’s economy and population of the northern territory;
  - Preventing inflation processes caused by excessive growth of gas prices, because policy of price regulation in the gas sectors of the economy is essential to the maintenance of low inflation in the industry and creating conditions for economic growth - increase the competitiveness of local products by reducing the cost of production;
  - Fairness of pricing, reimbursement of economically reasonable costs to gas suppliers;
  - Availability of gas to consumers;
  - Competition between different types of energy resources on the basis of a rational relationship between them, based on the calorific value and the consumer benefits from the use of natural gas;
- Encouraging and supporting energy and resource saving;
- Ensuring the stability of conditions and pricing regime to encourage private investment in natural gas facilities;
- Implementing the principles of social cohesion in public spending in payment for gas for food preparation and heating over other forms of energy supply.

Thus, we have proposed concrete measures to improve state regulation of prices for gas produced in the Republic of Sakha (Yakutia) by OAO “Yakutskaya toplivno-energeticheskaya kompaniya” (JSC “Yakutsk Fuel and Energy Company”). We have also justified the basic principles of regional pricing in the gas industry of the Republic of Sakha (Yakutia), which on the one hand provide an opportunity to attract private investment and encourage energy saving, and on the other hand, the acceptable level of gas prices for industry and households.

References:

Elyakova I. D.
ORGANIZATIONAL, ECONOMIC, AND TECHNOLOGICAL BARRIERS TO THE SALE OF ELECTRICAL ENERGY TO CONSUMERS OF THE NORTHERN TERRITORY

Financial-Economic Institute of the North-Eastern Federal University,
This paper discusses the current problems of energy supply to consumers in the northern region of Russia. The study identifies the organizational, economic and technological barriers to the sale of electrical energy to consumers of the Republic of Sakha (Yakutia) and proposes the main directions for elimination of cross-subsidizing consumers between energy areas of the Republic of Sakha (Yakutia), as an effective mechanism to ensure reliable operation of the regional power sector.

Key words: region, Far North, power district, energy complex, electric power industry, depreciation, power grids, economics, finance, tariffs, consumers, population, budget, industry, cross-subsidies, threat to energy security.

Problems of the electric power industry in the region particularly severe in our republic, as well as in other energy isolated northern territories are dictated not only by severe climatic conditions and the scale of areas of low population density, but also a complex of factors affecting the economic, financial and technical condition of the electric power industry.

The problems of electrical energy security and supply of the economy and the population, as is known, occur primarily in regions that operate in a technologically isolated environment (or have weak ties) to the Unified National (All-Russia) electric grid, such as the northern territories of the Far East, including the Republic of Sakha (Yakutia) [1].

Yakutia is characterized by the following socio-economic features: remoteness and inaccessibility of the territory; vast distances between settlements; underdeveloped communications network; complexity of the transport scheme of seasonal importation of fuel and material resources; low population density. Extreme climatic conditions of Yakutia and the whole Far North in many ways exacerbate the electrical energy security issues, and therefore, security of power supply of most of the territory of the Russian Federation.

The regional electric power complex, undoubtedly, is the connecting link and the basic sector of the economy of the Republic of Saka (Yakutia), which provides
for the development of fuel and energy complex of the northern territory and create conditions for a comfortable life of the population in the Far North, faced particularly acutely with the challenge of the electrical energy security.

The electric power supply system of the Republic of Sakha (Yakutia), as mentioned above, is objectively divided into four separate energy areas (power districts) that are not connected by power lines to each other or to the Unified National (All-Russia) electric grid (UNEG): West, Central, South-Yakut and North power districts. The formation of four power districts in the republic is predetermined by such a specific feature of electrical energy industry in Yakutia, as the power supply from energy sources, technologically isolated from one another, as well as along with self-contained power supply sources [2].

Thus, the electrical energy complex of the Republic of Sakha (Yakutia) objectively since the construction of technologically isolated electric power sources is divided into four power districts:

- Western Power District (WPD) - combines Aykhal-Udachinsk, Mirny, Lensky industrial hubs and a group of agricultural Vilyuysk uluses (districts). The main source of electrical power – Vilyui hydroelectric power plants HPP-1 and HPP-2, OJSC “Yakutskenergo”, Vilyui HPP-3, ZAO AK “ALROSA”. The Mirny State District Power Plant (SDPP) and the Lena Diesel Power Station (DPS) are built a back-up power supply source within the Western power grids.

- Central Power District (CPD) - brings together the central industrial hub and and the group of central regions, including the right bank group of districts of the republic. The main source of energy supply - the Yakutsk SDPP and Yakutsk Thermoelectric Plant (TEP).

- South Yakutia Power District - includes the South Yakutia industrial hub. The main sources of energy supply - Neryungrinskaya and Chulmanskaya TEPs.

- Northern Power District - includes companies that provide functioning of autonomous diesel power plants in the northern regions of the republic.
In the power industry of the Republic of Sakha (Yakutia) there are still a number of serious organizational, economic and technological barriers that may be a limiting factor for sustainable economic development of the Republic of Sakha (Yakutia):

- lack of intra-regional transmission lines between the three technologically isolated energy areas of the republic. During accidents at power site, and therefore, the restriction or termination of power supply to consumers of a local territory of the Republic, and in the absence of spare capacity and intra-regional lines between the three technologically isolated power districts there can occur a cessation of activity of the economy and population of the northern region, which would lead to significant losses in all spheres of life support;

- high degree of wear of power generation equipment, power transmission lines, transformer substations. The technical condition of fixed assets is characterized by a high percentage of wear: on average, it is more than 55%, including wear of power lines - 70%; of power and other equipment - 46%; of substations - 55%;

- heavy network losses due to high degree of wear and low bandwidth of the power lines, amounting, on average, according to OAO AK “Yakutskenergo” to more than 17% loss;

- lack of full funding for the repair of power plants, leading to accelerated wear and aging of the equipment, determines the probability of recurrence of massive accidents with a cascade development, increasing the threat to livelihoods in the northern cities and towns;

- financial position of the power company provides a solution to the current problems of production activity and does not allow us to solve the long-term problems of production without investments;

- acute shortage of investment resources and underfunding of capital investment for the construction of energy-efficient sites of the power industry leads to problems of unfinished construction, as well as constrain the development process the power industry itself and of the regional economy;

- problems of northern delivery of diesel fuel for the power stations in remote communities are complicated by an underdeveloped transport infrastructure.
relative weight of the fuel component in the cost of electricity power of the republic in the North energy district reaches up to 65-70% due to the high cost of imported diesel fuel;

- high specific fuel consumption and the cost of electricity production, irrational modes of operation of the equipment reduce the economic performance and efficiency;

- energy consumption by diamond and coal mining enterprises in the Western and Southern Yakutia regions is sharply reduced;

- growing shortage of production and power reserve (energy) in the central power district of the republic is one of the main limiting factors of economic development;

- geographical dispersion of decentralized consumers of the republic and their small power loads cause a number of problems associated with the reliability of electricity supply to consumers;

- the major organizational challenge of managing the electric power industry of the republic is the lack of an effective mechanism for management of the electricity company OAO AK “Yakutskenergo” (the proportion of state-owned shares of the Republic of Sakha (Yakutia) is 1.31%);

- the republic used the average uniform tariff for electric energy, high-load of economically justified tariff of the diesel power industry is distributed among the other groups of consumers, hence the need for the existence of cross-subsidies between consumers of the republic’s energy districts.

As a result of the state regulation of tariffs for electric and thermal energy in the Republic of Sakha (Yakutia), during 1992-2012 in the energy pricing the cross-subsidization has been established in three areas:

a) subsidies between consumers of electricity and thermal energy through low tariffs for thermal energy compensated by higher electricity tariffs;

b) subsidizing consumers in areas with a high cost of production of electricity (Northern Power District) at the expense of consumers with low-cost electricity production (West and South Yakutia Power Districts);
c) subsidizing of the population through providing them with feed-in tariffs compensated by high tariffs for industrial consumers.

The first form of cross-subsidization remains for a number of objective reasons:
- Determination of the necessary costs of production, transmission and distribution of energy is difficult because there are no sufficiently qualified legal framework, instead of which there is an outdated definition of production costs in the production of electricity and thermal energy, including the absence of jurisdiction to determine the losses in electric networks, taking into account the length of power lines, distance from power sources, as well as technical and technological condition of the electric networks;

The existing pricing mechanism provides compensation of losses for the production of electricity and heat in areas with the highest costs by establishing a uniform average tariffs for consumers.

As a result of the conservation of the second form of cross-subsidization, the amounts of cross-subsidizing consumers between power districts of the republic has increased significantly over the last four years (Table 1.2).

Table 1

<table>
<thead>
<tr>
<th>Name</th>
<th>CPD</th>
<th>SYPD</th>
<th>WPD</th>
<th>NPD</th>
<th>Average rates for the RS (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Economically justified average rate</td>
<td>3.400</td>
<td>1.620</td>
<td>1.130</td>
<td>18.750</td>
<td>2.790</td>
</tr>
<tr>
<td>Approved average rate</td>
<td>2.570</td>
<td>2.860</td>
<td>2.900</td>
<td>2.280</td>
<td>2.770</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Economically justified average rate</td>
<td>Approved average rate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>------</td>
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<td></td>
</tr>
</tbody>
</table>

Table 2

The volume of cross-subsidization of energy districts of OAO AK “Yakutskenergo” for 2013

<table>
<thead>
<tr>
<th>Measurement unit</th>
<th>CPD</th>
<th>SYPD</th>
<th>WPD</th>
<th>NPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAO “Yakutskenergo”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Effective output</td>
<td>million</td>
<td>kWh</td>
<td>1213</td>
<td>1130</td>
</tr>
<tr>
<td>Economically justified rate</td>
<td>RUR /</td>
<td>kWh</td>
<td>5.127</td>
<td>3.140</td>
</tr>
<tr>
<td>Approved average rate</td>
<td>RUR /</td>
<td>kWh</td>
<td>4.181</td>
<td>4.469</td>
</tr>
<tr>
<td>Required revenue</td>
<td>million</td>
<td>rubles</td>
<td>6219.4</td>
<td>3548.6</td>
</tr>
<tr>
<td>Actual revenue</td>
<td>million</td>
<td>rubles</td>
<td>5071.3</td>
<td>5049.5</td>
</tr>
<tr>
<td>Transmission of energy</td>
<td>million</td>
<td>rubles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-subsidizing</td>
<td>million</td>
<td>rubles</td>
<td>-1148.7</td>
<td>1500.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Thus, in the North power district of the Sakha Republic (Yakutia), the share of expenditure on diesel fuel in the cost of electricity is over 70% due to the systematic and uncontrolled rise in prices for imported fuel. At the same time this power district accounts for 94% of the total diesel power consumption in the whole of OAO AK “Yakutskenergo” and for 76% of the consumption of electric power in the public sector and housing and communal utilities sector. Due to the high cost of fuel and low volumes of consumption, the cost of electricity production by diesel power stations is overprices compared to other energy sources. For the maintaining of the system of cross-subsidies in 2013, the volume of funds for these purposes will be
more than 4.9 billion rubles. As a result, because of the special social importance of the northern power district, the high cost of electricity generated by diesel power plants, is being subsidized at the expense of other consumers of the republic.

But the problem of cross-subsidization of electricity consumers is not limited to the disparities in the levels of tariffs for power districts of the republic. A similar situation exists within the industrial group of consumer where the price imbalance is formed between industrial consumers and the public, in favor of the former customers at the expense of the latter.

Since the population for a long time will not be able to pay the full cost of electricity, it necessitates the preservation of the third form of cross-subsidization in the power industry of the republic. In addition, for the aims of social protection of the population in matters of payments for utility resources of the Federal Tariff Service of Russia annually sets a limit for the growth of tariffs for the population, which makes it impossible to establish tariffs for electric energy at a faster pace.

The author would like to mention the following main shortcomings of preserving the mechanism of cross-subsidization of consumers in the power industry of the Republic of Sakha (Yakutia):

1. Such pricing principles are economically and socially unfair for certain categories of consumers. In accordance with the principles of pricing in the Russian Federation for the products, the prices subject to government regulation should be set at the price of their real cost of production.

2. The preservation of subsidizing for electricity consumers has led to distortions in the economy, resulting in a failure to fulfill basic principles of pricing in the power industry and the formation of unrealistic expenditures of budgets and, as a result, causes reduction in financial assistance from the Federal Fund for Financial Support of the Russian Federation.

3. In general, it distorts the inter-budget relations in all levels of the budget, as well as the mechanism of distribution of tax revenues. At the level of the republic it amounts to the shortfall in the necessary volumes of financial assistance from the federal budget as a result of the distorted formation of budget expenditures with the
consideration of average tariffs for energy, reflected in a reduction of tax revenues in order to cover the real costs. At the municipal level, during the transition to self-government it means the distortion of the formation of their own material costs for heat - and electricity, fuel, leading to wasteful and inefficient spending of energy resources, especially in places that import expensive diesel fuel.

4. “Loss” of large consumers due to the high tariffs of the energy company. In recent years, due to high electricity tariffs for industrial and similar consumers there comes a negative factor for the republican electricity company OAO AK “Yakutskenergo”: the refusal of industrial consumers to accept services of “Yakutskenergo” in favor of its own generation or services of the wholesale market. Besides, because of the high tariffs no new contracts are signed with potential large industrial consumers nowadays. A situation has arisen in which the involvement of such new industrial consumers as OAO “Gazprom” for the electricity supply of Chayandinskoye field becomes problematic or even impossible. The situation is exemplified by the problem of reduction in the projected growth about 5 years ago, of the production of electricity by the joint-stock company “Yakutskenergo” - as a result of the power supply for the pumping station “Talakan” by the joint stock company “Transneft”, Talakanskaya gas turbine power plant of the OAO “Surgutneftegas”, instead of joint stock company “Yakutskenergo”. It should be understood that it is impossible to overestimate the expectation of growth of electricity as a power company growth prospects, as it provides greater production of electricity, which helps to reduce electricity rates and, therefore, attracts new consumers in the power districts of the republic.

5. Insufficiently elaborated in the existing cost allocation methodology are the issues of distributing costs and profits of utility companies between electric and thermal energy. The current method virtually eliminates the possibility of using by the energy supply companies of flexible marketing policy in the field of marketing electricity - and heat (taking into account the specifics of a particular region and opportunities for greater competition in the regional consumer markets of electrical and heat energy).
6. Calculations for a number of energy systems show that the lost income of power supply companies due to high fuel costs that are not included in the rates for electricity and benefits for a number of consumer categories are so large that they cannot be compensated. Therefore, it is necessary to introduce into the consciousness and practice of local authorities and the federal government the following principle: if decisions are made about a preferential rate for a particular group of consumers, at the same time a question of budget subsidies must be decided. This principle is necessary to legislate by means of amendments to the RF Law “On Electric Power Industry” of 26.03.2003 N 35-FZ.

7. The dynamics of costs generated in tariffs for electricity do not correspond to the real economic costs of their production, hence the set of economically unreasonable electricity rates of “Yakutskenergo” in the power districts of the country.

8. The inexpediency of transfer to electric heating in the Western power district of the republic and other budgetary consumers because of the high cost of electricity in view of the subsidy for diesel energy generation.

The existing organizational, economic, and technological barriers of the electrical power complex of the Republic of Sakha (Yakutia) are the main factors leading to threats to reliable energy supply of the republic. The main directions of the elimination of cross-subsidizing consumers between the power districts of the Republic of Sakha (Yakutia) are as follows:

- The establishment of differentiated tariffs for electricity power districts with due consideration of the economically justified costs of its production by phasing out cross-subsidization of electricity consumers and the use of the mechanism of subsidizing electrical energy of the Northern Power District.

- The allocation of funds from the federal and republican budget in the form of subsidies to consumers of the North Power District for the phased elimination of cross-subsidies for consumers between the energy districts with the aim of preventing growth of tariffs on the remaining power districts and reduction of the production of electricity through the “loss” of existing and potential consumers;
- The implementation of paragraph 5 of the Protocol of the meeting of the Prime Minister of the Russian Federation Vladimir Putin in Mirny on August 21, 2009 No. VP-P9-34pr, coordinated by the Government of the Republic of Sakha (Yakutia) with the appropriate federal bodies of executive power. On the basis of the above document should it is necessary to provide subsidies from the federal budget for the reimbursement of costs for the production of electricity by diesel power plants. The allocation of these funds provides for the reduction of costs for production of electricity and is a condition for the implementation of the Program of local power industry optimization of the Sakha Republic (Yakutia) till 2015;

- In order to achieve the maximum effect of the proposed subsidies it is necessary to allocate these funds for financial assistance from the federal and state budget in the form of grants in the following areas: to lower the tariff for electricity generated by diesel power plants; to fund the local power optimization of the Sakha Republic (Yakutia).

References:
The economic interests and their implementation are exactly used to be the motive power for the economy development. Considering the formation of modern Russian Federation civilized market economy, the problem appears. This problem arises from the accounting and reconciliation for the interests of different entities that participate in economic relations.

Nowadays Russian state system assumes a relative autonomy of municipal formations and it gives the reason to determine the economic interests on the municipal level by the municipalities’ isolation from the state.

Different entities which are the owners of the specific interests function at the municipal level of the economy system. These entities’ definition and their interests’ features identification are important for the study of economic interests on the whole and for thorough study of the social-economy field in municipal formations.

This article will consider the characteristics of economic interests for such entities of municipal level as: the population, economic entities (including the commercial enterprises and non-commercial organizations), local self-governments. Their interests are predetermined by specific needs and municipal property. We shall also consider in detail the characteristics of the municipal property as the economy basis of interests.

**Social structure entities at the municipal level.**

It is widely known that the needs are the material basis for the economic interests and the economic relations based on property relations act as their social basis. The economic interests themselves represent socially determined and historically defined objective need to meet existing and emerging demands [1]. To mark the line, the economic interests of the municipal-level entities are determined, primarily, by their needs.

The following entities that have different needs and represent different economic interests function at the municipal level:

- **The population**, that represents the interests and needs mainly of the social character related to the creation and use of objects in the social infrastructure of the municipality.
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- **The economic entities**, including commercial enterprises, which represent the needs related to the formation and use of resources for production and business activities, non-commercial organizations that represent the social needs of society: religious, educational, social, cultural, managerial ones, etc.

- **Local self-government bodies**, which are the entity that represents the needs associated with the regulation of social and economic life of the municipal foundation.

**Features of the economic interests of different entities.**

Let’s describe the municipal economic interests on the whole and the interests of each of mentioned group of entities.

*Economic interests of the municipal foundation* as an entire system (municipal economic interests) lie in the efficient use of internal and external resources (physical, natural, labor) involved in order to meet existing and emerging needs at this level of the social structure, to achieve economic efficiency of the municipal economy, to achieve the economic growth.

The population, economy entities, local self-government bodies represent the interests of the municipality, and the municipality is the entity representing the range of municipal interests as an integrity. Besides, the municipal economic interests are not identical to a simple complex of interests of the municipal level entities. Municipal economic interests are immanent to the municipal formation as an integrity of co-developing economic entities in the area, they are different from the interests of the regions and the Federation ones.

As for the temporal feature, the municipal economic interests are divided into tactical (current, short-term) and strategic (perspective, long-term). Tactical interests are formed in ensuring to meet the current needs of municipal economic entities. Municipal strategic interests are related to self-preservation (stability), development and economy growth. The implementation of economic interests of the municipal formation as the integrity defines the vectors of municipality strategic development.

There is a priority of needs and interests of one or another municipal foundation. So, the needs and interests of city, town and rural municipal formations, industrial
and agricultural municipalities and the municipal formations of the Central Economic Region and the Far North, etc. will differ.

**The economic interests of population** in the municipal formation match the general interests of the municipality and serve to improve the situation in different regions of the municipality, their improvement, provision of social and consumer services, transport service, cultural activities, etc.

The population living in the territory represents the territorial, local interests, as some researchers claim. Under the existing production relations in municipal formations the population actualizes its local interests. [2]

The economic interests of the population in a municipal formation express the need to meet the existing and upcoming needs of residents in social, housing, communal and other services as a part of reproductive process of the municipality, and the needs for labor.

The economic interests of economic entities of the municipal formation – *commercial enterprises and organizations* that operate on the basis of private property (partnerships, communities, production cooperatives) relate to the need to meet the demands for a stable and relatively high income (profit), to increase the cost of funds of the enterprise.

The economic interests of commercial enterprises that function on the basis of public property (state and municipal unitary enterprises) also relates to the need to meet the social demands of a municipal formation.

The economic interests of economy entities of the municipal formation – *non-commercial enterprises and organizations* that function on the basis of private property (consumer cooperatives, community and religion organizations, foundations, associations and unions) relate to the need to satisfy their material and non-material needs and to achieve social, charity, education and other socially useful purposes.

The economic interests of non-commercial organizations that function on the basis of public property (state and municipal institutions) relate to the need to meet the administrative, social, cultural and other non-commercial needs.

The need to meet the above-mentioned demands of the people and economy
entities makes the content of local governments’ economic interests.

Social protection, development of a network of social services have special importance among the interests of local self-governments bodies. As for the health protection field the local governments meet their needs in the organization, maintenance and development of municipal health care institutions, ensuring the area sanitary conditions, development of physical culture and sport. As for the education field, the local authorities are interested in basic general education availability for the population of the municipality.

Thus, the economic interests of local self-government bodies consist of the need to meet the demands of population and economy entities of the municipality under the reproductive process at the municipal level.

The economic interests of the municipal level entities are interconnected within the territory of the municipality. Functioning as a part of such an open economic system as the municipality is the interests of economic entities do form a relationship, and interact.

The interaction of economic interests of the municipalities can be studied in vertical and horizontal dimensions. The vertical aspect involves the integrity of municipal and state interests, the interests of regions and economic entities on the territory of municipal foundation, that leads to a system: federation - regions - municipalities - entities. The horizontal axis is determined by the presence of relationships of municipal interests with those of other municipalities, and other entities of economic relations.

Municipal property as an economic base of interests and its features.

Since the property relations are the social and economy basis of municipal interests, the specifics of municipal property affects the features of relevant interests.

Particularly, the specifics of Russian municipal property is that it is not included in state property, while the regional property is. The partition of state property to federal property, the property of the Federation and municipal property was made in 1991 by the RSFSR Supreme Council Resolution № 3020-1 by December 27, 1991. Thus, an isolated municipal property is the basis of municipal foundation autonomy
and is the economic basis for economic interests at the municipal level.

During the division of property while the time of transformation of Russian economy was going the following objects were transferred to the municipal property that were necessary for providing municipal services to the public:

- Social and non-social fund, housing maintenance and repair-construction companies maintaining this fund;
- Wholesale and retail enterprises;
- Catering and consumer services;
- Local infrastructure objects;
- Education, health, culture and sport institutions.

Another way of forming the municipal foundation property was the municipalization of social fund department, social facilities and urban infrastructure during the privatization of state enterprises and institutions. In both cases the specificity of municipal property is clearly observed and they are intended primarily to meet the municipality population needs in social, housing and public services, thereby affecting the economic interests of municipal communities.

We can talk about the large number of property entities at the municipal level. And we mean that the owner in the municipal foundation is not only the municipality population as a whole, self-managed by local authorities, who actually possess, use and dispose of municipal property on behalf of the population. The owners are also the private individual owners and corporate owners, functioning either on the basis of private property (commercial enterprises and organizations), or on the basis of public property (non-commercial enterprises and organizations, state and municipal enterprises and organizations).

Municipal formations are characterized by different condition and level of municipal property development, that results in a difference and the economic interests’ specification for different municipalities.

Firstly, we should note that there is an industry-featured municipal property. Thus, there will be differences, for example, between the municipal interests of science city, single-industry town (which city-forming base is represented by one or
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more enterprises of a relevant profile), a closed administrative-territorial formation, a
city with historical and cultural heritage. [3]

Secondly, we have a different quantity and value of municipal property in
different municipalities. That is associated with particular economic interests of
small, medium and large municipalities. [4]

The interests of small, medium and large municipalities are defined also by
population quantity. However, the residents will be kept at the territory of the
municipality by provision of municipal goods at high level. Therefore, the presence
of municipal property objects, serving the needs of the population, must be equal to
the number of municipal foundation residents.

Thirdly, the structure of municipal property is different in municipal formations.
Traditionally, enterprises and organizations of housing and communal services,
consumer services, socio-cultural field dominate in the municipal area. However, a
small number of industrial facilities and other industries, which are not social but
mainly commercial in nature, prevents the affirmable realization of people's interests,
which are based on the demands for goods and services, as well as the needs of local
governments in obtaining cash income from additional sources.

Fourthly, the use of municipal property is carried out with varying efficiency.

Conclusion.

The analysis of municipal economic interests features, identifying the most
evident and obvious characteristics, determined by their material and social base
features allows to specify them as a form of general economic interests in the system
of economic interests, and also to distinguish their kinds.

The economic interests study at the municipal level, allows to mark groups of
economy entities with different interests that need to be taken into account while
managing the socio-economic development of the municipalities under the formation
of local self-government financial foundations. These are such groups of economical
entities, as municipality citizens, commercial enterprises, non-commercial
organizations, local self-government authorities.

The economic interests of the municipal level are mainly related to the needs of
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population living in the territory of municipality. Needs of the population are met by the activities of enterprises and activities of local self-government bodies. It can be said in this way that the municipal interests are social in their nature.

In general, municipal economic interests are not equal to a simple complex of interests of the municipal level entities. Municipal economic interests are immanent to the municipal foundation as a consolidation of co-developing economic entities in the area, and they are different from the interests of regions and the Federation.

References:

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Novosad V.A., Novosad L.V.
SECURE ENERGY IS A STRATEGIC ISSUE OF THE EACH COUNTRY IN THE 21st CENTURY

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In this report, we describe the important to the economic development of the country of the question of the safety of electrical networks.

Key words: ”economics”, “energy”, “electrical energy”, ”Smart grid”.

Foreword

Today modern metropolises and small households can’t imagine their life without electricity. The state of electrical networks has great importance for each
country's ability to create a safe environment for the economy of the future. Reliable supply of electricity contributes to development of new technologies, products and services, raise of living conditions of the population. The development of new secure power grids and modernization of the old power grid is a strategic issue for each state, as such, which ensure energy independence and security of each country. The existing power grid should work as a single body in order to ensure safe operating conditions its. At the same time some of its parts belong to many companies with different ownership forms. Therefore, the establishment of a secure power grid is a matter of national importance and requires cooperation and collaboration between the private sector, state and local governments, various consumer groups and other stakeholders.

**The main text**

Change of traditional attitudes on use of energy resources to the new policy of the using of non-traditional but environmentally safe energy sources requires a change in the policy of power grids in the near future. This requires also significant investments to build new power networks to new sources of power generation and for modernization of the existing power grid, including creating tools for collecting and storing electrical energy and also new technologies of control of flow electricity demand and cyber security of electrical system. The U.S. as always in these matters is leaders. In 2011, the U.S. adopted the report "A POLICY FRAMEWORK FOR THE 21st CENTURY GRID: Enabling Our Secure Energy Future"(hereinafter referred to as the Program)[3]. It provides substantial public investment in electricity networks of different forms of property to create a Smart grid of the country, to reduce the losses in the power grid, for increasing of the reliability of power networks, giving for consumers the possibility to choose modes that save energy resources and their costs, and increase export opportunities country.

Each year, the administration of the U.S. President reports on the implementation of the adopted program, that proves the importance of this issue as an issue of national importance.
Program of the development of the electricity grid of the US is based on four principles:

1) Cost-effective investments in new technologies of transmission and distribution of electricity.

2) Creating of opportunities for innovation processes in the electricity sector.

3) Empowerment of consumers, enabling them to make informed decisions about their circuit energy supply.

4) Creating a safe electrical networks (ensuring cyber security of the power system).

Each principle contains a set of specific recommendations to ensure the implementation of the enunciated principle. Achieving of progress in all four areas requires overall effort by the long-term cooperation between the private sector, state and local governments, consumer groups and other stakeholders. The U.S. believes that conduct the stated principles is an important step for the development of the economy in the 21st century. Allocated budget funds are $4.5 milliard to implement this program. The main objective of this project - to achieve by 2035 - 80 percent of electricity consumption from environmentally safe sources of electricity. This program also includes the production plan of electric vehicles in the amount of 1 million until 2015, requiring a change in power grid due to the need to create storages of electrical energy [3].

The developers of this program believe that investment in electricity infrastructure are crucial because from the beginning of electrification of the country took many years and the electrical network is worn out. Major investments are assumed for modernize the electricity grid by implementing Smart Grid. (Principle1).

Making Smart Grid provides a significant change in the metering of electricity, automation of distribution networks, significant changes in the management and monitoring of a condition of electrical networks, nodal substations, control of flows and changes in customer installations in connection with the use of alternative and renewable energy sources. These systems, that will be changed to create a Smart Grid, will use new technology in automated accounting and information systems.
consumers, new infrastructure of communication systems for power projects, a new system of monitoring and control of electrical equipment. The new system will ensure the integration of different electric energy sources and low power electric drives for refueling. Also this is new data management system and the new management system of mobile teams. The combined into one system, these technologies will create smart grids which can automatically carry out reconfiguration at conditions change. Main results of this program should be:

- To promote and ensure the use of clean energy from renewable energy by consumers.

- New distribution of electrical energy, which takes into account the availability of electric vehicles and the necessary means for storing electrical energy.

- Establishment of a reliable energy supply structure and terms for consumers to save their money at the expense of opportunities to use of renewable electricity source.

- Creation of new jobs for the personnel involved in the creation and maintenance of a new Smart Grid.

The process of implementing Smart Grid is carried out at different rates in different states. Today in the U.S. there are more than 3,000 electric companies with different needs, different resources and different regulatory framework for their activities [3].

However, the program SGIG to create a Smart Grid in 2011 allocated grants to 99 recipients, including private companies, more than $ 8 milliard [2, 3].

The implementation of the enunciated principle 2 will be carried out through the use of the opportunities offered to all members of generation, transmission and consumption of energy in Smart Grids. It is the creation of new standards in the field of electricity supply and new tariffs that encourage consumers to economical use of electricity and smoothing the load by encouraging consumers to use cheaper electricity during the hours with less load of the electricity network.

The principle 3 will be carried out by providing for consumers the choice of sources of power generation. Smart Grid should provide opportunities to move from
one energy source to another, depending on the decision of a particular user. New tools and programs must provide personalized information and provide the opportunity to make an informed choice of energy sources, to ensure the protection of confidentiality of data on electricity consumption and payment for these services. The task for state and local governments is to provide public information for consumers about the possibilities that they can use at work with Smart grid.

The high level of automation, the widespread use of information networks and the creation of new Smart grid need protection of the electricity network from cyber attacks and security activities. This will facilitate the implementation of the fourth principle of the creation of Smart Grid. Introduction of standards of cyber security in power grid is vital to the national security and economic well-being of citizens. Therefore, in the framework of public-private partnership the US will provides a cyber security for of electrical system and information networks used for the power supply and metering of electricity use by consumers. Global efforts will be directed at developing a framework to ensure the effective and real security for all stakeholders of the process supply of energy.

This year's report of the U.S. President Barack Obama about establish a reliable power grid in the country shows that in the period from June 2011 to February 2013 was installed 343 advanced sensors of networks, was updated 3000 distribution networks with digital technologies of data transmission, was installed 6.2 million smart meters and was invested in 16 projects of storing electrical energy. (For example, the U.S. have available sources of electrical energy storage for 2.5% of the electrical energy needs, and Japan have- even 15%)[2].

In Ukraine, as in all countries, the condition of the power grid influences the political and economic status of the state. Opinions of experts of energy indicates that Ukrainian Energy is also ready to build a smart power grid in the country. However, the lack of attention first persons to this strategically important issue, the lack of adequate funding suggests that Ukraine will stop at several "pilot projects".

Purely budgetary financing for to building of the overall Smart Grid in the United States for 1000 kWh of electricity consumed is 1.2 $ plus 2 $ various grants.
from various funds, plus 1-2 $ annual investment most energy companies. For example, only one company Florida Power & Light Company (FPL) plans to invest approximately half a milliard dollars between 2013 and 2015 to improve the stability of power grid for their customers. That is the minimum - 4-5 $ for 1000kWh the US invest in the creation of the Smart Grid[1,2,3].

In Ukraine, overall budget funding of electric network (not just for build Smart Grid) by 2030 will be 187 million UAN according to the latest updated Energy strategy This will be 0.5 $/1000kWh[4]. These funds will not be enough to create by 2030 a Smart Grid in Ukraine. The reorientation of power grids to modern needs (extensive use of electric network for newly created alternative energy sources and energy storage devices for electric vehicles) in the updated Energy Strategy of Ukraine is not even mentioned .

Conclusions:

Ukraine needs a separate strategy for electricity networks as a strategically important facility for the country and the correct calculation of financial needs in the future that will not have significant problems with its activities .

References

PERFECTION OF PREVENTIVE MAINTENANCE OF ACCIDENTS AS THE DEFINING FACTOR OF SUCCESSFUL DEVELOPMENT OF MODERN MANUFACTURE

In work attempt of the complex approach to investigation, analysis and perfection of preventive maintenance of accidents taking into account the human (psychological) factor is undertaken.

It is offered on the basis of questioning of workers of enterprises and mathematical processing of their results to compare the statistical data of external control with the data of an internal self-estimation (self-inspection) and on this basis to develop preventive actions for traumatism decrease.

Increase of power, of material-economic, information potential of industrial complexes and systems observed recently, application of new energy - material - and high technologies, and also other objective reasons connected with scientific and technical progress, demand new, a fuller appreciation about an industrial traumatism various dangers of technical systems, and also revaluation of old and development of new criteria and factors of an estimation and traumatism preventive maintenance.

Modern science, proceeding from a preventive maintenance imperative, postulates a priority of preventive work, including under the prevention of the industrial traumatism, being one of the main moments of increase of safety level of existing "human-machine" systems.

For working out of adequate preventive actions for traumatism decrease it is necessary to have the authentic data in the given concrete region (enterprise, shop etc.) and during given concrete time. From here there is clear a necessity of the competent, qualified and unprejudiced investigation of accidents on manufacture. The analysis of both domestic and foreign literature has shown an urgency of further
studying of problems and cause and effect interrelations of a traumatism and successful development of manufacture at the present stage. Thus there are not completely solved questions of the organization of registration and the analysis of traumas, preventive maintenance of accidents. A problem of the present work was studying of features of the organization of investigation of accidents on manufacture and work perfection on traumatism preventive maintenance.

Without understanding of reasons of occurrence of accidents it is the extremely difficult to prevent them. More often the human factor, in the form of the limited number of existing before imperfect industrial systems, generates principal causes of accidents. The given reasons are united with the subsequent technical errors and misses or adverse conditions of environment and lead as a result to an accident.

Major link in structure of actions for maintenance of safe activity of a person is the psychology of work safety, representing one of sections of work psychology. The system of subjective features of labor process is designated by concept of the human factor. Safe work is appreciably a psychological problem. Acknowledgement of that is the international statistics which testifies that reasons of a traumatism of 4 % make dangerous working conditions, and 96 % - dangerous actions. So-called «the human factor». There is a variety of objective reasons promoting growth of number and weight of accidents. And studying of these reasons, knowledge of some of them, promotes their elimination, counteracting traumatism growth.

For working out of adequate preventive actions for traumatism decrease it is necessary to have the authentic data in the given concrete region (enterprise, shop etc.) And during given concrete time. It is known that frequency of occurrence of a traumatism at enterprises submits to the law reminding a pyramid in the basis of which there are risks which are taking place on manufacture, further micro traumas, etc. Statistics shows [1] that if at the enterprise there is a fatal case in its basis there is from thousand to several tens thousand dangerous conditions. It is possible to consider that the administration has not watched these thousand dangerous situations. From this point of view the incident with a deadly outcome is a natural end of above-stated "pyramid" that is its top. In the basis of this pyramid are not registered
infringements, above - easy traumas, still above - traumas with temporary disability, and is closer to top - incidents with serious consequences. And, at last, there is a fatal case. It is established, for example, that one fatal case is preceded by 10-30 cases of serious traumas (differently at different enterprises), 100-300 easy traumas, 1000-3000 micro traumas and 10-30 thousand so-called dangerous factors. If at the basis of this pyramid, at level of dangerous situations not to undertake any preventive actions, in process of their accumulation incident with a deadly outcome becomes natural and inevitable.

Thus, traumatism preventive maintenance is connected, first of all, with work of the given pyramid at "base" level that is with the normalization of noxsosphere. And it rests first of all in psychological, that is, in human factor. At all evidence of the given position, in practice, there are certain complexities of its realization in connection with absence of full and absolutely trustworthy information.

And the main most difficult tractable problem in this plan is that workers of enterprise are interested in concealment of facts of a traumatism is main, or their skill conversion on less heavy as they bear for them personal responsibility. Hence, going only by the way of strengthening of the responsibility of heads, with the help of only retaliatory measures it will be not possible to reach the expected result as each fact of a traumatism opened on manufacture will be perceived by the higher head not as the positive moment in preventive work spent in division, but as the basis for punishment.

Therefore by working out of actions for traumatism preventive maintenance there becomes actual a question of working out of such models of management by labour safety at the enterprise in which the center of gravity would be displaced from procedures of external control from a higher management and control bodies towards an internal self-estimation (self-inspection) where psychological, that is «the human factor» becomes solving again.

Statistics and dynamics of accidents on manufacture and occupational diseases should be collected and analyzed carefully. However not search and punishment of guilty (and more often innocent) should be the purpose and result of such analysis,
but management improvement, perfection of system of industrial safety and a labor safety. Thus, not fear should be the predominating factor, but positive motivation in actions of people. Results of a self-estimation become on the one hand the mechanism of constant internal improvement of working conditions, and with another – can be represented as external checking for their random inspection.

One of the basic methods of self-estimation are matrix and tabular. The matrix method represents a set of qualimetrical scales (in the form of matrixes) «perfection levels» by all criteria of the model, expressed verbally, from completely unsatisfactory condition to full perfection, and tabular - is spent by filling for each estimated aspect of activity or criterion of model of the table in which the estimation of level of perfection of criterion is given, to degree of systemacity and prevalence of the applied approach.

By working out of the plan of preventive actions for the prevention of a traumatism a prominent aspect is not only their list, but also ranging, that is definition of degree of weightiness of the contribution of each action in a condition of working conditions. On values of «perfection levels» criteria of Model taking into account factors of weightiness of the given criterion the integrated criterion (indicator) of an estimation of perfection can be calculated.

Thus, working out of the model improving quality of work of the enterprise in the field of preventive maintenance of a traumatism on the basis of carrying out of a self-estimation, will allow to estimate an initial condition of preventive work, to define strong and the weak parties needing improvement and to develop the adequate plan of measures under the prevention of an industrial traumatism.

**Literature:**

Grosheva N.B., Bobkova N.G., Potapkina M.A.

ASSESSMENT OF THE ECONOMIC EFFECT OF IMPLEMENTATION AND APPLICATION OF MANAGEMENT TOOLS IN AN INNOVATIVE ECONOMY, AS EXEMPLIFIED BY RELATIONS MANAGEMENT SYSTEM

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Introduction

Day-to-day management tools are often not used to their full capacity in practical operation of Russian companies, especially among small and medium businesses. Part of the reason is insufficient qualification of owners being unable to determine essential requirements to management quality in their companies, as well as lack of trained managers capable of defining and implementing such systems of management. In addition, there exists an opinion that management tools somehow "do not work" in Russian companies, but only are a waste of time, and that their implementation is costly.

1. Role of management tools in an innovative economy. Mechanism of economic effect assessment on their implementation and application.

The problem of application of management tools in companies gains special criticality in the conditions of an innovative economy, where innovations perform the role of the source of sustainable competitive advantage. Based on their type (according to technological parameters), innovations are classified into four types: product, process, marketing and organizational innovations.

Organizational innovations appear to be of greatest interest for our research, being given the definition of implementation of new methods in corporate business practices, workplace organization, or external relations. The key target of
implementing organizational innovations is to increase the company's operational efficiency. Innovative management tools are the core of organizational innovations.

Special place among organizational innovations is dedicated to new management methods for a firm's external relations. These include implementation of new methods to set up relations with state authorities, other companies, to establish new forms of cooperation with R&D organizations or customers, new methods of integration with suppliers. Therefore, the system of relations management may be viewed as an innovation.

Any innovations imply certain investments. This is why already at decision-making stage of building such system of relations management, it is vital to possess an efficiency assessment mechanism for the given tool of management. In our study, we will rely on standard formula of Net Present Value (NPV), with certain adjustments:

\[
NPV = \sum_{t=1}^{n} \frac{(\Delta EVA_t - TCO_t)}{(1 + WACC)^t}
\]  

where EVA - economic value added;
TCO - total cost of ownership of the management tool;
WACC - discount rate (weighted average capital cost);
n - number of periods (years) since the beginning of tool management tool implementation until its termination.

Total cost of ownership of a management tools for each particular period n is compared to increment of economic value added over the same period. The difference here versus the standard approach to definition of net present value is primarily that we choose to compare all advantages and costs associated with implementation and operation of a management tool, including non-monetary, rather than pure cash flows.

It is proposed to assess the costs of implementation and application of a management tool with method of total cost of ownership, which is currently used to assess many managerial decisions involving several stages of a life cycle.
2. Implementation and application of a relations management system in companies

A relations management system involves the following: initiation; development of strategic relations management system; creation of a dedicated division or distribution of authority among existing specialists; development and implementation of appropriate procedures; budget approvals; operation; implementation of associated events; results assessment; upgrade (alteration of relations structure or rejection of the current system and complete replacement).

Direct capital expenses include procurement of software (whenever management automation is required), hardware upgrade, possible upgrade of internal corporate communication system, software support, costs of additional required software. In addition, primary costs incurred during creation of a specialized relations management division also belong to direct capital expenses.

Direct operational expenses - staff training costs, maintenance costs (including salaries and associated costs), cost of services and other costs. Direct operational expenses may also include financing of any particular dedicated events (including measures of direct social support, social actions).

Indirect expenses include equipment depreciation, cost of business hours spent on event approval procedures, negotiations, reports on conducted actions and events. Apart from the above, these may include costs of staff self-training, costs of efficiency reduction caused by implementation of particular events, additional corporate risks due to centralization or information disclosure.

Let us consider the assessment of total cost of ownership of a relations management system for a company operating in petroleum industry, as exemplified by provision of tax benefits (federal and regional). The following entities will be the key stakeholders: state (federal authorities), region, municipality of presence, transportation company (Transneft), shareholders (including the state).

A relations management system involves creation of a dedicated company division: three specialist positions, whose functions, among others, include GR
management, development of social and economic partnership agreements, staging of charity events.

Budget of this division is expected to cover the following: salaries and social deductions; work premises maintenance; fuel and lubricants; stationery and communication; information support costs, including publications in mass media about events conducted; monitoring of company information field; maintenance of a dedicated corporate website area; charity budget, hospitality expenses, trip allowances.

One-off expenses are also involved in setting up of the dedicated division, such as premises set up, procurement of office appliances and associated materials, connection to communication and data transfer networks.

After the division has been established, certain works were undertaken to draft the event plan and obtain its approval with management (operational plan included assessment of expected results of the events conducted, and determination of events’ budget).

Within the framework of its operation, the division conducts charity events, drafts agreements of social and economic partnership both at regional and municipal levels.

Indirect costs include salaries of staff participating in project approval procedure.

While the company spends on charity purposes on average 35 million rubles per year, associated costs amount to only 250,000 rubles per month. i.e. 3 million rubles per year, rendering the total annual cost at approximately 38 million rubles.

The indicator, which allows to assess the revenue of system implementation, is the increment of economic value added through reduction of tax burden in the form of property and profit tax.

3. Analysis of key risks associated with implementation and application of a relations management system in companies

The following risks may occur at the initiation stage: difficulties in approval of the system by management, lack of general initiation concept; unavailability of
budget funds toward system implementation; difficulties in selection of system implementation coordinator; technical incongruence of system implementation versus other existing systems.

At the stage of concept development for strategic relations management, the following risks may occur: lack of common approach to stakeholder relations management; delay of system concept development schedule due to work scope expansion or budgetary constraints on the system, imprompt approval of procedures and associated documents; conflict of interests between the newly created specialized service and other structures of the company.

The following risks may be identified at the operation stage: operational risks (poor system functionality due to lack of clear comprehension of the system's key elements, its operational targets, methods of establishing communications etc; system malfunction related to use of additional information control systems, i.e. information leak or theft, inaccuracies in determination of operational targets, distortion of factual data at reporting stage); presence of considerable discrepancies and decrease of motivation for use of the system.

At completion stage, the key risks are related to rejection of the existing system or its complete replacement as the result of relations structure change.

It is worth noting that as the system approaches the completion stage, the risk of additional costs of system implementation increases. This determines the need to design risk mitigation measures in advance.

Inferences

1. Day-to-day management tools are often not used to their full capacity in practical operation of Russian companies, especially among small and medium businesses.

2. The role of organizational innovations gains additional value in the conditions of an innovative economy, which implies a considerable potential in application of modern management methods.
3. A stakeholder relations management system is a management innovation, which is associated with high level of uncertainties and requires considerable investments for implementation.

4. We propose to assess the implementation and application of a relations management system in companies from view of total cost of ownership and its contribution to economic value added.

5. Similar to any other tool, a relations management system generates certain business risks, whose control mechanisms must be thoroughly analyzed prior to implementation of the system.