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# Part I: ACTUAL ISSUES IN MODERN PEDAGOGY

## MODELING OPTIMIZATION STUDENT'S PORTFOLIO OF ACADEMIC DISCIPLINES

**Victor Nevezhin**, PhD in Engineering, Professor,  
**Alexandr Bogomolov**, PhD in Economics, Associate Professor,

*Financial University under the Government of the Russian Federation, Moscow*

**Liubov Chagovets**, PhD in Economics, Associate Professor,

*Simon's Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine*

**Abstract:** *Modern methods of education suggest great autonomy for students to select learning disciplines. We consider students of university, because students have more freedom when choosing academic disciplines in modern systems of higher education, particularly in the West. Self-study student's planning begins with assessment of the available information resources of the educational process, according to the existing curriculum. The current organization of the educational process also involves preparation of a training schedule for students using all the opportunities, which provide a virtual learning environment [1].*

**Keywords:** *utility function, optimization, laws Gossen.*

## INTRODUCTION

The main resource, limiting the cognitive capabilities of students is a temporary resource. A time resource, which is provided for students, should be used as an optimal way to conduct classes in various disciplines. It produces the maximum profit in form of knowledge. If student spend more time for studying the discipline, they get more profit or knowledge. Each student decides how much time to spend on studying a discipline. It is assumed that the student's behavior is rational and strives getting the maximum amount of knowledge using available time resources.

## MATERIALS AND METHODS

The conceptual model based on the theory of consumer behavior and on the laws of Gossen [2], was provided. The approach allows estimating the usefulness of time spent on the study of student's unit of a discipline. There is an assumption, according to the theory, that a uniform of profit's rating scale or amount of the profits obtained from the good does not exist. The economic good are products, services and all consumer needs. But each user has its own scale of financial advantages. Each user attempts to maximize a set of economic goods for themselves considering limitations. If the good or service meet the requirements of the consumer, it has utility. The consumer utility is the ability of something to satisfy needs or wants derived from human consumption of a particular good. We consider time of student as good, which can bring profit, in our case knowledge.

## RESULTS

We assume that the learning time was transformed into knowledge. The knowledge of the good has quantitative utility. The concept of utility examines satisfaction of requirements from the goods possession, use or profit from the services. Usefulness is the quality characteristic, due to meeting the requirements. This is the result of individual taste and perception. The same products have different utilities for different customers.

The quantitative approach to the utility analysis is based on the possibility of measuring the usefulness of different goods in hypothetical terms ("utile" means utility). It is assumed that the consumer can compare the different economic goods in terms of their advantages. The consumer rates economic goods on a certain scale of preference. The user can determine the difference between economic goods. This means that a particular consumer can evaluate that the consumption of one cup of coffee brings him benefit in 30 utile, two cups of coffee 56 utile, two cups of coffee and a cigarette 70 utile, etc. [3]. This approach is the basis of consumer choice, the purpose to maximize the total utility with limited income.

We assume that a student has different abilities in different disciplines. Therefore the utility function of student's disciplines also has different analytical specifications. The analysis of the types of functional specifications allows developing a model specification for the investigated sample. The utility function of learning a discipline is denoted  $U_i$ . Total utility is the entire amount of knowledge (from a subjective point of view of the student) obtained for a certain period of time. Total utility increases slower than the rate of consumption growth. The additional unit of the good decreases each next utility of unit. The correlation between consumption and utility can be provided individually for each user (student) of the analytic specification. The correlation between consumption and utility for a group of consumer's goods were estimated. The individual work with a student by questioning in the class is one of the possible ways for constructing the utility function, the result is averaged. Thus, the optimal distribution of student's self study time is estimated by nonlinear programming tools.

The above-mentioned approach was applied to estimate the optimal distribution of student's learning time of three disciplines. The set of disciplines does not determine. The disciplines portfolio can combine any (limited) set of disciplines, for example, two or ten. The learning schedule of subjects A, B and C was given, for example, schedule have five weeks. The time of schedule should be spread, in our case, among the three disciplines. The set of input data consists of questioning of 10 students. The aim of questionnaire is the estimation of profit, received by a student of the discipline learning during one week. The profit is evaluated by units (utile). The questionnaire consists additional questions: "What will be the profit, if the schedule of discipline have two weeks?" Then, the data were averaged by adding and dividing by 10.

## DISCUSSION AND CONCLUSIONS

The results of estimation allow that functions are well approximated by polynomials of the second degree. The Lagrangian method or "Solver" application MS Excel was used to solve the problem and estimate values of  $t_i$ . The result of estimation indicates that, the student chooses mostly one discipline from the set and spent available time to self study. The results analysis suggests that the above model allows evaluating student's preferences when choosing self-study disciplines. The model can be used in forecasting of distribution of self study time. It allows developing a portfolio of disciplines. Such data can be useful in the preparation of syllabus and master programs. It will increase efficiency of education as one of the ways for further progress. The proposed model, based of utility theory, provide very useful results, both to the scientific research and practical implementation to improve the quality of education.

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# PORTFOLIO OF PROFESSIONAL PRACTICE AS AN ESSENTIAL ELEMENT FOR PREPARING QUALITATIVE STUDENTS AS FUTURE TEACHERS

Florinda Tarusha, Ornela Bilali

*Faculty of Educational Sciences,  
"Aleksander Xhuvani" University, Elbasan, Albania*

**Abstract:** *The problem of professional practice documentation is extensive and more complex, connected and mutually interdependent with important new problems such as the development of new curricula, the structure of professional practice within the curriculum, the concept and division of roles between leading actors to this structure. Preconception of the documentation was conditioned by the construction and application of new curricula with a 3-year timeframe of the study due to Bologna Charter. In the curricula that we are applying we usually combine a serial of weekly practices extending from the second to the sixth semester. The documentation should not only rely on the reallocation of roles but should have a linearity, a continuous climbing, in terms of evolution or professional development from student to teacher status with complex skills. This documentation should cover at the same time the organizational side of pedagogical practices, their content, and evaluation of students on the basis of skills that a teacher should possess. On the other hand, they have to support and be aligned with the rest of school documentation, subject matter and teaching fields which are reciprocally linked.*

**Firstly:** *The documentation of professional practice will increase the responsibility of all parties involved in this process;*

**Secondly:** *The documentation will clearly define roles; will sanction the rights and duties of everyone (mentor teachers, students and tutors);*

**Thirdly:** *will help, orient, and facilitate interactive parties in this process;*

**Fourthly:** *Documentation with theoretical and practical character is required.*

*Student's portfolio is a document that will involve the student's development, achievements gained within the academic environment and workplace, which contains the outline for teaching, learning and assessment process. The made assessment is based on the student's portfolio, the purpose is to favor co-evaluation and self-assessment and to centralize all the assessments made during the school year in order to be taken into consideration in determining the final outcome.*

**Keywords:** *portfolio of professional practice, documentation of professional practice, student's portfolio*

## INTRODUCTION

Educations' Faculty in Albania offer study programs in teacher preparations in different profiles through a three year period of study as Bachelor. In this study programs, pedagogical practice is seen as an integral part of it. Teaching practice is an integrated form of learning, seen as a time period where students work in the field of study in order to be trained applying their theoretical knowledge earned in lectures before they can be integrated in the real world of teaching (Kiggundu and Nayimuli, 2009)<sup>1</sup>. This gives them the opportunity to practice teaching in a real context. Students perceive it as "the bases of their preparation in their profession" (Menter, 1989:461)<sup>2</sup>, in order to practice and gain experience. Conant (1963:142)<sup>3</sup> in relation to teachers' education in America stresses that "in an unconditioned way, the basic element of professional education is Pedagogical Practice (teaching). Practice is evaluated by

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<sup>1</sup> Kiggundu, E. & Nayimuli, S. (2009), Teaching Practice: a make or break phase for student teachers, *South African Journal of Education*, 29:345-358.

<sup>2</sup> Menter, I. (1989), Teaching Stasis: Racism, sexism and school experience in initial teacher education, *British Journal of Sociology of Education*, 10(4):459-473.

<sup>3</sup> Conant, J.B. (1963), *The education of American teachers*. New York: McGraw-Hill Book Company Inc.



the University of Fort Hare, Department of Education as "crucial for a successful determination of studies "as central" point of graduation in teachers education" (Irvine, Westaway and Shaefer, 2004)<sup>4</sup>. Even Farrell (2008)<sup>5</sup> determines pedagogical practice as "one of the most important aspects in teachers education and formation". Teaching practice can have different forms depending on the institution. Some of them send their students in teaching practices once a week; others do it more than a semester. Despite the form of organization, teaching practices aim to involve students in the profession of a teacher. Student teachers have the opportunity to judge "the real art of a teacher profession before being part of the real world of teaching" (Kasanda, 1995)<sup>6</sup>.

### **NATURE OF PEDAGOGICAL PRACTICE**

Bachelor program of "Teachers of preschool education" & "Teachers of elementary education" are part of the Department of Teaching Methodology, in the Faculty of Education "Aleksander Xhuvani" University, Elbasan. This study program is a three year period and the discipline of Professional Practice (PP) is compulsory in this period of study program. Practice (PP) takes place in elementary schools and kindergartens in the city of Elbasan through an agreement between the university and Educational Directory in Elbasan. It is planned to take place in two forms: (1) Serial Professional Practice (PPS) and Weekly Professional Practice (PPJ). Pedagogical practice is named serial (1) when includes serial visits at schools once or twice a week and it is named Weekly when students stay at school for one week or more (Turku, 1998)<sup>7</sup>.

Serial Professional Practice takes place at the second year (third and forth semester) and the third year (fifth semester), once a week four hours a day. Through SPP students should accomplish observation of the lesson hours integrated in the preparation of the basic materials and activities as a teachers' assistant, work in group with pupils, be able to fulfill schools' documents, to compose and work with program plans, organize extra-curricular activities and be in touch with parents and community, take place in every subject and field as part of a daily lesson, assist in analyzing and reflection over lesson hours in cooperation with the teacher in charge for Professional Practices and professor of Department Teaching Methodology. Weekly Professional Practice takes place in the third year (sixth semester) every day, four hours per day, for eight weeks. This practice put the student in a teachers' real position with all responsibilities of a real teacher in front of school directory, other teachers, parents and pupils fully practicing the teaching process. Tutor teacher is always present as an observer and counselor. The problem of the documents related to the professional practice is wide and complex, depending from other new problems related with development of new curricula, the structure of professional practice as part of the curricula, concepts and divisions of roles between the principal parties of this structure. The period before changes during the time period of the three years of study, for the branch of Elementary School, professional practices had 8% of the study time and elements that could be included as practice were: 1) observation in specific subjects; 2) fifth semester pedagogical practices named 0/3; 3) eight weeks pedagogical practice.

The first and second were passive, while the third was the basic in the formation of teaching skills. Documents were incomplete, not to say they didn't exist at all.

As part of didactics there were lectures of subjects, assessment was just as another subject with lectures and seminars. Practices 0/3 had no documents prepared at all for the students, teachers and professor. For the practice during 8 weeks the only document prepared were three pages of instructions which determined what a student should do during this period.

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<sup>4</sup> Irvine, M., Westaway, L. & Schaefer, J. (2004), Student's Guide to School Experience. Bachelor of Education (GET). *East London*: University of Fort Hare.

<sup>5</sup> Farrell, T. (2008), 'Here's the book, go teach the class' ELT practicum support.

<sup>6</sup> Kasanda, C.D. (1995). Teaching practice at the University of Namibia: Views from student teachers. *Zimbabwe, Journal of Educational Research*, 7:57-68.

<sup>7</sup> Turku, A. (1998), Guide e praktikës pedagogjike, fq. 20.

There were no helping or normative materials. Everything was based on the existing literature in special didactics, oral instructions by the professors and transmission of experience from professors to students. Assessment was made by a grade that the tutorial teacher in the school were the student accomplished his practice puts toward with standard characteristics. 90% of the cases, students had a maximum evaluation.

The new conception over documentation was conditioned with the development and application of the new curricula with a three year study period according to the Bologna Charter. In the application of the new curricula we applied a combination of serial practices with a weekly one expanded in a detailed manner from the second semester to the sixth one every week four hours.

Documents had to do not only with the division of roles, but it had to be linear, in a continuous development, evolution and professional development of students till they reach the teachers' status, forms with complex skills. At the same time, this document had to cover the organization part of pedagogical practices, their content, and students' evaluation over the abilities they must gain as future teachers. To the other part, it had to fulfill and do along with the other parts of schools' documents, subjects' fields which have a reciprocal connection to one another.

### STUDY QUESTIONS

Why there was the need for documents' renovation?

**First:** Professional Practice Document will raise the responsibilities of every parties involved in this process.

**Second:** Documents will determine roles, authorization, rights and obligations to everyone involved in the process (mentor teacher, students and tutors).

**Third:** It will help, orientate, and facilitate the parties cooperate with each other.

**Forth:** There was a need for a document with theoretical and practical character.

Treatment of the professional aspect of students is fulfilled with his portfolio, which is well organized and legal for everyone who wants to read it. It is a document which registers students' development, gained skills inside the academic environment and work place, which contain teaching frames, learning and evaluation process. Evaluation made to the students is based on this portfolio, which aims to favor co-evaluation and self-evaluation, also centralize every evaluation made during the school year so that they can came to a final evaluation.

### DISCUSSION AND CONCLUSIONS

Diversity and documents' perspectives, Improvers' portfolio.

A very important aspect of documents is the evaluative one, which should be considered continuously, change and be impartial. Daily practice, execution and usage of composed documents till now, should highlight positives sides, its values which are:

- Latitude and escalation of the problem;
- Accuracy and clarity;
- Punctuality toward students and teachers competences.

During the professional practice time, students must fill out their portfolio with the best experiences. Portfolio contains:

1. Annual subject plan;
2. Objectives for students achievements;
3. Daily plan for lesson hours;
4. Lesson hours and chapters tests;
5. Curricular projects done by students;
6. Examples of the usage of different teaching sources by the students;
7. Examples of methods used by the students to form in pupils the abilities of:
  - creative thinking;
  - critical thinking;
  - teamwork;

- teaching management from different sources;
- work with pupils with difficulties in learning etc.

Despite this, students fulfill the "report" with reflections over his experiences during the professional practice with his success and failure. This report is a reflection of the student over his experience during the professional practice, his relationship with pupils, teachers, parents and his professional progress.

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# ANXIETY AND NEUROSES IN ALBANIAN CHILDREN DURING TRANSITION PERIOD AND ITS INFLUENCES ON THEM

Arbjola Halimi, PhD-Student,

*Faculty of Educational Sciences, Department of Psychology  
"Aleksandër Xhuvani" University, Elbasan, Albania*

**Abstract:** *This article represents a research over children's psychological problematic as well as the causes and consequences they have in their education in Albania during the last 3-5 years. It transmits information through theoretical part for a deep knowledge and raised hypothesis based on some findings which are reflected as data and conclusions. Information are assured using qualitative research methods such as opened questioners with psychologists, parents, teachers and doctors as well. Also, medical healthcare institutional statistics are used for a qualitative information transmission through this article. Some of the most important conclusions, we can mention incoherence of parents and teachers over child's problem, lack of knowledge over those problems by parents and teachers, as well as failed efforts for information ensuring by both sides.*

**Keywords:** *children, psychological wellbeing, neuroses, education, taking care*

## INTRODUCTION

Albania can still be seen as an environment which has an influence over neuroses, as it is widely admitted that it is seen as threatening functional disorder of emotional and psychological wellbeing, mostly developed on chaotic emotional environments which are unsafe and unstable. A society in transition influences its values and dimensions in every field, as for consequences, society members must be focused mostly on their successors, values, development, health and their behavioral, educative, professional, personal and relational capacity.

Pursuant discussions try to put light on these organizations and especially their consequences on education, children wellbeing and not only in knowledge acquisition but as well in their general and qualitative development as a human being. This aspect is also related to their mental and physical health development, if we admit that school and family environment are the most important one, where children develop numerous abilities such as social interaction through their interaction with other children of their age and older ones, communication, initiative, creativity, productivity, logic, learning and understanding which help in developing their thinking ability and interaction through observations and continuous exchange of images, identities and values with people around them. The Albanian picture over these problems is still fragile although this study represents specific data based on a five years research and observations, especially in Elbasan city and its regions.

## THEORETICAL PART

Adler<sup>8</sup> used to consider education and especially school and familiar environment as one of the most important ones which influence on children the state of anxiety and inferiority. This feeling can develop future serious problems on children psychology and his school processes which can be followed by compassing emphatic tendencies such as attempts for superiority. In this case, school and family might be the ones which can stimulate these experiences. According to Adler, every kind of neuroses is caused by the feeling of inferiority where neuroses are nothing more than just a stable feeling of inferiority. We are not talking about random feeling of inferiority (because it is normal to feel inferior toward our parents),

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<sup>8</sup> See: George Boere, *Personality theories*, p. 89; Kozma Grillo, Adler. *Individual psychology at school and education psychology*, pp. 143-210.

but for a feeling which is transformed on a certain "disease", which reproduce aggression or humiliation; the feeling of being less than other ones around and everything is transformed into neurosis which can provoke suffering, shame, anxiety, fear, enmity, aggression, need to be better than other ones, need to be in charge and be the first one to humiliate other ones. Inferiority becomes a reaction of the entire personality without taking into consideration no one or any situation at all. It becomes a "mental habit", sometimes conscious, but most of the time unconscious which control the action of the one who his possessed by this feeling.

Pierre Daco emphases<sup>9</sup> the fact that through a continuous observance toward a child, thinking that you are taking care of his wellbeing, educators, parents and teachers can dominate, frustrate and create inferiorities on it, which will build the feeling of inferiority (cause of neuroses, anxiety and personal compensation). Everything that violates personal's will can cause such feelings. Children need to feel protective and supported, but not dominated and treated as objects. Education can help children to reach as fast as possible their self-confidences and self-esteem in what they say or do. According to Daco, everything that interferes on children personal wills is a factor which influence neuroses (depart from individual personality, development of a complex which commands most of the actions). Referring to Adler, he stresses out the fact that a high level of inferiority weakens individual personality. He thinks that some educators are authoritative and neurotic. An authoritative person can strengthen the feeling of inferiority even in the healthiest children in the world. An inferior parent needs its child to stay inferior as well. They need their children not to have a personal or spontaneous life, but their weakness to strengthen their feeling of dominance and strength. All psychologists see this as one of the most important causes of neuroses of adult people: a lot of parents dominate their children (a dominant mother is one of the most dangerous cases). There are numerous cases of frustrations and inferiorities. Beside dominant parents, we also have the cases of unnecessary care, meaning neurotic such as: over reacted recommendations to be careful by accidents, insects, microbe etc. Jealousy between brothers and sisters can provoke a terrible hate when parents estimate one of the children over the other and when they take it as an example to be followed. The absurd face of society, according to Daco, has condemned a huge part of society swimming through the feeling of inferiority.

According to him and to a large number of educators the golden rule is: to work over in a manner so that child self-esteem must be equilibrated or work on the fact that this self-esteem to be strong. There are even people who are punisher, dominant and authoritative who create an ideal environment for inferiority, punishment and frustration. Most of the parents try to impose to their children their own wishes and not allow them having their own ones.

School environment must be equally important for children. In this case, according to Daco, our culture and society is directed toward lack of cooperation, social and financial superiority creating clans: weak people are refused; poor people are not welcomed, while rich children are admired and respected. While children who are humiliated and who can create compensation mechanisms, can become successful or bandits. According to him, elimination of humiliation would prevent numerous crimes. Some teachers can stabilize neuroses on poor children cause of their parents' profession, accent, and timidity in front of a class which laugh. Some educators can be seriously ill (in neurotic context) where lack of intelligence and love is flagrante that does not need any comment over it.

A frustrated child, with lack of attitude and self-esteem is one of the most dolorous problems. Most frequent cases of children neuroses are feeling of inferiority, guilty, shame, humiliation and enmity. A childish miss equilibration is affectively based. It must bared in mind the fact that huge adaptive demands to children or those connected with the classical way of the presence of another child who is seen as more intelligent, and parents intelligence not distinguishing them is not always enough to eliminate the feeling of jealousy which is transformed to children as a dark side for which they are not aware. So, in order to have parents' attention, some teenagers chose to behave like infant which provide them security.

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<sup>9</sup> See: Pierre Daco, *Les prodigieuses victoires de la psychologie*, Alfred Adler, pp. 202-219.

Meanwhile, everything that provokes frustration feelings, humiliation or fear can easily be transformed into neuroses.

Karen Horney speaks<sup>10</sup> about parents' indifference (not parents' purposes, but children perception) and lack of parents warmly care as the "devil itself" according to whom these are the main causes of neuroses, higher level than abusing or abandonment. These children, instead of being passive and weak they develop aggressive and angry attitudes, "principal enmity", as a protest toward disappointment and injustice. As much as these enmities are seen as an effective solution, the more it will be transformed into a random solution to life difficulties.

Going back to Daco, we can say that a children opinion over itself has an absolute importance. Children involvement at school and their activation with other ones around them is only one of the phases. Children are protected by their parents who decide for everything putting them in danger and making them timid and shy.

Discouraged children by an environment where feelings cannot be expressed freely (cases when they are raised by old people) are in danger just as those who are frustrated cause of lack of affection and love. We have the cases with super intelligent father who make the child feel useless, as well as such cases of children with complexity (short, tall etc).

These children's fear, as in the case of every human being who is shy and has difficulties in expressing themselves, is teachers or parents irony and that's why they should be very careful not causing or transmitting those signals. Intelligent children can be at the same very shy and another fear is misunderstandings which at the same time reflect ignorance. Inhibition is a process which comes as a consequence of shame and in this case, education which is a canalizing process of actions, is also seen as inhibition (do not move your legs, fingers, do not play with your pen, be quiet, stay in your room etc). Educators must be aware of these process characteristics which can produce bubbling, mutation, aggression (shy children are aggressive). Everyone knows that when anxiety is in high level and dominant, it does not allow an individual to freely express themselves and this is an obstacle on children school achievements. In some cases, parents and teachers do not pay attention to these obstacles in children school success, they may even become the source itself causing such obstacles in children life.

## EMPIRIC DATA

In our days, children in Albania, live in a frustrated world where most of the cases they become shy, inferior, or aggressive cause of these frustrations. From a survey which took place in 12 different schools, it was noticed that 4 to 5 children in each class had a tendency for: aggression toward their friends, difficulties in learning, concentration, shame and dominance<sup>11</sup>. Most of the cases it is difficult to find out the real cause because it is based in family, social and personal dynamics of children. It was also noticed that some of these children were educated by a single parent (mostly mother) who was interested for child continuity at school and had the total responsibility over it. Also it was noticed that some of those children were the first or second one in a family and they were followed by two or other three, with a difference from 4 to 5 years. Unconscious comparison of parents used to bring differences on children emotional state, but most of the time they were inevitable because they were for their own good. Diffusion between sex were almost the same with small differences even for financial characteristics of families (both children, from poor or rich families, had anxiety problems at school, mostly at home).

In this work were made 40 opened interviews with parents and teachers who identified learning problems in children which used to grow up cause of educational material problems which tend to be useless, and not compatible to children age related to the used terminology, understandings, logistics and explanations.

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<sup>10</sup> See: George Boere, *Personality theories*, p. 109.

<sup>11</sup> Remark: These observations identify tendencies and not correct definitions in clinical understandings (diagnoses).

These boundaries can cause frustration on children and as a consequence disturbs and hinders in creating wrong conceptions over themselves such as lack of power, tiredness, anxiety and in this case they can build an obstructive environment in their learning process cause of difficulties in understanding. Sometimes, children face parents' inability to help them understand these concepts by creating differentiations in the opportunities they have for further explanations and the opportunity to continue along with other ones. From concrete observation the role of teacher in class is passive not active and inclusive as it is supposed to be, although we have some cases of exceptions.

## **DISCUSSION AND CONCLUSION**

Some of the most common specification referring to familiar discussions and those at school as well as from observation with anxious, impulsive and shy children are:

- Children raised by their grand fathers or older people, those ones with little familiar attention (sometimes these children are anxious because they feel they must take care of other people and take the role of a "parent" beside their unconditioned freedom to take initiative without being informed over possible dangers);
- Parental wrong care. Parents usually use some specific targets or demands which are incompatible to children age or development because they think it is for their own good. (He/she can be the best one, nothing is missing: or he/she has everything but is lazy);
  - Weak communication between parents and children (father is still a "prohibit" person);
  - Single parent care (divorced parents);
  - Family conflicts, between parents or influences from other people;
  - Comparisons. A wide spread phenomenon;
  - Imprudence. Some specific attitudes or reactions which are not seen as something important to children emotional and personal development;
- Presence of another child (parents are not informed over the management of jealousy or perception of avoidance by children (often is seen as a passive object toward these changes);
  - School dominant environment;
  - Familiar dominant environment (parents transmit complicated messages);
  - Weak or monotonous educational environment;
  - Monotonous and superficial teaching process (relation to their coeval, texts problems, physical problems etc); most of the time it is difficult to conclude whether learning problems are related to children neuroses, such as shame, guilt, doubt in their abilities, low level of self-esteem, enmity, or the feeling of continuous humiliation;
- Teachers' confusion and miss-coordination of family and school demands, or contradictions between those;
  - Communication problems, parents – children (poor communication);
  - Communication problems, parents – teachers (weak interest of teachers over possible explanation of difficulties related to children and passing of responsibilities; teachers can accuse parents while parents accuse teachers in order to avoid their own responsibilities over children development);
  - Communication problems teacher – children;
  - Poor knowledge over children – grown up relations and conceptions over emotive climax which can dominate the educational environment (class, school, family);
  - Lack of stimulants;
  - Lack of knowledge over children's needs and authoritative attitudes;
  - Lack of games and entertainment (one of the most classical expression of parents with children problems in learning, who can be overtired and with high level of hyperactivity and as a consequence they have problems with concentration cause of these elements, and the only thing they say is that they are "busy" to take care to them. These type of parents are the ones who have highest demands and unreachable by children by straining them and avoiding entertainment;
  - Lack of psychological knowledge related to emotional and social development of children;

- Poor environment and lack of stimulations;
- Lack of temperament logic (they are treated on an undifferentiated manner regarding talents, abilities and potential, behavioral characteristics related to temper);
- Personal problems of teachers, parents or family regarding employment, working relations, partner relations etc.

Some of these children consequences are: Confusion; Fear (social anxiety); Inability of understanding rules and values; Continuous conflicts with their coevals; Unconscious urination; Separation anxiety; Obsessive fears; Continuous anxiety of children; Aggression and ambivalence; Learning and concentration problems; Lack of spontaneity; Bubbling; Emphatic problems related to the ability of learning especially in reading, math calculations and communication. Some suggestions are:

- Positive environment in class;
- Positive environment at home;
- Transmission of familiar attention (both parents);
- Attention and responsibilities by each part involved in his education (mother, father, brother, sister, teacher, community etc.);
- Coordination of people in charge for his care;
- Knowledge over his individual characteristics and differences;
- Elimination of unnecessary demands or raise of their level when they have a weak performance;
- Avoidance of non-educational forms cause of the feeling of being guilty over lack of responsibility by parents and teachers (such as completing every single demands of children or not completing none of them). Extremity are dangerous, it is needed an equilibration;
- Respect over children spontaneity and individuality, including anomalies, differences, retarded development or learning etc.);
- Avoidance of family over reacted care;
- Elasticity in time space to answer or fulfill a performance and assuring it is understood and fulfilled at an average in order to continue with the next performance;
- Good knowledge over parents care rules, school and social ones, including a continuous informing through media, education etc. For example, a lot of parents are not aware of the fact that a continuous attitude or lazybones of children to learn, actually is a psychological disorder of difficulties in learning (ADHD)<sup>12</sup> and as a consequence it is unconscious process which must be understood and not accused.

In conclusion, it must be emphasized, that a problematic child, will become a problematic adult and in Albania, it is very dangerous as long as these problems in our society are not understood, identified, prevent or treated. No one should lack massive protection and social masks to except some mistakes if we speak in the name of love for our children which must not be seen as purposeful. It must be expressed a profound gratitude to all these teachers and parents who make an effort in educating these children for what it really means.

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<sup>12</sup> See: AMERICAN PSYCHIATRIC ASSOCIATION. MINI DSM-IV. *Critères diagnostiques*, p. 63.



# INVOLVING PARENTS AS ACTIVE PARTNERS OF SCHOOL IN THE LEARNING PROCESS OF THEIR CHILDREN (REGIONAL STUDY AT ELEMENTARY SCHOOLS, ELBASAN, ALBANIA)

**Valentina Haxhiymeri (Xhafa)**, PhD in Pedagogy,

*Department of Psychology, Educational Science Faculty,  
University "Aleksander Xhuvani", Elbasan, Albania*

**Abstract:** *Families make critical contributions to children's achievements. Parental involvement in education, at home and in the classroom, is vital to student's effective learning and academic success. The purpose of study was to explore actual roles of teachers in helping parents become effectively involved in the learning process of their children. The study methodology included questionnaires (applied at 50 teachers and 50 parents) and an analysis of relevant data. The results of study indicated that teachers try to inform parents to support their children's learning, but they think that parents don't do enough. Meantime, many parents want to support their children's learning at home but not always know how to help. The study proposes a new interactive approach, Teachers Involve Parents in Schoolwork (TIPS) process.*

**Keywords:** *School-family partnership, parental involvement, the learning at home activity, homework TIPS process*

## INTRODUCTION

### ***Background on parental involvement in the learning process of their children***

Families make critical contributions to children's achievements through schooling years, regardless of race, ethnicity, social status, economical income or education level of parents. Parental involvement in education, at home and in the classroom, is vital to student's effective learning and academic success.

Current research has found positive relationships between specific parent involvement activities and student achievements. But, *what does parent involvement in education mean?*

According to some studies, meaningful parent involvement can be defined as the active, ongoing participation of a parent or primary caregiver in education of their children. In one study about home context and student performance, parental involvement at home is defined as "someone who works with the teacher and continues with student' learning activities at home".<sup>13</sup> Parents, family members and caregivers can demonstrate involvement in education in many ways, e.g. by establishing appropriate rules for success of children in school, reading stories with children, playing math and reading games, helping them with homework, discussing school events or talking about school day, or attending functions or volunteering in classrooms. There are *six types of parent involvement* described from research in framework of school, family, and community partnerships. They are<sup>14</sup>:

1. *Parenting*: help families establish home environments to support children as learners.
2. *Communicating*: use of effective forms for school-to-home and home-to-school communications.
3. *Volunteering*: recruitment and organization of the school's volunteer program.
4. *Learning at home*: help families assist their children with homework and recognizing other learning at home opportunities.
5. *Decision making*: includes parents, students, and community members in school decision-making processes.
6. *Collaboration with community*: identifies and integrates resources and services.

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<sup>13</sup> Ingram, Wolfe, & Lieberman (2007).

<sup>14</sup> Epstein (2002).

A typical activity area regarding partnership between school and family is *involving parents in the learning process of their children at home*. Learning at home includes activities such as parent-child discussions about school, organization of space at home to support learning and the use of interactive homework<sup>15</sup> (i.e. homework that requires parents and students to discuss and work together on a learning activity or assignment).

As an example of the learning at home activity, *homework* is an inevitable daily connector of home and school. It creates opportunities for important interactions among schools, families, students and other adults who care for children. The homework can be a powerful tool<sup>16</sup> for: a) letting parents know what the child is learning, b) giving children and parents a reason to talk about what's going on at school and c) giving teachers an opportunity to hear from parents about children's learning.

Homework is an integral part of a comprehensive program of school and it is designed to meet broad educational purposes. Some recent studies have indicated that homework may be designed to increase student learning and development, develop home-school-community partnerships<sup>17</sup>, and improve teaching and administrative practice.

Parental involvement is an element of *homework design*<sup>18</sup> that may encourage students to spend more time and complete their assignments with higher quality work.

Research about parental involvement in relation to academic achievement has indicated that when parents are involved students have: higher grades and test scores, better attendance and more homework completed, fewer placements in special education, more positive attitudes and behaviors, higher graduation rates, greater enrollment in post-secondary education<sup>19</sup>, increased motivation, better self-esteem, lower rate of suspension, decrease use of drugs and alcohol, fewer instances of violent behavior<sup>20</sup>. Working in genuine partnerships yields is mutually beneficial. Both schools and parents benefit when family is actively involved with schools, in a sustained way, and at every level of framework of partnership<sup>21</sup>.

Because being at the center of the homework process, teachers play critical roles in helping parents become effectively involved in student homework. Assignments not only reflect teachers' knowledge of the curriculum but also their understanding of the skills, abilities, needs of their students and the characteristics and situations of their students' families<sup>22</sup>.

Current research has developed specific methods for encouraging the optimal parental involvement in homework. New one is *TIPS* (Teachers Involve Parents in Schoolwork)<sup>23</sup> process that involves students in demonstrating or discussing homework with a family member.

### ***Barriers of parents' involvement as the active partners of school in the learning process of their children***

It is an irrefutable fact that school-family partnership in frame of enhancing learning at home promises increasing student achievements. However, daily practices show that many schools continue to strive with achieving meaningful parental involvement, and yet there are barriers that keep parent from being involved with schools.

There are a variety of factors which can influence school-family collaboration for enhancing learning-at-home activity. According to Parent Teacher Association (May, 2004) hindrances to family involvement tend to fall into one of six major categories<sup>24</sup>:

- Contextual factors.
- Language barriers.

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<sup>15</sup> Bempechat, (2004); Warton, (2001).

<sup>16</sup> Joan M.T. Walker, Kathleen V. Hoover-Dempsey, Darlene R. Whetsel and Christa L. Green (2004).

<sup>17</sup> Epstein J.L. and Van Voorhis F.L. (2001).

<sup>18</sup> Epstein (2001); Hoover-Dempsey et al, (2001).

<sup>19</sup> Clark, R. (1993); Griffith, J. (1996); Dauber, S.L. & Epstein J.L. (1993).

<sup>20</sup> Parent Teacher Association (May, 2004).

<sup>21</sup> Epstein (1995).

<sup>22</sup> Epstein J.L. and Van Voorhis F.L. (2001).

<sup>23</sup> Henderson, A.T. and Berla, N. (1994).

<sup>24</sup> National Center for Family & Community Connections with Schools (2004).

- Cultural beliefs regarding appropriate roles of parents, teachers and students.
- Families' lack of understanding of schools.
- Families' lack of knowledge about how to help their children with homework.
- Issues of exclusion and discrimination.

Also, research has found that:

- Schools tend to see the parental role as traditional, passive and home-based, whereas many parents are interested in more active roles.
- Schools are often not taking the initiative to ask parents for help and not welcoming their participation.
- Schools often organize events for their convenience and pay little attention to the needs of at-risk parents<sup>25</sup>.
- Schools don't have well-organized, goal-linked and sustainable partnership programs<sup>26</sup>.

## MATERIALS AND METHODS

*Purpose of our research:* The purpose of the study was to explore actual practices of elementary school teachers in helping parents become effectively involved in *the learning process of their children at home*.

*Participants and Instrumentation:*

- 50 elementary school teachers, grades k-3 and k-4, from 5 different schools of urban Elbasan district which completed a questionnaire including some of scales administered to teachers in parental involvement process (TIP teacher scales);
- 50 (78%) out of solicited 64 parents of students at fourth grade (k-4) from two different classes in diverse schools of urban Elbasan district which completed a questionnaire including some of scales administered to parents about helping their children with homework (TIP parent scales).

A modified version of Teachers Involving Parents (TIP) Scales created by Hoover-Dempsey, Walker, Jones & Reed (2002) was used for purposes of this study. Scales assess teachers' reports to parental involvement process during the school year. Scales included in the survey are:

1. *Teachers' Beliefs About Parental Involvement:* Alpha reliability as reported in Hoover-Dempsey et al. (2002) = 0.65 (pre-test), 0.75 (post-test).
2. *Teachers' Beliefs about Parent Efficacy for Helping Children Succeed in School:* Alpha reliability as reported in Hoover-Dempsey et al. (2002) = 0.80 (pre-test), 0.69 (post-test).
3. *Teachers' Beliefs about the Importance of Specific Parent Involvement Strategies:* Alpha reliability as reported in Hoover-Dempsey et al. (2002) = 0.90 (pre-test), 0.94 (post-test).
4. *Teachers' Reports of Parents' Involvement:* Alpha reliability as reported in Hoover-Dempsey et al. (2002) = 0.89 (pre-test), 0.92 (post-test).
5. *Parents' Report About Helping Child with Homework:* Alpha reliabilities for three scales as reported in Boreno (1997) was Scale 1: Parent perceptions of child performance (school and homework) = 0.84; Scale 2: Parent perceptions of parent ability to help with homework = 0.75; Scale 3: Parent perceptions of parent's structuring and activities related to homework = 0.80;

Each scale employs a six-point Likert-type response scale. The first four scales assess the extent of beliefs and behaviors that a teacher holds toward parental involvement practices in learning process of students.

The next scales assess the extent of perceptions that a parent holds toward their involvement in children's homework. The response scale for belief items uses the following response options: 1 = disagree very strongly, 2 = disagree, 3 = disagree just a little, 4 = agree just a little, 5 = agree, 6 = agree very strongly. The prompt for belief items asked to indicate *how much you agree or disagree with each of the following statements*.

<sup>25</sup> Slaughter, D.T. & Kuehne, V.S. (1988)

<sup>26</sup> Epstein J. L., & Salinas K. C., (2005)

The response scale for perception items uses these response options: 1 = not at all important, 2 = not important, 3 = not very important, 4 = somewhat important, 5 = important, 6 = very important. The prompt for perception items asked to respond how important teaching and parents' involvement practice is.

#### *Descriptive Statistics*

##### Teachers

- The full sample included 50 teachers from 5 different schools of Elbasan district.
- Gender: 50 females (100%).
- Average age = 38 years.
- Experience as elementary school teacher: on the average = 16 years.
- Teachers had worked at their respective schools an average of 6 years.
- Educational level: all teachers had higher degree in teaching field for Elementary Education.

- Grade: Elementary School (100%).

##### Parents

- Sampling: The full sample included 50 (78%) parents of the total number of 64 (100%) parents of students in fourth grade (k-4) from two different classes in diverse schools of urban Elbasan district:

K-4a = 23 (74%) out of solicited 31 parents;

K-4b = 27 (82%) out of solicited 33 parents;

- Gender:  
12 = Males; 3 fathers were employed full time; 9 fathers were employed part time;  
38 = Females; 11 mothers were employed full time; 27 mothers were unemployed or housewife; 6 mothers came back about two years ago from emigration to native country; 2 mothers were single.

## **RESULTS**

Below there is a summary of the research questions and findings measured with a six-point Likert-type response scale.

### **1. Beliefs of teachers about parental involvement**

All teachers participating in the study *agreed / agreed very strongly* that:

- Parent involvement is important for a good school;
- Parent involvement can help teachers be more effective with more students;
- Parent involvement is important for student success in school.

Majority of teachers participating in the study *disagreed/disagreed just a little* that:

- Most parents know how to help their children with schoolwork at home;
- All parent could learn ways to help their children with schoolwork at home;
- Parents of children want to be involved more than they are.

### **2. Beliefs of teachers about parents' efficacy helping children succeed at school**

Majority of teachers participating in study *agreed/agreed very strongly* that:

- If their students' parents try really hard, they can help their children learn even when the children are unmotivated;

- Students' parents don't know how to help their children make educational progress.

Responses of teachers participating in the study *agreed/agreed just a little* for statements:

- Students' parents help their children learn;
- Students' parents help their children with school work at home.

### **3. Beliefs of teacher about the importance of parental involvement practices**

Majority of teachers participating in the study believed that it is *important/very important*:

- Having conference with each of their students' parents at least once a year;
- Contacting parents about their children's problems or failures;

- Suggesting ways to practice spelling or other skills at home before a test;
- Asking parents to listen to their children read;
- Asking students' parents to help their children with homework.

Majority of teachers participating in the study believed that it is *somehow important*:

- Contacting parents when their children do something well or improve;
- Telling parents about the skills their children must learn in each subject;
- Providing specific activities for parents to do with their children in order to improve

their grades;

- Assigning homework that requires parents to interact with their children;
- Giving parents ideas to help them become effective advocates for their children;
- Sending home "letters" telling parents what the children have been learning and

doing in class.

Majority of teachers participating in the study believed that it is not important/not very important:

- Involving parents as volunteers in classroom;
- Giving parents ideas about discussing specific TV shows with their children;
- Asking students' parents to ask the child about the school day;
- Inviting students' parents to visit their classroom;
- Asking students' parents to take the child to the library or community events.

#### **4. Perceptions of teachers for parental involvement in learning activities of students**

Majority of teachers participating in the study reported that *none/10-25%* of students' parents:

- Have participated as volunteer in classroom;
- Have discussed TV programs with their child;
- Give information about the child's needs, interests, or talents.

Majority of teachers participating in the study reported that *30-40%* of students' parents:

- Attend meetings or workshops at school;
- Contact them when their children are having problems with learning;
- Contact them when having something good to report about their child's learning;
- Ask for specific activities they can do at home with their child;
- Visit classroom at school;
- Take the child to the library or community events.

Majority of teachers participating in the study reported that *55-70%* of students' parents:

- Talk to their child about the school day;
- Help their child with homework;
- Listen to their child read;
- Attend children's performances at school.

#### **5. Perceptions of parents for involvement in children's homework**

76% of parents responded that *sometime* it is hard to help children with homework; 30% of parents reported that children performance at school and homework is *usually* very good;

71% of parents responded that they *usually* try to make child follow rules about doing homework, but it is difficult;

82% of parents indicated that they ask *always* child about homework; 25% of parents indicated that they *always* tell the child to correct any mistakes made on homework.

### **DISCUSSION AND CONCLUSIONS**

The results of the study indicate that: 1) Elementary school teachers are aware of importance of parental involvement in learning process of children at home and schools can benefit by their support; 2) It seems that teachers have just a little belief to involve parents as volunteers in their classroom; 3) Teachers try to inform parents in many ways to support their children's learning, but they think that parents don't do enough; 4) Teachers estimate

communication with parents as effective practices to share information about students, but the majority of parent's don't feel confident with school; 5) Meantime, many parents want to support their children's learning at home but don't always know how to help.

The study concludes that there is no doubt that contextual factors at home can either facilitate or stifle home-based support for student learning. There are families who are more comfortable in reaching out to school staff and others are reluctant to do so. When school teachers have a better understanding of their students' home cultures, families' parenting practices, home contexts, home crises, or significant family and community events, they can develop processes and strategies to bridge school-based and home-based activities and increase support for student learning<sup>27</sup>. Schools need to invest time and effort into influencing learning-at-home routines. They need to focus on developing processes to support families as they prepare their children to academic success. Deliberate adult actions and assistance at home are integral to the effectiveness of home-based academic support<sup>28</sup>.

The study proposes a new interactive approach, the Teachers Involve Parents in Schoolwork (TIPS) process. This process works as part of well-organized, goal-linked, and sustainable partnership programs that the schools develop. In TIPS process parents are asked to monitor, interact, and support their children' learning. TIPS have a section for home-to-school communication where parents indicate their interaction with the student about the homework<sup>29</sup>. This type of partnership is the best promise for increasing student achievements, but it requires developing the capacity of school staff to work with families.

Limitations are: 1) Teachers were asked to estimate by questionnaire the extent of parental involvement in learning process of child at home and school, which allows for some subjectivity in the responses obtained; 2) The full sample of participants included in the study is shortage which effects on generalizing of results.

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<sup>27</sup> Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson (2005); Wong & Hughes (2006).

<sup>28</sup> Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson (2005).

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## PECULIARITIES OF CREATIVITY DEVELOPMENT IN CHILDREN OF SENIOR PRESCHOOL AGE IN PLAY ACTIVITY

**Irina Koryakina**, PhD in Pedagogy, Associate Professor,

*Department of Theory and Methods of Preschool Education,  
Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, Ukraine*

**Abstract:** *The article describes actuality of the problem of developing creativity in children of preschool age in modern society and the state of such development in scientific sources. It proves the value of play activity as one of the methods of pedagogical influence on child's personality development. At the same time play activity is considered as a specific type of child's activity, one of the favorite types of art, because it is implemented in the child's needs for self expression, communication and knowledge of itself through a variety of image reconstructions. The survey specifies the criteria and indicators of determined levels of children's creativity in play activity. System presents socio-dramatic play in order to increase the understanding of the world of adults, professional, family roles and moral norms of communication that underlie the development of creativity of children of preschool age.*

**Keywords:** *art, creativity, creative activity, creative work*

### INTRODUCTION

New paradigm of education of Ukraine in the XXI century is orientated on active individual, capable to creative self-expression; reveal personal potential, formation of humanistic values. Special role in the development of creative abilities plays preschool childhood. The increasing of the role of children's creativity in the educational system of preschool education institutions provides professional and personal self-improvement of the teacher. After all creative development of preschool children in large part determines of teacher's competence, their skills and creativity work basis, also advanced pedagogical reflection.

I. Beh, A. Bogush, L. Vygotsky, N. Gavrysh, O. Zaporozhez, O. Kononko, V. Molyako, V. Orzhehovska, G. Pustovita, S. Rubinshteina enlightened the problematic of child's creativity development. Moreover O. Artamonova, L. Artemova, Z. Borysova, R. Bure, N. Bynogradova, G. Godina, L. Zagyk, S. Kozlova, T. Markova, D. Medgeryzka, V. Nechaeva, L. Penyevska, O. Radina, L. Stralkova, A. Usova studied the field of survey concerning the problematic of the development of creativity of children in play. Features of guidance of process development of children's imagination in different spheres of activity are illustrated in works of: N. Grama, O. Kucheryaviy, V. Alfimova, V. Andreeva, I. Ivanova, V. Zagvyazynskogo, V. Kan-Kalika, S. Sysoeva, etc. Scientist determines the necessity of special psychological aid and support (psychological and pedagogical accompaniment) in the process of development of creative and talented personality. Considering the actuality of the problem, we outlined the subject of study that is determination of pedagogical conditions of children's creativity in preschool children in play activity. In accordance with the subject of research we specify the tasks of scientific inquiry, in particular: expose the art development level of the preschooler.

Preschool childhood is a period of primary actual achievement of personhood, evolution of creativity potential, and its realization in different spheres of activity. National psychologist V. Molyako gives a definition to the nature of creativity as: "Art is a formation of something new in various views and scopes, which fixed and unfixed materialistically" [6, p. 4]. Based on his point of view, creativity has further characteristics: "train" to originality in finding something new, by perseverance, invention, self-criticism, courage, spirit, vigor.

L. Vygotsky empathize main feature of children's craft, its totality (presence in every child's life): «every child more or less naturally possesses a creative potential, "creativity" is a normal and permanent associate of child's development" [2, p. 32]. In the author's opinion "the best motivation for child's creativity became such life and environment organization, which create the necessity and ability of child's creativity" [2, p. 58].

One of important science thesis of L. Vygotsky's theory is imagination characteristic as a basis of creativity work. From this point of view the world of culture is a product of human imagination and creativity. The value of children's craft academic observes not in the result, but in the process itself, which consist of the practice of creative imagination. The ideas of L. Vygotsky are worth noticing in the context of our study, because it is important what potential and vector of development reached the child, and not the level itself. That is why present-day teachers should use this age period to create favorable conditions for children's creativity development, its enrichment in creativity work and in play.

## **MATERIAL AND METHODS**

To identify the level of creativity in children's dramatic role playing, we have organized and carried out the psycho-pedagogical experiment at the kindergarten "Svitlychok" in the city Gluhovsk, which covered 40 children at the age of 5-6 years. The study was conducted in two consecutive and interrelated stages.

To identify the level of creativity development of senior preschoolers we created a program of study, which consist of: 1) survey procedure; 2) a system of differentiation of the attained results by the following criterions:

1. Confidence of own experience (indexes: child in shortage of information, in unknown situations is not lost, children count on themselves, independently find a way out of the difficult situation);

2. Rejection of heavy regulation of activity (indexes: child tries to withdraw from the cliché, sample, children aim to make something on their own, to improve the process, make novelty element, do the job originally, show imagination, invention);

3. Interest to problem solution (indexes: child for a long period learn something new, complex and unknown; does not pay attention to an outside; trying to bring started thought, successfully solve a problem, enjoy the process).

Development level of creativity in children of 5-6 years was studied by the methodic of Mikhaylenko [5]. We proposed to preschoolers perform several tasks. Task № 1 involved the detection of ability originally to outplay a toy. For this purpose we brought a new toy, which we offered to outplay. For example: "Today we have a new guest Alice Fox. She is very bored and she would like to play with you".

Carrying out task no. 2 children supposed to invent a plot with the condition: "How would you play if doctor Aibolit comes to your family?" Performing such tasks allow evaluating the skills of children to outplay the items, replace physical things on relative, build role interaction, use role-playing dialog, ability to invent new original plot, variation of well-known play, ability to change the traditional course of game, ability to accept changed plot.

## **RESULTS**

Observation of organization play activity children proved that 47% role actions of respondents partially concerted, logic of creative replication is breaking of vital motivated connections. Observable the crossing of role and real relationships of playing children, they show their disagreement, discontent of partners, they abstract from the aim of game, partially embody the conception. Game theme is monotonous. Role behavior of the game participants characterized by the absence of novelty, variability. Playing assignment children solve in habitual ways by suggesting/speaking low level of development of creativity in senior preschoolers. Mainly used offered plots by adults and other children; rarely create new versions of the game. And only 13% of preschoolers are able to chose the theme independently; can conjecture the proposed variant of plot; grasp by their ideas other participant of the game; adapt quickly to the aim of the game; can propose different variants of plots. Research results allow us to detach 3 levels of creativity development in preschoolers in role playing game. Let's characterize them. We classified 47% of testers to low level, they weren't able to suggest new idea, had difficulties in acceptance of game problem, used only well-known scenario of game plot. During the process of game showed carelessness, often were abstracting from the role. 0% of children had sufficient level of creativity development. Preschoolers understood the game rule,



suggested design from famous games, or from well-known fairy tales or cartoons. During the game tried to be careful, watched the game progress, but sometimes forgot the rules. High level of creativity development we diagnosed in 13% of testers. Such children proposed new game plots, quickly adapt to the game problem and new role. They create various plots, suggested new application to learned objects. Also they can remember formerly learned material, correctly reproduced it in memory. During the game were attentive, followed the course of the game, and corrected the errors of others. Having analyzed the received results of the study we made a conclusion, that the process of creativity development in preschool children demands significant activation by using the best tool, which is role-playing game.

In order of enrichment of game plots, we acquainted kids with artist: I. Rusina "Aibolit", F. Reshetnikova "Znovu dviyka", Morgan Westling "Country schoolhouse", M. Ivanenko "Nostalgiya", I. Ayvazovskiy "Rybalky na beresi morya", "Bereg morya Shtul", Van Gogh "Fishing boats on the beach at Saintes-Maries", Rob Gonsalves "The house build from books", Giuseppe Maria Crespi "Two libraries". Together with preschoolers we analyzed works of fiction: "Z lyudynoyu bida" by Y. Synizyn, "Likar Aibolit" by K. Chukovskiy, "Ya bibliotekar" by S. Zhupanin, "Pro Topku moryaka" by M. Markov etc.

Developed and implemented in practice of work in preschool education institution system of socio-dramatic play foresee the representation extension of senior preschooler in parents' profession: sailors, fisherman, teachers, doctors, librarians, mailmen, actors. In socio-dramatic play children recourse to the complicated transformation of known plot, after that they invented the new one. New roles were proposed to the participants, these roles were devoted to different spheres, such as Pinocchio and teacher, princess and policeman, the witch Baba Yaga and the salesman. With the purpose of not "Closing" the objective actions of creative work, to connect these roles in a general plot, we held the game in the form of "telephone" conversations of characters.

## DISCUSSION AND CONCLUSIONS

Therefore the analysis of psychological and pedagogical literature and the experiment itself, allow us to assert that the problem of creativity development is important today for modern Ukrainian society.

Thus, to develop creativity is effective from preschool childhood, because original period of achievement of personhood, during which giant beneficiation and normalization of sense experience took place, child's seizing of human forms of perception and thinking, establishment of fundamental components of personality.

The condition of formation of creative personality is socio-dramatic play with children.

Developed and scientifically grounded and tested system, provide the enrichment of life experience of children and creativity development can be used in practice by teachers of different types of preschool educational institutions.

The performed survey does not solve the problem. Further development needs the pedagogical conditions of creativity development in children in different types of activity.

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## RESEARCH OF PECULIARITY OF TRUST RELATIONSHIP IN DYAD "ADULT-PRESCHOOL CHILD"

Inna Savchenko, Lecturer,

*Department of Theory and Methods of Preschool Education,  
Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, Ukraine*

**Abstract:** *The article contains modern approaches to the perception of the phenomenon of trust relationship in dyad adult-preschool child. Author's approach to the survey of the peculiarity of trust relationship between parents and children, its ways of expression and support is covered in the article. Conceptual approaches to the usage of the observational method with the purpose of fixation of expression of trust relationships between parents and children are covered. The groups of the adults defined on availability/absence of credit and emotional closeness in the interpersonal relationships with children. Authors conclude that the problem of the formation of trust between the children of the senior preschool age and adult family members rarely has attracted notice of native scientist and practitioners.*

**Keywords:** *ethic attitude, moral parenting, trust relationships, over-fives, oversight*

### INTRODUCTION

In front of modern education appears a stiff task of construction of society with high culture of human relations, which would be defined by social equity and ethical life. "Act of Ukraine about preschool education", "Concept of preschool education in Ukraine", program of child development "I am in the world" and "Basic component of preschool education in Ukraine" orient on the necessity of ethic direction in education and upbringing. Moral treatment of personality to itself and to the World and to the other people lay out in preschool age. Findings of I. Babi, O. Batuhtyna, A. Bogush, M. Izzatova, T. Ponymanskaya, N. Rogalskaya, R. Halykova are dedicated to ethic upbringing of preschool children. On the point of above-mentioned topic appears researching of modern conditions of family education of preschool children (T. Alexeenko), formation of mother's respect (O. Butenko), cooperation arrangements between infant school and family (T. Alexeenko, L. Artemova, A. Bogush, S. Borisova, L. Zagyk, A. Denisuk, T. Markova, Z. Plohiy). Scientists indicate the absence of emotional sensibility of children, their mistrust and high level of aggression. First cause of such phenomenon appears in the family (I. Beh and E. Kononko).

Thus, the process of family education must be directed to the perception by the child and its place in the family, i.e. the family is the most friendly, mother is the best, home is a castle. Such attitude of adult encourage the formation of "basic trust to the world" (E. Erikson), and ensure the development of successful socialization of preschool children [4].

V. Suhomlynskiy emphasize that "trust arise from trust" and that it's impossible to educate children if they don't have the trust to their parents and teachers. Youth feel confidence only to the adult, who has confidence in them and demonstrates it at every step. Thereafter credit of educators and parents generate similar trust relationship in child's soul [3].

Lack of research and actuality of the subject cause our interest to the problem of children's trust to adults.

Thus, psychological constitution of junior children of preschool age with trust deprivation and ability of its correction studied A. Polina [1]; psychological constitution of preschool age trust surveyed A. Sydorenkov [2]; subject matters of E. Chiginzevoy [5] became the development of availability of parents to open communication with children. Practically pedagogic works are absent, they supported theoretically and empirically the phenomenon of "preschool children trust relationships with adult relatives and acquaintances".

That is why the *subject of our survey* became the skills of parents to recognize and support trust-based relations with their children.

## **MATERIALS AND METHODS**

In the experiment participated 219 parents of over-fives, who attended educational institution in the city Gluhovsk. Among them were 153 parents (mothers and fathers) and 66 elderly family members (grandparents). We generated a new methodic of research which took part in few phases to receive complete information. On the first phase we analyzed the features of children's trust relationships with adults. On the second phase, we surveyed aspects of trust expression of parents with preschool children, which foresee usage of such methods as discussion, questionnaire of parents in order to analyze the aspects of emotional part of interaction between parents and children (author E. Zakharova), as well as observation of process of interaction with children.

Using the method of observation for defining the features to express trust relations between parents and children we received interesting information. Primary focus was devoted to the identification of such aspects: what type of communication dominates (practical or personal), how attentive are adults to children's initiative addresses; what sources are used to support trust relationships to it; what type of emotions dominate during the cooperation with children. Received empirical data during the observation were fixed in a behavior-description record.

## **RESULTS**

Qualitative measurement of received data gives ground to make further conclusions. Depending on skills to develop trust relations with over-fives we conditionally divided probationer adults on three groups. Criteria were presence of trust and emotional intimacy in relations; realization of adult one's attitude toward the child, ability to define their emotional state, perceive and understand its reason; nature of reaction on open communication, idiosyncrasy (conation to skin-to-skin contact, succor dance, skills of support and calm); orientation on view point and emotional conditions of preschool children in the process of cooperation, and the ability to affect on children.

38,5% of the family members (from the total amount of adults), who promoted the formation of trust relationships to each other by cooperation with children were defined to the first group. Basic aspects of cooperation were openness of adults to practical and personal communication with children, respect to their interests, considered wishes and plans in the process of composition of cooperation strategy, active support of wishes of children to communicate. Skills of parents and teachers to demonstrate attention and sympathy to emotional state of the child; motivation of trust initiative of kids and ability to determine it by verbal and non-verbal means; provision of discretion to make a decision considering leisure and family obligations. Critic of children and adults was constructive and fair. Chosen style of cooperation promoted in children emotional comfort, state of security and confidence that parents love them as they are.

49,7% of the family members composed the second group. Trust relationships in latter are unidirectional "child-adult", appear only from the preschool child's side. Demonstration of trust has situational character, thus in the process of latter satisfy the needs of communication. Self motivated reference to the children is short-termed. Parents demonstrated tendency to cooperation by non-verbal means, predominate neutral ground. In the process of communication, parents were not always attentive; their behavior created suspicion and hurt children. Occasional adults demonstrated trust relation taking into account their tune to communicate. They orientated in means of formation harmonized trust relation, however on practice they used orders and instructions, thus demonstrating their authority and importance. Parents tried to solve child's emotional state, supported them and sympathized only situational. Lack of time was the main reason of absence of trust relation, parents thought.

Third group included 11,8% of parents (87% were fathers), who had low level of trust relationships with children. Reasons were: inability, sometimes unwillingness to understand and analyze the emotions of children; respond truthfully, support and sympathy to preschool children. For parents peculiarity of emotional worries of the child were not the main subject, thus conflict situations are a natural fact. Cooperation between parents and children became

stressful, dialogue interchanged with monologue; therefore children thoughtfully opt out from communication and tried to talk with other adults or age mates.

In case of trust treatment, parents felt irritation and sent their children to other family members, persuading that they had business to do. Such parents performed strict control and were uninterested in conversations. In child's evaluation prevailed condemnation over approval. Parents were ashamed in public showing love and tenderness toward a child. They believed that bringing up a kid means to remark, forbid, punish and that is how they saw their parent's functions. Consequently children formed believe that a father is a person who expect from them "wrong", "bad" behavior (unlike to mother), they appraised low (not specific act, but personality in general). From now forth this believes apply to the outer world, children became unsure of themselves, expect from others negative valuations of their abilities and skills.

There is a range of negative factors, which bother the formation of trust relation between children and parents, they are: deficiency of knowledge about emotional life of preschool children, their interests and needs; undervaluation of parents (family members) the period of preschool childhood with the aim of formation of ideal level of child's trust relation with adults; limitation of personal communication with children, and its substitution on practical; limitation of personal independency and close control of preschooler; inability to be fair with children, responsible, secure, predictable and sincere, lack of ability to identify and influence on their emotional state. Such factors deprive of secure level of trust and deform relations between parents and children.

## DISCUSSION AND CONCLUSIONS

As a result the analysis of the scientific literature and own experimental research showed that the problem of moral education of children has never lost its relevance. It is particularly acute when the Ukrainian state faced with economic and moral character problems, in particular, associated with deficiency of the family trust. The problem of the formation of trust between the children of the senior preschool age and adult family members rarely has attracted notice of native scientist and practitioners; however the means of traditional pedagogy have been left out of their attention and have not been a subject of special scientific research.

Performed research does not pretend to be an exhaustive solution of discussed problem. Further studies require such issues as: definition of pedagogical conditions of formation of trust of preschool children with the family, friends and adult acquaintances; organization of close interaction with the family and pre-school institution in the moral education of preschool children using traditional pedagogy.

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# INTER-CULTURAL COMPETENCE OF UNIVERSITY STUDENTS

Natalya Iankina, Doctor of Pedagogy, Professor,

*Orenburg State University, Russian Federation*

**Abstract:** *The article presents the notion of intercultural competence. It grounds why it is becoming one of the vital components of modern university education and how to develop it using university and individuals' reserves. While correlating intercultural competence and intercultural communication, the author analyses the aspects and the functions of the latter. This enables the author to define the components of intercultural competence (gnoseological, axiological, praxeological) and specify the notion itself. The author suggests its own conception of this personal characteristics development. The process is described by building a model that has stages, mechanisms, and outcomes. The study also presents approaches and methods how to make university students inter-culturally competent.*

**Keywords:** *intercultural communication, intercultural competence, intercultural values, intercultural interaction*

## INTRODUCTION

Means of communication have undergone a rapid development in the past years. It has led to a change in the nature and essence of all political, economic, and socio-cultural contacts internationally. The process of globalization has come to the forefront, significantly altering all spheres of human life, including university education. It is becoming more flexible, variable and responsive to the needs of industry and business. And with the emergence of big corporations, joint ventures and logistical nets our modern society feels the need for professionals who can work in a multicultural environment. This request to connect a learning process to a broader multicultural context has provoked a special interest for intercultural competence of future specialists [3].

This characteristic of a person manifests itself in the process of intercultural communication which is a key form of interaction having a mutually beneficial dialogue between people of different national and business cultures [5].

## MATERIALS AND METHODS

The analyses of intercultural communication's aspects (informational, gnoseological, axiological, interactive, normative, semiotic and practical) and functions (informative, social and expressive) allowed the components of intercultural competence being identified and defined:

- 1) The gnoseological component presents itself as a complex of many-component knowledge (foreign languages, lingual-cultural, socio-cultural, psychological, culture-specific and culture-general, professional);
- 2) The axiological component shows communication as a process of exchanging values;
- 3) The praxeological component includes a number of general (cognitive, practical, organizational, evaluative and reflective) and specific skills (verbal, nonverbal, paraverbal communication skills; socio-valuable behavior, i.e. behavior that agrees with the norms and values of a foreign culture; mastery of imitation, identification, stereotyping and generalization).

Thus, a university student's intercultural competence is an integrative personality characteristic that guarantees a person's commitment and readiness for intercultural interaction.

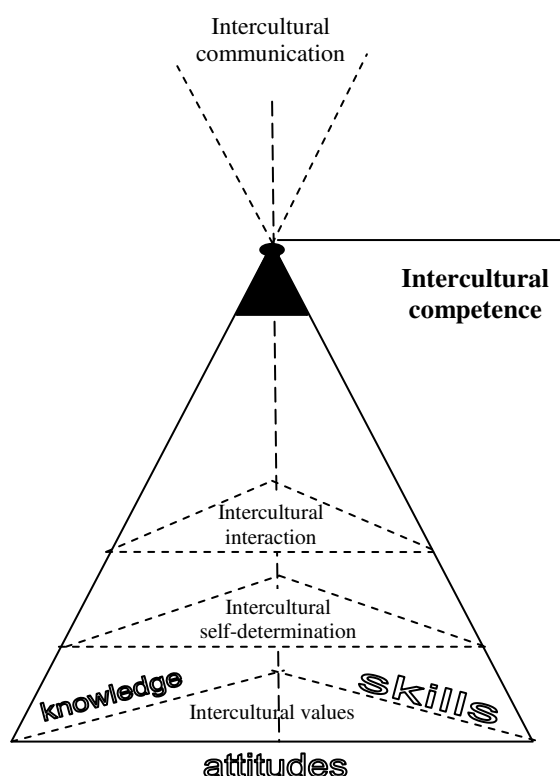
This trait is the integration of a) expertise needed for an intercultural dialogue; b) values providing interactions based on understanding, respect, tolerance and interest in the values of another culture; c) skills needed to participate in intercultural communication.

## RESULTS

To organize the process of a student's intercultural competence we used several principles. Taking it to be self-evident, that the actual use of words in speech to a large extent is determined by the knowledge of the social and cultural life of those who speak the language, we emphasized in our study the necessity of a language-culture integrated study. The success of the latter is achieved by putting forth the principle of a dialogue of cultures [1]. The essential features include:

- Uniqueness of individuals and their fundamental equality;
- Different and varying viewpoints of each participant in the dialogue;
- Commitment of each individual to the perception and active interpretation of his\ her point of view by other individuals;
- Interrelatedness and complementarities of positions and content of the dialogue;
- Personal aims and content of the dialogue;
- answer prediction and its anticipation in your own utterance;
- improvised nature of dialogue, involving the free expression of each participant;
- Collision of existing ideas and points of view, and the generation of new ones in the process of creative synthesis.

Another basis which the author has developed the conception of intercultural competence development is the actualization of a student's subjective position. It means we have used a student's internal reserves to develop intercultural competence. We have introduced values to the educational process [4, 6]. In this regard, the axiological approach [2] was defined by us as the leading and most productive methodological foundation to develop a model with a structure and functions (*Figure 1*). The experience to restructure the university's educational process according to this model resulted in the effective development of intercultural competence of students.



**Figure 1: Model of development of intercultural competence**

*Source: created by author*

In general, the process of the development of intercultural competence can be represented as a pyramid, which triangular base defines the space of integration of inter-cultural skills, knowledge and attitudes.

The height of the pyramid determines the degree of integration of gnoseological, axiological, and praxeological components at different levels of their development.

Different levels of each component development imply different integrative qualities: the formation of value orientations (first level), cognitive independence (second level), and the actual readiness for intercultural communication (third level). Consequently, in the process of intercultural competence development, we can record three stages:

Stage I: intercultural value orientations;

Stage II: intercultural self-determination for values;

Stage III: intercultural exchange of values.

The expanding space of communication is represented in the upper part of the model. It lists a set of tasks of intercultural communication, which a graduate will be able to solve after graduation.

The first stage of intercultural value orientations guarantees the creation of native and foreign culture value images. The mechanism of orientation describes this process as moving from individual values to intercultural values. The product of this stage is the existing hierarchy of a student's value system that comes from the dialogue of native and foreign cultures. Moreover, this dialogue has constants of communication such as "individual", "adjustment", "information", "time", "space", and so forth. These realities of language and culture in a comparative analysis of the mental characteristics of people are opposite in meaning.

Self-determination as the second stage in the development of intercultural competence can be defined as a process in which individuals make a choice based on understanding and correlating their needs, capacities, and abilities to personal and public requests, determined by the system of their values. The mechanism of selection as a factor of axiological self-determination allows correlating external circumstances and internal motivation and needs. Cognitive independence acts as the outcome of this intercultural axiological self-determination stage. In the context of our research, it is also an indicator of a student's self-determination in the field of knowledge as a value. The display of this cognitive independence served as the evidence of having a value system. In our research, we examined the exchange of values as coordinated activities of individuals aimed to achieve common goals and outcomes in the process of intercultural communication. The stage is best described through the mechanism of projection, under which we understand the process of conscious or unconscious transfer of an individual's characteristics and emotional status to external objects. The product of the third stage is readiness for intercultural communication.

The content and procedural sides of axiological conceptual development of intercultural competence of students are reflected in the model of this process presented above. But it might be successfully implemented only if we use the pedagogical potential of the university's educational environment. In terms of content, the development of intercultural competence of students is carried out through the comparative analysis of information about areas that are different in different cultures. This knowledge is gained in reproductive and creative communicative activities. In regards to the procedural side, intercultural competence of students is based on the emotional and axiological perception of intercultural interaction. The success of this interaction is measured in terms of solving tasks of intercultural communication. The unity of the content and procedural side of the intercultural competence development is achieved in the dialogue of the participants of the educational process, i.e. students and educators. It is carried out with the help of traditional teaching techniques (lectures, seminars and workshops) as well as innovative ones (role playing, simulation activities, internet conferences, on-line courses, joint researches, cultural events).

To develop intercultural competence of university students, we have drawn up methodological guidelines for this process [7]. The effectiveness of its usage was determined by the ability of students to define their role and behavior in complicated, multi-variant, and inter-cultural situations. Moreover, we have documented that, when a student had to make a choice in professional or personal communication, he or she would make a move from simple negation of a foreign culture to a conscious understanding of its normative values.

## DISCUSSION AND CONCLUSIONS

We believe our study marked the emergence of a new strain of students at OSU (*Orenburg State University*). Their characteristics are: the interest in the study of a foreign language and foreign language culture, and the desire to actively participate in international educational programs and projects. However, while conducting the research we have fixed a significant positive dynamics for the development of intercultural competence, we are aware that not 100% of the students have become inter-culturally competent. Because of that, we might follow to talk about the exploratory nature of our study. We have described procedures, made predictions, and recorded the results of the of intercultural competence development that should be further studied in a larger context.

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## Part II: ACTUAL ISSUES OF MACRO- AND MICRO- ECONOMICS

### THE CURRENT STATE AND THE OBJECTIVES OF THE BULGARIAN ELECTRICITY MARKET WITHIN THE FRAMEWORK OF THE EU INTERNAL ELECTRICITY MARKET

**Victor Avramov**, PhD, Assistant Professor,

*New Bulgarian University, Sofia, Bulgaria*

**Abstract:** *The purpose of this paper is to show the current state of affairs in the electricity market and the level of achievement of the policy goals to which a developed electricity market is instrumental. The electricity market is considered as a policy tool for broader objectives of economy competitiveness, tackling climate change and energy security. The paper states that the current state of development of the electricity market is one of a hybrid model containing both free and regulated segments with considerable government share and insufficiently impartial regulation.*

**Keywords:** *electricity market, climate change, energy security, liberalization*

#### INTRODUCTION

Because of its strategic importance for the economy, during most of the twentieth century the main purpose of the electricity system was to ensure its own stability (i.e. security of supply). For this reason central and local governments were seen as responsible for the regulation of the market and thus controlled most of the supply of electricity. The electricity markets were national with cross-border trade relying on international agreements. The economic logic of these national systems has led to the creation of vertically integrated monopolies some of which were publicly owned. Because of different circumstances and the path dependency – characteristic of the electricity system – in Europe a number of differing electricity markets evolved. This difference created little incentive to invest in cross border trade and, furthermore, lack of competition, integration and scarcity of public funds in some cases has led to chronic underinvestment in transmission capacity. Thus, by the end of the last century the electricity markets of the EU was mostly national, heavily regulated and with specific circumstances concerning the fuel mix for generation and electricity infrastructures.

Since the 1990s however, the objectives of public policy concerning electricity and energy in general have shifted dramatically. The drive towards competitiveness and the creation of the Single market in the EU, climate change issues and concerns over security of supply all shaped the notion of what an electricity market should do. Now a modern electricity market is expected to provide low prices, stimulate generation from renewable sources and even create incentives for diversification of supply. This is probably best described by the EU "Target Model" (FG-2011-E-002 (Final)), describing what the Internal Electricity Market must achieve:

- day-ahead market coupling: simultaneous determination of prices and volumes in a zonal basis;
- intraday market coupling: as close as possible to real-time trade and congestion management;
- balancing market: the real time balancing of supply and demand;
- cross border forward capacity allocation and risk management;
- capacity calculation coordination between TSOs and harmonization of long-term transmission rights.

The implementation of this model should lead to more efficient operation of regionally integrated electricity markets, more flexible investments in generating capacity from different sources and better resilience to internal and external supply shocks. Thus, the policy objectives of competitive, low carbon economy and security of supply rely on the completion

of the Internal Electricity Market (C (2013) 7243 (Final)). The process of restructuring the Bulgarian electricity market began in 1992 with the creation of the National Electric Company (NEK EAD). The company was vertically integrated, state owned, functioning as single buyer and supplier. The process of liberalization of the energy market started in the 2000s first by abolishment of the NEK monopoly by separating major generation facilities as independent entities and the creation of distribution companies, privatized in 2005 (Ganev, 2009). In 2003 the single buyer model was replaced by regulated third party access and legal separation of generation and transmission. By 2007 the market was fully liberalized, operating on bilateral contracts basis with a balancing market. The market consists of two segments: regulated – with fixed prices (determined by the SEWRC public regulator) and non-regulated – with freely negotiated prices within the quotas, determined by the State Energy and Water Regulatory Commission.

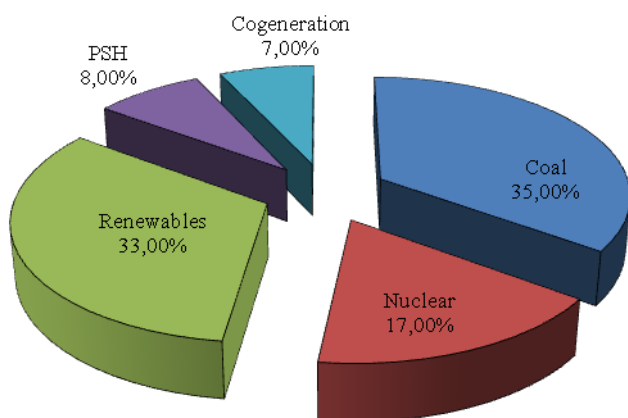
In the autumn of 2011 Bulgaria was among 19 Member States against which the EU Commission launched an infringement procedure for non-transposition of the Third Energy Package Electricity and Gas directives (MEMO/13/375). The reason for this was – and still is – the unfinished process of unbundling of both gas and electricity TSOs. Bulgaria is moving towards the implementation of the independent transmission operator model which provides that energy companies can maintain ownership of the transmission network if the transmission companies are legally separated companies with independent governance. The ESO which is a subsidiary of the NEK is currently in a procedure of de-facto separation from its owner, which is expected to end in 2015 (SEWRC report, 2014).

Thus, Bulgaria is still lagging behind the implementation of the Third Energy package. Whether this has led to suboptimal results is a question this paper asks. Furthermore, the electricity market is a tool for achievement of the broader objectives concerning economy competitiveness, climate change and security of supply. The purpose of this paper is to show the current state of affairs in the electricity market and the level of achievement of the policy goals to which a developed electricity market is instrumental.

## MATERIALS AND METHODS

This research is based on EU-data and national energy regulators, statistical sources such as Eurostat, National Statistical Institute of Bulgaria, ACER, reports and press releases from various public institutions. The analysis relies on previous empirical findings and takes a broader perspective on the electricity market as a policy tool aimed at broader objectives.

## RESULTS



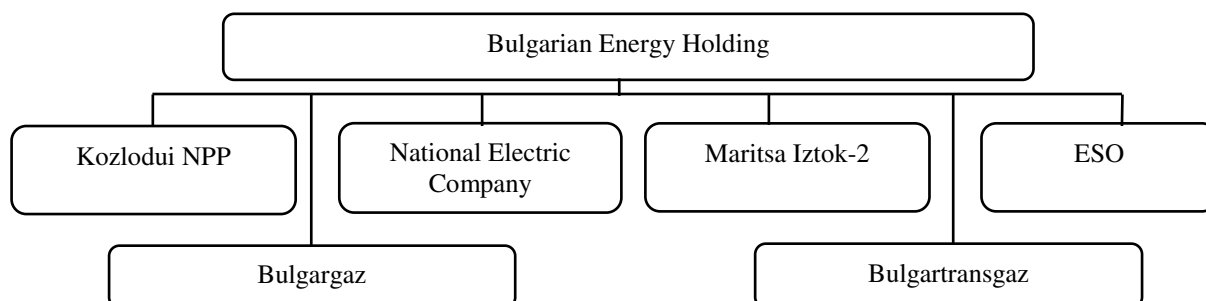
**Figure 1: Total installed capacity, 2013**

Source: SEWRC Report, 2014

Total installed capacity for all sources in 2013 is 11840 MW (*Figure 1*, SEWRC Report, 2014). The highest share of the sources is coal, with 4148 MW or 35% share and renewable – 3894 MW or 33%; nuclear – 2000 MW or 17%; Pumped-storage hydroelectricity (PHS) – 1004 MW or 8% and Cogeneration – 794 MW or 7%. State Owned National Electric Company has 30 hydroelectric power plants and 1 PSH plant with 2713 MW in common. It's part of the largest Bulgarian Energy Holding (BEH) which also owns the Kozlodui NPP (2000 MW) and Maritsa Iztok-2 thermal power plant with 1600 MW.

Thus, the combined total installed capacity of state-owned power plants amounts to a total of 6313 MW or 53%.

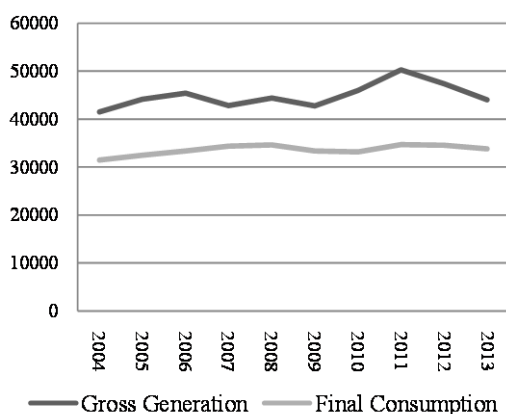
The structure of the BEH is shown below (*Figure 2*). As well as the generation facilities, BEH also controls the transmission operator – ESO. In relation to the gas market which is not a focus of this paper, BEH also controls the Bulgargaz (Gas Trade Company) and Bulgargaz (Gas Transmission Company). The market share of the holding's electricity generation for 2012 is 63%. Thus, the holding carries a key role in Bulgaria's electricity system. It has the largest share of generating facilities as well as market share and it acts through ESO as the single buyer on the high-voltage transmission grid.



**Figure 2: Organizational Structure of Bulgarian Energy Holding (BEH)**

*Source: Bulgarian Energy Holding*

For 2013 the gross electricity generation is 44040 GWh: slightly lower than the peak achieved in 2011 – 50330 GWh (*Figure 3*). The final consumption is considerably stable – about 33500 GWh. There is a clear discrepancy between the available generation capacity – 11840 MW and the actual peak load – 6672 MW in 2013. This is a result of both the economic shift from energy intensive industries and the decrease of the energy intensity itself. At 669.9 kg of oil equivalent per 1000 EUR Bulgaria has still the most energy intensive economy in the EU (EU 28 average is 143.2 kg of oil equivalent per 1000 EUR).



The electricity market includes 2 sectors: 1) regulated market, where prices are approved by the regulator and liberalized by market with freely negotiated prices and 2) balanced market. There is one operator of the high-voltage grid – the ESO. Thus, network tariff is determined on administrative basis by the SEWRC. There is no spot-market for electricity yet and the market relies mainly on bilateral contracts between buyers and suppliers. What is visible, then, is the significant role that the state-owned incumbents play on the market.

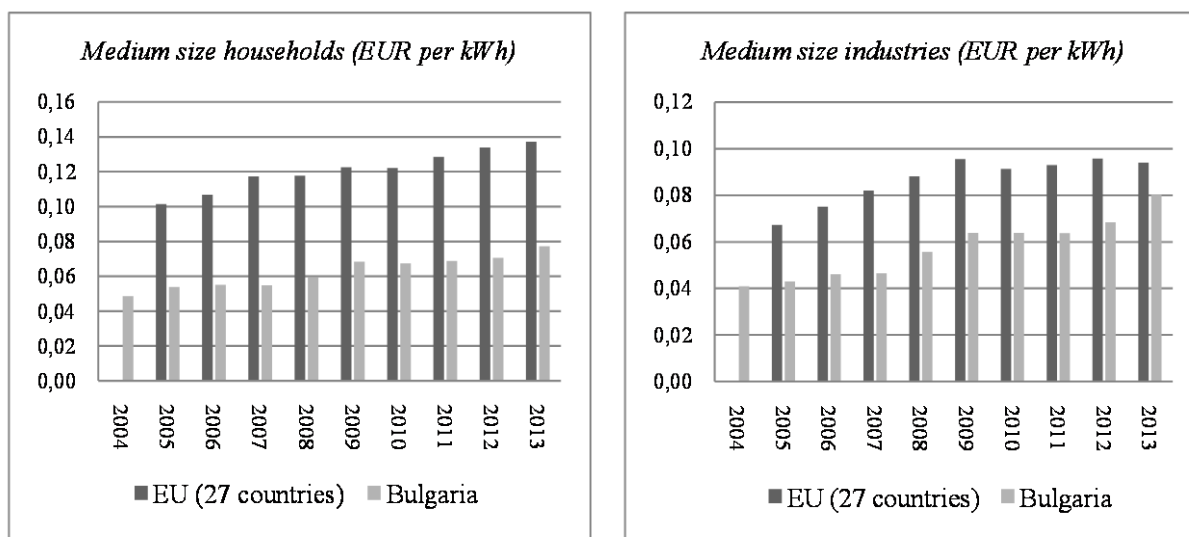
**Figure 3: Electricity generation and consumption (GWh)**

*Source: Eurostat*

The electricity prices are a traditional source of public concern in Bulgaria. By World Bank estimates, 61% of the population are classified as energy poor (World Bank, 2013). Below is a comparison of prices by type of users (*Figure 4*).

The prices may be significant for the average Bulgarian household but they are well below the EU average.

Thus, both low process and the excess in the capacity create an incentive for export orientation in the system. The numbers clearly show this trend (*Table 1*).



**Figure 4: Comparison of prices by type of users**

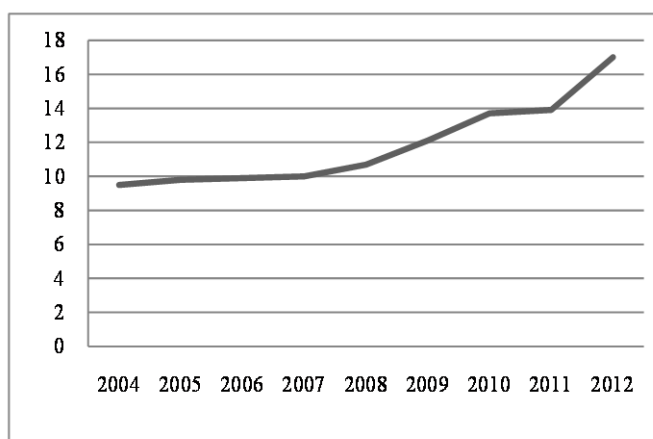
Source: Eurostat

Table 1

Import-export orientation in some countries								
Year	2010		2011		2012		2013	
Country	imports	exports	imports	exports	imports	exports	imports	exports
Greece	1	3453	0	2823	2	2303	5	1746
FYROM	0	2953	0	2918	1	2640	9	2139
Romania	1106	677	1445	568	2336	274	2912	202
Serbia	58	1794	0	2621	17	1454	427	860
Turkey	13	401	48	3070	1	3957	0	4588
<b>TOTAL</b>	<b>1178</b>	<b>9278</b>	<b>1493</b>	<b>12000</b>	<b>2357</b>	<b>10628</b>	<b>3353</b>	<b>9535</b>

Source: ENTSO-E

The share of renewables in total electricity generation is increasing since 2004 from 10% up to 17% in 2012 according to NSI-data. The total electricity generated from renewables in 2013 is 6825257 MWh; 6.52% increase from previous year. The total share of renewables in the final energy consumption reached 16.3% in 2012 and it is a bit more than 16% above the 2020s target. The total installed capacity of RES is high compared to the peak load. It has led to several decisions by the SEWRC regulator to decrease the feed-in tariffs by more than 50% in mid-2012 and further by about 30% in the fall of the same year. At the same time, for two consecutive years there are no plans for connection of new RES capacity (*Figure 5*).



**Figure 5: Share of renewable in electricity generation, %**

Source: National Statistics Institute

## DISCUSSION AND CONCLUSIONS

The slow reform of the electricity system created widespread public distrust in its governance, as stated by the World Bank assessment in 2013. The low electricity prices didn't compensate the resources' lack in many families to sustain their electricity bills. Furthermore, there is no evidence that they contribute at all to increase the economy competitiveness. In addition should be noted, that the big market share of the government-owned generation capacity distorts the market.

The result is a big surplus capacity that cannot be compensated with export, as the figures suggest. The SEWRC regulator is not guaranteed to be completely independent as its members are selected by the government and there are no clear law provisions for appointment and dismissal on the base of merit. Thus, there are no institutional safeguards for decision making process that seeks a balance of interests and against arbitrary decisions.

Considering the policy goals of competitiveness, energy security and climate change, the energy market is slowly evolving to tackle the challenges ahead. This evolution is product of both intentional actions and erratic decisions that reflect the conflicting interests of the electricity industry. The operation of an efficient liberalized electricity market lies still in the future. The current situation is one of a hybrid market containing both free and regulated segments with considerable government share and insufficiently impartial regulation.

The electricity system contains a lot of inertia from past decisions and cannot change quickly. But there are certain steps that may be taken quickly to ensure efficient results:

- development of the free market with incentives for more participants;
- organizing of electricity exchange for intra-day, day ahead and balancing markets;
- reform in the renewables policy in a way that credibility in the support system and do not create imbalance in the system;
- speeding up the energy efficiency measures;
- phasing-out of old and inefficient plants.

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# INSTITUTIONAL DESTRUCTIONS RESTRAINING SOCIAL DYNAMICS IN UKRAINE

**Olga Bilka**, PhD in Economics, Associate Professor,

*Oles Honchar Dnipropetrovsk National University, Ukraine*

**Abstract:** *There has been marked off the essence of the functioning result of a social state, sociality in particular; its normative meanings have been given. There has been estimated national policy in providing social orientation through the institutions of living wage and average monthly salary and their destructive aspects have been exposed. There has been suggested to improve the methodology of social standards and guarantees formation as well as the instrumental means of providing economic growth on their basis.*

**Keywords:** *social state, sociality, formation, institutions, mechanism, destructions, improvement.*

## INTRODUCTION

Ukraine by means of getting on the way of independent development twenty three years ago put great expectations to the possibilities for bringing the social architectonics of the society to civilized standards which have been discovered by the corresponding act. In course of time orientation to domination of social aspects of development over the economic ones was reproduced in constitutional capturing of a social state model in Ukraine. It would be imprudent to claim that the issue of social component enforcement in development was something new to Ukrainian reformers. But it was natural that during the time of being a part of the former USSR there formed in the world different models of states with market economy of social orientation and essentially different socializing processes passages on their territories. Cause these passages are rather ambiguous, hard to foresee and practically inimitable, they have become one of the main topics for national scientific researches.

There has been lightened a rather wide range of issues of theoretical and methodological plan considering grounding of conceptions development of socially oriented order on the basis of market mechanism of economic activity activation in the scientific works of O. Amosha, Z. Varnalii, Z. Halushka, V. Heits, M. Herasymchuk, V. Hryshkin, O. Hrishnova, M. Dolishnii, N. Dieieva, T. Zaiats, B. Kvasniuk, Ye. Libanova, L. Lisohor, I. Lukinov, V. Novikov, V. Onikiienko, M. Sokolyk, L. Tymoshenko and many others. Certainly they could not have conducted their researches on the actual subject from scratch without relying on scientific achievements received before them. On the subject of theoretical constructions of a social state which appeared in the XX century in the western countries there can be marked out interpretations of German economist W. Eucken [1, p. 275], professor of London school of economic sciences R. Titmuss [2, p. 45], English specialist H. Bayer [3, p. 75] and others.

A standard algorithm of subordination of economic transformations to social ones certainly does not exist and cannot exist. In each country life has been raising its vital problems connected with movement to civilization prosperity standards. As for Ukraine the whole problematic quintessence of changing the life of an average Ukrainian for the better was connected with the return character of market transformation and practically with return in economics socialization to a relatively moderate level with the accent on self-provision of prosperity in the multilateral range of social development issues. From the point of view of social dynamism provision the conversion of social dominance has not simplified the whole system of social-economic relations – on the contrary it has complicated this system considerably. As the consequence formally rationalist methods and forms diluted with a percent of humanistic imperatives have become vital in the sphere of practical spread and enforcement of sociality. In this situation simple logics leads to the necessity of a more careful study of the content of institutional apparatus for regulating sociality and determining its influence on social dynamics.

Following the essential necessity to enforce social effectiveness in the context of social-market reformation the problem of compliance estimation of the institutions considered to be regulative standards to the imperative of sociality provision has become the main research subject of this article. In correspondence with the research subject there have been set such aims for solving as marking off the functioning result of a social state, normative limits of its changes, estimation of the level of approximation to them by means of involvement of certain institutions for regulating sociality, as well as exposing destructive aspects and grounding the ways of their elimination. The research hypothesis is based on the presumption that scientific outlining of the results of social progress for the period of independent economy management in Ukraine in connection with the adopted and acting institutions of enforcement and motivation of dynamic aspects of sociality formation will create preconditions for exposing destructions in them concerning the influence on social structure of the society and will prevent their rise in perspective by means of easing the negative act or complete elimination.

### **MATERIALS AND METHODS**

The laws of Ukraine are the source of normative information. Literature sources, materials of the state statistics, results of own calculations and researches, informational resources of the Internet compose empirical and factual basis of the research. Total amount of general scientific and special methods of scientific researches composes the methodical basis of the article. In particular implementation of the comparative and retrospective analysis has made it possible to mark off statistical aspects of sociality formation from the dynamic ones, diagnostics of factual and empiric information has made it possible to generalize the tendencies of regulative practice and the disadvantages of the policy of keeping social orientation in development.

### **RESULTS**

The basic product of a social state following the content provided by Lorenz von Stein in the XVIII century is sociality [4, p. 584]. According to the opinion of H. Bortis, professor in the university of Fribourg (Switzerland), "social" is nothing else but "...interconnection between unequal, imperfect and thus interdependent individuals that need each other only to be able to achieve common goals including society on the whole" [5, p. 59]. This statement about sociality outlines it as a category of heterogeneous character. A difference between the income of 10% of the most prosperous population layer and 10% of the poorest one in limits  $8 \div 10$  [6, p. 413] is considered to be a general demand for the countries which follow the socially oriented way as a reasonable one.

The state through specific institutions shall provide involvement of a human into the society, maintain in the range of acceptable changes sociality of the life-sustaining activity on the whole and at least in the most important niches of social and labor sphere. Material basis of state income regulation depends both on GDP volume which outlines the primary distribution limits and on the percentage volume which is redistributed through the state budget centrally. In the process of primary income distribution there has been set the upper limit for nominal salary increase in the state sector. In general primary income regulation by the state is connected with inhibition of salary increase and inflation. On the basis of redistribution the state aims at solving the problem of changing for the better the income of the poor population layers, creating organizational legal conditions for normal reproduction of labor power and on the whole at easing social disintegration and social tension to the most possible extent.

The order for distribution and redistribution of the product created by the society is given through the system of social standards including the demand of compliance with the social guarantees of the state. Pursuant to the Law of Ukraine "About State Social Standards and State Social Guarantees" "social standards" appear to be established laws and other regulatory legal acts of social standards and regulations according to which levels of basic social guarantees are determined, in particular minimal salaries, incomes of the citizens, pension coverage, social assistance and other types of social benefits which provide the standard of living that is not lower than a minimum one [7].

Today it is hard to acknowledge realization of any system and consistent policy concerning provision of social orientation in Ukraine in the high period of redistribution of public property in 1991-2001. But there is a question in the other sphere: what aspects of socializing policy did not allow the government to start full realization of social imperatives in 2000-2012 till nowadays that is to the time connected with economic activation? From this methodological position we have estimated the institution of minimal standard of living concerning motivation of movement by the steps of raising the lower income level.

It can be seen from the *Table 1* that minimal pension reached the level of minimal standard of living approved for incapable people only in 2005 and the volume of minimal salary reached this standard for capable people in 2009. Though not only the fact of non-performance of laws by the state government is considered to be a destructive aspect but also lack of stable vector with positive dynamics in the changes of minimal standard of living. Social standard cannot appear as a set, foreseen and immutable phenomenon. This is a flexible category which is corrected permanently pursuant to the changes in economic capacities and approaches to prosperity implementation. Moreover, minimal consumption level shall be changed annually increasingly.

Table 1

Changes in the level of state social standards and social guarantees  
in 2000-2012 in Ukraine [8]

Year	Minimal salary	Minimal age pension*	Standards of living		Nominal salary (NS)	Average monthly pension	Consumer prices index	In comparison with prices in 2012		
			capable	in-capable				Minimal salary	Minimal age pension	Standards of living capable
2000	118	30	288	217	230	83,7	128,2	348,6	88,6	850,9
2001	118	39	331	249	311	122,5	106,1	328,6	108,6	921,7
2002	165	47	365	268	376	137	100,8	455,8	129,8	1008,2
2003	205	50	365	268	462	182	105,2	538,3	131,3	958,5
2004	237	50	387	285	590	316	109,0	571,0	120,5	932,3
2005	332	332	453	332	806	407	113,5	704,7	704,7	961,5
2006	400	366	505	366	1041	478	109,1	778,2	712,1	982,5
2007	460	415	568	411	1351	751	112,8	793,4	715,8	979,7
2008	605	514,6	669	498	1806	898	125,2	833,4	708,9	921,6
2009	744	548,8	744	573	1906	999	115,9	884,3	652,3	884,3
2010	888	709,1	869	695	2239	1151,9	109,4	964,8	770,4	944,2
2011	963	766,8	891,6	709,2	2633	1253,3	108,0	968,8	771,4	896,9
2012	1098	842,3	1098	842,3	3026	1470,7	100,6	1098	842,3	1098

According to the research results it is established that social dynamics is restrained in the national field by an interesting innovation which is implemented in the process of its analysis, estimation and planning pursuant to the level of average monthly salary determined by the political reasonability but not the statistics laws. At the presentation of household distribution according to the level of income average per capita the State Statistics Service of Ukraine opens the diapason of the tenth decile by the income at the level of average monthly salary and does not close it [8]. At the same time volume of the population layer that maintains income at the level of the average monthly salary and more as may be seen in the *Table 2* does not exceed 4-6%. When implementing instrumental methods of statistics the modal meaning of the average monthly salary in 2012 did not exceed 1431 UAH. Not taking into account the possibility of establishing real average monthly salary following the classical theory of statistics in the budget process there is planned annually nominal average monthly salary from the level of the one reached in the previous year.

Implementation of such movement technology to the average prosperity does not have anything in common with provision of controlled social dynamics due to its orientation to financial enforcement of the most prosperous layer. Para-statistical distribution of population according to the income at which there hardly exists a layer with an accounting level of average monthly salary allows claiming about "social achievements" that exceed European standards. Thus in particular at practical correlation of average per capita income between the extreme deciles of 1077 times as of the beginning of 2013 a number was given to the public of 4,6 times that was a better result in comparison with the European standards.



Table 2

Reality of the NS receiving and it comparison with the modal meanings in 2000-2012 [8]

Indices	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Relative density of people receiving NS and more, %	Over 240-13,9	Over 300-12,1	Over 360 – 9,9	Over 360 – 14,7	Over 420-18,6	Over 720-10,6	Over 720-15,8	Over 840-24	Over 1920-6,1	Over 1920-7,1	Over 1920-12,4	Over 1920-24,8	Over 3000-8,4
Modal meaning of NS, UAH	96	114	117	144	189	270	323	517	686	755	1016	1190	1386
Correlation between nominal salary and modal one	2,4	2,7	3,2	3,2	3,1	3,0	3,2	2,6	2,6	2,5	2,2	2,2	2,2

In the national practice of programming social progress there has accumulated a great number of scholasticism and abstract constructions which yet are oriented but to slow and as a rule partial movements in such spheres of economics and social life that need efficient and rapid radical changes. For their elimination it is necessary to discuss not only the creation of a new system of social standards and guarantees but also first of all the changes in methodology of their formation and implementation of instrumental methods for provision of economic growth in their basis. Practice of maintaining the principles of social orientation gives all the grounds for claiming that only the state is able to eliminate destructive social problems with Ukrainian peculiarities even if the demands concerning social liability are executed by the economic entities.

### DISCUSSION AND CONCLUSIONS

Situation with conservation and sometimes increase in differences of income of citizens appears to be a manifestation of one of complicated social-market destructions which need special researches. Due to the fact that country is having a transition and rather unstable period of development there cannot be excluded implementation of a strict control over manifestations of uncontrolled differentiation that exceeds the limits of an acceptable one.

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# INTEGRAL PARADIGM OF SUPRANATIONAL BUDGETING

**Andrii Boiar**, PhD in Economics, Post-Doctoral,

*Department of European Integration,  
Vadym Hetman Kyiv National Economic University, Kyiv, Ukraine*

**Abstract:** *Institutionally supranational budget is a new and quite specific regulatory tool which can serve specific needs and objectives in international relations and integration. Traditional methodology of public finance, public sector economics and some other scientific fields together with specific research techniques can be used in the model supranational budgetary process. Their existing understandings are stochastic and intra-disciplinary; they do not reflect complex nature of the phenomena in terms of contemporary global paradigms of human development. These and some other arguments assure that the concept of supranational budgeting should be singled out into separate paradigm, i.e. integral paradigm of supranational budgeting.*

**Keywords:** *supranational, budgeting, budgetary process, paradigm, international union*

## INTRODUCTION

The process of globalization profoundly transforms the scientific vision and approaches to the study of various world economy' sectors and international economic relations, the economic regionalization' process etc. The consequences of this are the rethinking of the existing concepts and development of new concepts and theories; the emergence of new areas of scientific research and as a result, development of new paradigms.

Both so-called outer regionalization, which reveals itself in regional economic integration, and the emergence of different international unions greatly enhance the development of intergovernmental and supranational budgetary relations. Naturally a theoretical vacuum is occurred, which is started to be filled fragmentary at the beginning of the XXI century.

Neither purely neoclassical public sector economics approaches, nor the works of theorists of institutionalism or other branches of science can give comprehensive responses to numerous methodological challenges generated by the collision of intergovernmental fiscal relations in conditions of globalization. Such contradictions are manifested primarily in insufficient financial resources needed to achieve the political tasks set by the organizers of an international union. Consequently it leads to low functionality of many unions increasing disparities in social and economic development of their regions, exacerbates the sensitivity of national economies to cycled economic development, reduces the political and financial sustainability and independence of the unions.

Thus, creation of a new inter-paradigmatic format for research within the framework of the existing paradigms of global development ("Homo oeconomicus" and "Homo sociologicus") would consolidate the efforts of scientists from different fields of knowledge and create new budgeting models for economic integration entities of modernity. In this context it is important to outline the framework of a new paradigm, i.e. an integral paradigm of supranational budgeting.

## MATERIALS AND METHODS

Methodologically the paper is related to investigations of two thematic groups: general philosophy of humanitarian sciences and public finance theory. The first block is represented by works of T. Kuhn, R. Dahrendorf, J. Kornai, R. Swedberg, J. Rifkin, G. Kleiner, D. Lukianenko and others. Works by A. Pigou, H. Dalton, R. Musgrave, W. Oates, A. Wildavsky, J. Stiglitz and some others fall within the second group. Recently there occurred also some research that directly constitutes the theory of supranational budgeting. Here one should mention the names of J. Simon, J. Valasek, F. Figueira, A. Alesina, I. Angeloni, F. Etro, M. Mattila.

## RESULTS

The notion of "paradigm" was substantiated by the American philosopher T. Kuhn in the early 1960s [10] though it was used in literature long before this. Systemic vision of science by Kuhn has largely influenced the structure of academic research and has generated a lot of discussions as for interpretation of this category, interactions and relationships among existing paradigms, etc. In economics the notion of "paradigm" is usually understood as a set of sustainable and substantial norms, theories, methods and schemes of scientific activities which form the analytic unity as for interpretation of reality [5, p. 84]. Theoretical component of any paradigm should be simple, logical and well-structured. Segregation of a new paradigm helps to develop an appropriate methodology and organize empirical studies. Objectivity of these researches will depend on the quality of the paradigm.

Some basic prerequisites for defining a new paradigm are outlined in the literature. They include: 1) the presence of pre-paradigm phase that involves the existence of different directions and theoretical concepts that are intended to improve the existing economic system; 2) the occurrence of negative trends in the system which deprive the old paradigm of practical content; 3) the availability of basic principles that effectively work in other economic systems which enable assimilation of instruments of old paradigms and the new one; 4) the opportunity to choose among several paradigms; 5) the comparability of the proposed local paradigm with the global paradigms [5, p. 85].

The transition to a new paradigm becomes necessary when science cannot link into a single system and rationally explain new facts, phenomena and real events. This casts doubts on the scientific ability to explain the facts and the new paradigm is designed to eliminate these doubts. The new paradigm can be positioned as a complete deviation from the existing paradigm(s) or as a change in existing paradigm which is very important for obtaining and systematizing new knowledge. However, a common characteristic of adequate theoretical approaches is that they do not reject completely the previous theoretical works but integrate them [8].

What about budgetary system of an international union (supranational budgetary system), one can state that the vast majority of the above mentioned prerequisites is true indicating, thus, necessary preconditions for articulation of separate paradigm of supranational budgeting. The need to segregate the paradigm of supranational budgeting is confirmed by the existence of several quite different approaches to the vision (understanding) of supranational budgetary system. In particular we can highlight the paradigm of supranational budgetary system (SBS) as a mechanism for redistributing funds among the member states of a union (the paradigm "SBS as a redistributor")<sup>30</sup>.

From the standpoint of this paradigm, the main function of supranational budget is redistributing resources in order to smooth out the difference in social and economic development of the union regions. That is supranational budget is regarded as a tool of regional convergence, the ultimate goal of which is the formation of a unified social and economic space and the conversion of an international union into a quasi-state homogeneous entity. Paradigm of supranational budgetary system as a reflection of the institutional structure of an international union leads to understanding the supranational budgeting as a result of political trading between representatives of member states within the institutional and legislative framework of the union (the paradigm "SBS as a political institute")<sup>31</sup>.

The structure of both revenue and expenditure parts of the budget are predefined by the objectives of a union and the political weight of its member states as well as by the distribution of powers between supranational and national authorities.

The third paradigm is a supranational budget as a mechanism for adjusting societal processes ("SBS as a regulator"). It is the consequence of dominance of neo-Keynesian

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<sup>30</sup> Apologetics for this paradigm are present, in particular, in the theory of economic needs presented in the works of M. Mattila (2004) and in the national cost and benefits theory (S. Hix (1999), C.J. Carruba (1997)).

<sup>31</sup> Such understanding of supranational budgetary process is discovered in the works by R.E. Baldwin (2001), J. Rodden (2002), L.S. Shapley and M. Shubik (1954).

approaches in the theory of public finance. According to this paradigm functions of regulating social and economic processes should be given to supranational level in cases when it leads to overall efficiency, i.e. economies of scale, better internalization of externalities, etc. That is a supranational budget is seen as a tool to adjust the parameters of social and economic development but only in those cases when it is economically efficient (cheaper compared to the situation when such regulation is carried out from national or sub-national levels)<sup>32</sup>.

Abovementioned paradigms can give quite aptly explanations of the budgeting principles in some international unions. In case of EU, all paradigms have found verification. The budget of EU is a reflection of institutional structure and goals of the EU (the paradigm "SBS as a political institute"). At the same time it performs the functions of redistributing financial resources in favor of poorer regions (paradigm "SBS as a redistributor") and provides the regulation of some socio-economic parameters (for example, the level of farmers' income; agricultural prices; the level of investment in the economy of certain regions; employment, etc.) (paradigm "SBS as a regulator"). However, we are confident that in XXI century the integral paradigm of supranational budgeting will prevail. It will be based on a new concept of supranational budget as a complicated poly-structural and hierarchical formation that is characterized by a number of specific (different from the national budgetary systems) features, principles and operating rules. The new integral paradigm fits in models of global paradigms. In particular, its content is a symbiotic combination of two dominant in the humanitarian sphere paradigms: "Homo oeconomicus", which originates from the end of the XIX century [18], and "Homo sociologicus", presented by the German scientist R. Dahrendorff in 1958 [6]. "Homo oeconomicus" focuses on individual interests and rational behavior of the economic units (in our case, integrating states). "Homo sociologicus" concentrates at collective activity occasioned with common interests, traditions and values, political and social conditionality of decision-making (*Figure 1*). A comparative analysis of both concepts was provided by R. Swedberg [17].

Development of a new paradigm of supranational budgeting can be justified by the fact that budgetary systems of the current international unions can be explained and described by tools of existing narrow sectoral paradigms, which makes them useless for the modeling of modern supranational budgetary process. The tendency of sectoral paradigms' replacement with integral paradigms is pointed out in scientific literature<sup>33</sup>. J. Kornai states that modern systemic paradigm among other characteristics should contain both its own tools and analytical tools, shared with other paradigms. He also concludes that contemporary paradigm cannot be reduced to any single science [9].

## DISCUSSION AND CONCLUSIONS

Integral paradigm of supranational budgeting is inter-paradigmatic in nature. While the paradigms that emerged earlier ("SBS as a redistributor", "SBS as a political institute" and "SBS as a regulator") fall within the context of individual scientific branches (the first and the third ones are the scions of the public sector economics; the second one is in the framework of political science), the methodological toolkit of integral paradigm is formed by general and specific (inherent solely to supranational budgeting) models, theories and techniques of related sciences. Methodologically supranational budgeting is related with public sector economics, theory of public finance and developed within its framework theories (fiscal federalism, tax theory and theory of public expenditure), theories of institutionalism, theory of optimum currency areas, theory of public budgeting, national costs and benefits theory, theory of economic needs, Dalton's principle of maximum social advantage, principle of functional subsidiarity, etc.

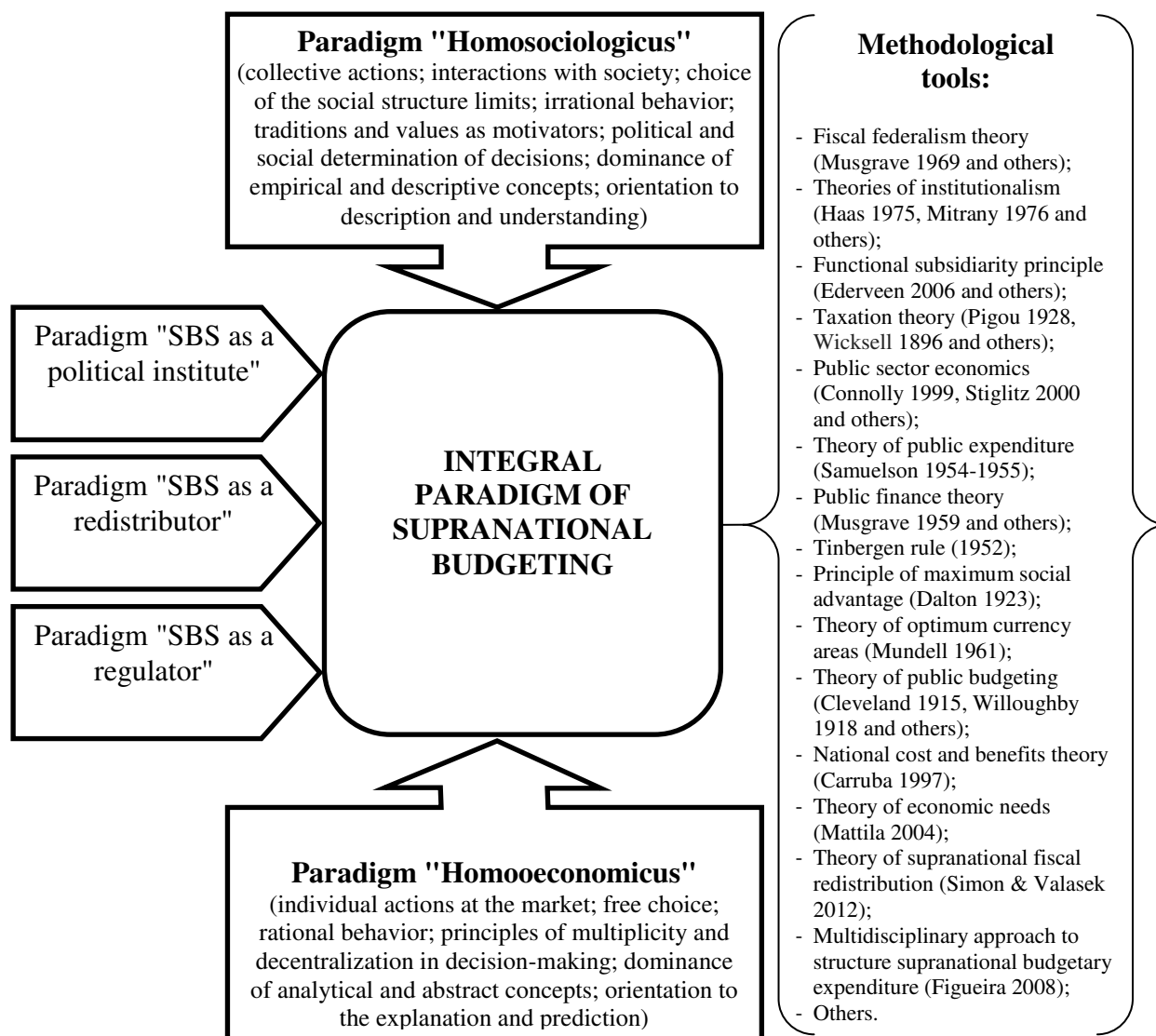
Integral paradigm of supranational budgeting combines existing budgetary paradigms and reflects key characteristics of two global humanitarian paradigms: "Homo oeconomicus" i

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<sup>32</sup> See: Basic postulates of paradigm are reflected in fiscal federalism papers of R.A. Musgrave (1969), W.E. Oates (1972), R. Bird and others (1993).

<sup>33</sup> See: O.G. Bilorus et al 2001.

"Homo sociologicus". From cognitive point of view the conceptualization of the new paradigm will promote the development of the theory of supranational budgeting. In practical terms the whole macro-regional and global institutional setup will be enhanced and improved.



**Figure 1: Model of integral paradigm of supranational budgeting**

Source: created by author

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# INTERNATIONALIZATION OF SMALL AND MEDIUM-SIZED ENTERPRISES IN TRANSITIVE ECONOMIES

Ina Chepik, PhD-Student, Assistant,

*Belarusian State Economic University, Minsk, Republic of Belarus*

**Abstract:** *Globalization, increased global competition and limited domestic demand affect to the large multinational companies as well as the small and medium-sized business who comes to the international space. The article discusses the current trends and characteristics of SMEs internationalization in transitive economies, particularly in Republic of Belarus. Author describes the SMEs internationalization dominants and characteristics, analyzes statistics on Belarusian SMEs export and their main trading partners. The new strategy of SMEs development in a global economy is proposed in this research.*

**Keywords:** *SMEs internationalization, internationalization strategy, transitive economy, export patterns*

## INTRODUCTION

The global scale competition encourages small and medium enterprises (SMEs) to streamline the companies' internal processes, which both results in successful operation in the domestic market and leads to rewarding international activity.

## MATERIALS AND METHODS

Internationalization as a global process has been discussed by M. Porter, J. Dunning, G. Mintzberg, M. Zinkoty et al. Such scientists as D. Bell, K. Cairns, E. Bragin, A. Melnichuk focus their researches on economic and organizational performance of SMEs in the foreign market; SMEs' innovative aspect as a key factor of international trade is considered in the scientific papers of S. Kravtsov, N. Egorova, S. Khachatryan and others. Internationalization at the micro- and macro-levels as well as the ways to foster company's foreign trade are reflected in researches of A. Danilchenko, D. Kalinin, M. Balashevich, O. Krylova and others. Researches of V. Shimov, G. Shmarlovskaya and L. Davydenko are contributed to the practical aspect of Belarus integration into the world economy. However, it seems necessary to specify and summarize the features of SMEs internationalization in the transitive economies.

The subject of our research is SMEs internationalization in a transitive economy. The choice of the issue is explained by increased involvement of SMEs in the global economy and the necessity to develop specific strategies for Belarusian SMEs in foreign markets.

Systemic method, logical and comparative analysis were used in our research.

## RESULTS

In the countries with a transitive economy SMEs internationalization is determined by:

- 1) Alignment of multiple activities within an enterprise;
- 2) lack of a clear company specialization and the entrepreneur's pursuit to a maximum independence;
- 3) Low technical level and old-fashioned technology coupled with a significant potential for innovation;
- 4) Quite high skills and knowledge to adapt to the challenging economic environment on background of unprofessional daily management;
- 5) Inadequate state infrastructure to support SMEs that prevents successfully functioning enterprises from entering international markets as well as lack of correct information about market conditions and consulting services;
- 6) Significant part of SMEs is in the illegal sector; according to expert estimates, the share of shadow turnover is up to 25-40%;

7) Presence of one-day firms founded for illegal trade; after establishment of Free Market Zone of Russia, Belarus and Kazakhstan a half of shadow flows moved to Belarus and Kazakhstan;

8) Sporadic nature of foreign trade, as SMEs needs the investments for sustainable functioning in international markets;

9) Prevalence of micro-enterprises because of low capitalization of SMEs and corporatism (90% of the total number of SMEs).

Republic of Belarus is characterized as a transitive economy; therefore above-mentioned features can be traced in internationalization of domestic SMEs. However, the official statistics do not reliably distinguish small and medium businesses due to its informal nature and lack of panel researches. According to Belarusian Statistics Committee data, 27780 SMEs (29.5% of the total number of enterprises) operated internationally in 2013, which provided 36.4% of the total foreign trade turnover, including 37.3% (\$13.9 bln) of the total export of goods [2]. Nevertheless, there was a negative balance of \$1.474 bln, which is \$4.4 bln less than in 2012. The decline is explained by reduced exports of petroleum products in 2012 and depletion of the beneficial effects of the currency devaluation in 2011.

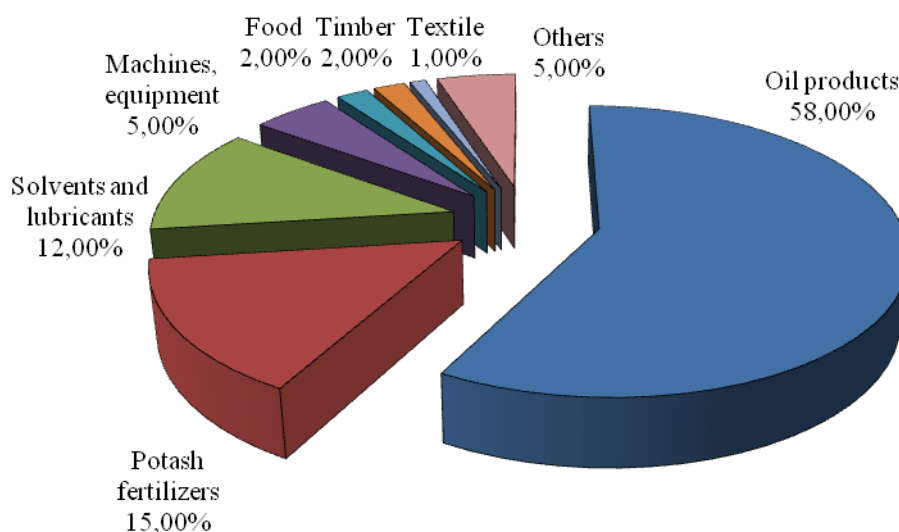
Foreign trade turnover of sole entrepreneurs (netto-importers) amounted \$567 mln; the share of imports increased up to 77% and was distributed unevenly, i.e. the CIS countries-partners accounted 24% of total imports and the non-CIS countries accounted 76% [2]. Growth in consumer imports is conditioned with a significant increase in wages over the period, risen by the administrative methods and does not connected with productivity growth. In general, sole entrepreneurs provide a substantial part of the retail trade and satisfy the demand for foreign consumer goods (13% of the Belarusian imports or \$423.1 mln), for resale business requires less financial resources. These data do not include imports of shuttle traders estimated by 20% of SMEs total imports. In contrast to the Western European companies, where foreign trade activity directly depends on the company size, out of twenty thousand local SMEs engaged in export-import activities, more than eighteen thousand are micro- and small companies.

The peculiarities in the development of SMEs in Belarus are: business environment is not conducive to the emergence of medium-sized enterprises because they have to compete with the state-owned enterprises, which gained a number of preferences (relations with regulatory authorities, loyal rent and tax rates, commodity prices, conditions of licensing and permissions, etc.). Another factor that hinders the transition of small business to the medium and therefore its active internationalization is SMEs specialization. Small business operates mostly in the resale and public catering (this niche occupies up to 40% of small business; manufacturing industry accounts only 20%). The largest number of SMEs involved in foreign trade is located in Minsk and surroundings (66% of the total amount). Therefore, it is necessary to work over the geographical accommodation of SMEs and their penetration to the productive industry. About 95% SMEs are private and therefore their foreign activities are not enough coordinated; they do not included into the national economic forecasts.

The export pattern of SMEs is shown in *Figure 1*. As it can be seen, up to 80% of SMEs exports accounted for oil, potash fertilizers, solvents and lubricants. If to exclude parastatal commodity traders, the total export of Belarusian SMEs will include \$3.9 bln that is minor in comparison with the European SMEs, i.e. 8.5% of the total exports of Belarus (\$45.99 bln). The commodity traders are Belarusians or the joint ventures created with Russian big enterprises (for example, LLC "NefteHimTreyding", LLC "Interservice", etc.). Their formal purpose is the tolling of Russian oil at the local refineries and shipping the oil products to the foreign markets. The number of these SMEs increased in 2012 by 20%.

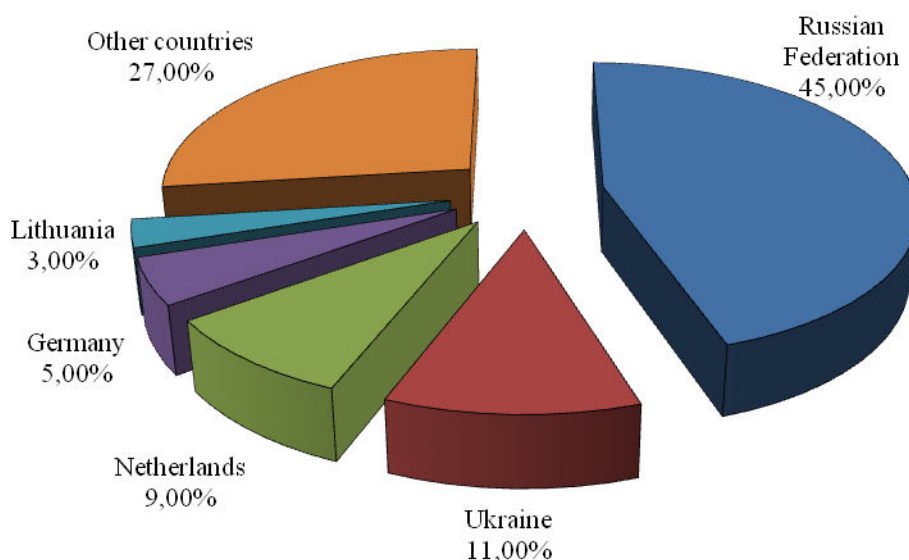
Thus, in contrast to the SMEs in developed countries that export innovative products with a high customizing degree, Belarusian SMEs operate in low-tech industries, where export is determined by the outer market conditions of the trading partners. That evidenced about its rapid decline in 2013. The trading partners of Belarusian SMEs correspond to the total export pattern of Belarus as it is shown in *Figure 2* due to the commodity trade of SMEs.





**Figure 1: Belarusian SMEs Exports, 2013**

*Source: Own research based on [2]*



**Figure 2: Trading Partners of Belarus, 2013**

*Source: Own research based on [2]*

However, according to researches of Institute for Privatization and Management, the vast majority of SMEs (except of petrochemical and mining industry) are oriented on the internal market (82.4% respondents), 14.3% of SMEs are targeted at the CIS market and only 6.8% of the total number of SMEs try to operate in the EU markets [2]. SMEs are focused on the local consumers because of miss the access to external markets. In addition, situation is exacerbated by necessity to match to a number of standards imposed in the EU for SMEs (quality, safety and environment standards). Therefore Belarusian SMEs have orientation to the CIS countries.

The main obstacles of SMEs internationalization are the resources lack for the promotion (34.4%), high production costs (14.3%) and administrative barriers on the way to foreign markets created by governments, including the Eurasian Economic Union authorities (15.3%) [1]. Likewise, exports of separate Belarusian goods are over-controlled by the Russian government disregarding the intentions to lift restrictions in the mutual trade. It is expected that after the Union formation (January 1, 2015) above-mentioned protectionist measures will guarantee the freedom of goods and services trade as well as the freedom of financial flows and human capital.

Thus, Belarusian SMEs export corresponds to SMEs performance in the developed countries, however, excluding raw material revenue, the share of SMEs export with a high customizing degree and innovation remains low. The majority of Belarusian SMEs focuses on the domestic market (mainly in retail) due to the low products competitiveness on the CIS and EU markets. Therefore it's important to identify causes of imbalance and continue restructuring the SMEs sector in view of the existing goods as well as sectoral, territorial and quantitative discrepancies in SMEs exports. The above-mentioned barriers to SMEs internationalization are necessitated the measures to expand financial assistance at various institutional levels; to negotiate the lifting of restrictions on the SMEs flows under the Union's SMEs Supporting Programs at the intergovernmental level as well as to align the raw material cost with their cost at the state enterprises.

### **CONCLUSION**

The main internationalization strategies of Belarusian SMEs are the exports expansion in a new world branches (medical, financial and informational). As an alternatives of SMEs internationalization it can be singled international guarantee contracts signing, public-private partnership, franchising, outsourcing, which are in its infancy.

The export fall is determined by the low innovativity of SMEs activity, poor innovative infrastructure and absence of venture financing. Adequate adjustments should be provided to the sphere intellectual property rights protection as well as informational and analytical portals. It should be ensured the access possibility of SMEs to the secondary security market to expand the network of foreign business accelerators.

The findings of our research can be used for working out the measures to promote SMEs internationalization as a precondition of the sectoral sustainable development and the ground for the middle class formation and prosperity.

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## HR-MANAGEMENT MODEL FORMATION ON THE PRINCIPLES OF SINTELLECTICS AND SYNERGY

Iryna Danyliuk-Chernykh, PhD-Student,

*Department of Management and Administration,  
Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine*

**Abstract:** *The approach to the human resources management based on sintellectics and synergy is considered in our article. The scientific interest is focused on a possible creation of the mechanism and favorable conditions for building the effective HR-management system in the most effective way as a result of collective awareness, cooperation and staff self-organization. The author presents a conceptual model for the staff development in the system of HR-management. Also the basic principles of human resource management in the activity of domestic enterprises are considered.*

**Keywords:** *human resources, development management, self-development, synergism, sintellectics*

### INTRODUCTION

The competitive activity of any company in the modern society is possible only if the effective hiring, development and management of their staff. An important element of successful work with the staff is the choice of adequate models of continuous professional competences development to enhance the intellectual and creative level of employees. Despite of sufficiently developed scientific and methodological base for HR-development justification, interesting is to solve this problem by combining sintellectual and synergistic approaches.

### MATERIALS AND METHODS

A lot of scientists have considered the problem of the effective staff development at the enterprises, for example, N. Tsymbalenko, V. Danyuk, L. Shymanovska-Dianykh and others. A lot of scientific papers are devoted to the staff motivation and effective use of their skills and competencies through a progressive system of individual incentives. For example, J. Petrovich is convinced that the wage of professionals involved in the production of innovative and competitive goods will grow at 3-4 times faster [7, p. 9]. T. Kulinich has noted that in-time salary and absence of wage arrears will reduce probability of conflict situations and will improve the social and psychological climate inside team [4, p. 554]. Analyzing the perspectives of staff development and labor potential at the enterprises T. Bilorus marked the necessity of providing economic development, modernization and the development of knowledge-based industries; the timely replacement of fixed assets and outdated technologies; expansion of areas and forms of employment; improvement of the HR-capacity as well as industrial, regulatory, innovative and international governmental policy [1, p. 44].

Some scientific papers are devoted to the problems of human capital use. In these papers investment in human resources development are considered primarily as a means of increasing productivity and income of the enterprise as well as a dominant factor in increasing its competitiveness. N. Tsymbalenko has proposed the method for assessing individual human capital of each employee and common human capital [8]. We agree that the accumulation of human capital and its effective use will lead to solving of some social problems. However, in practice conflicts between employers and employees always will exist because individual points of view on one or another aspect of the enterprise activity exist. Today it is necessary to ensure the formation of a "new portrait" of employee who will become an active accomplice of the enterprise wealth creation as well as who will find the work their sense of life and thus will become highly developed prosperous person.

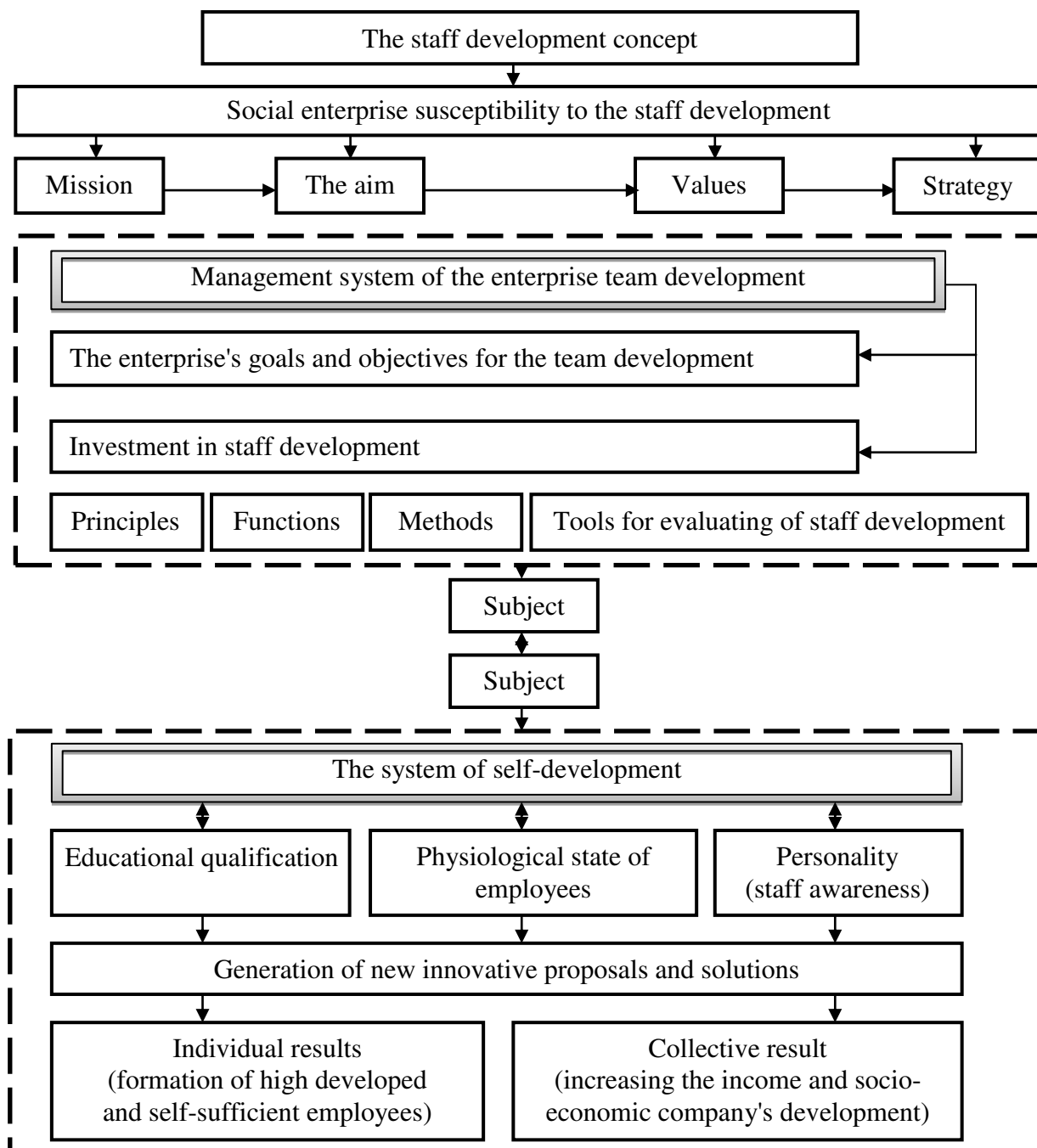
## RESULTS

The current changes take place under the influence of increasing role of the knowledge economics that leads to the need for reassessment of the individual factors role in the enterprise effective activity. The staff intelligence and its professionalism are the dominant factors, in turn; their level depends on the business competitiveness. The main tasks of the staff development are: 1) forming a systematic process of improving knowledge and skills of employees through a combination of organizational and socio-economic measures; 2) planning and forecasting of needs in the staff and investing in human potential; 3) assimilating of employees' knowledge and skills for the purpose of interchangeability; 4) establishing the continuous connections and communications between the inner staff as well as the staff of allied enterprises; 5) staff motivation to the effective teamwork; 6) using of the companies-competitors' experience on the staff development; 7) preventing of the conflicts and creating of favorable social and psychological climate in the company for the individual and collective development; 8) permanent monitoring the competitiveness of individual experts and teams. As it can be seen from above analyzed problems, the employees' professional development concerns to the individual groups (teams) as the higher education focuses mainly on the individual training. Therefore one of the enterprises' priorities is to find the most effective theory, methods and measures of human resources development during their working process.

It should be noted that nowadays we can observe the creation of new HR-management theories. Instead of cybernetic approach that pushes the system to move to a new stage, companies use a synergistic approach, which creates the favorable conditions for achieving the desired future stage and is the most effective way to improve the collective awareness and self-organization. However, team-synergy as a new joint activity type can take place in a creative development. Any system can be self-organized if it is able to move to a new level without external influences. In this case, we can observe changing the concept of management, its transition from the principles "subject – object" management to "subject – subject" management [3]. Synergetics integrates with other modern theories of dynamic processes of complex systems; it is transition from static researches of the system to their evolutionary dynamics. One of such innovations is the sintellectics concept. Professor Y. Kanygin maintains about the possibility of forming associative (collective) intelligence, which creates a specific "effect of the creative (intellectual) elements accumulation in a complex system" [9, p. 37].

As a result, the author offers a conceptual managing model of staff development on the basis of sintellectics and synergy (*Figure 1*). First of all it should be focused on the managing of staff professional development as a set of interrelated and systematic measures to ensure the free (self-) selection of various training forms for target specialists. The scientific principle provides the team management development on the basis of advanced domestic and international theoretical findings and practical experience. The scientific development of team management supposes that company's corporative objectives are harmonized with the goals of individual employees and teams. Therefore, it is necessary to adhere to the consistency principle that coordinates bilateral interests. Otherwise, any managing system of team development is doomed to fail, no matter which resources would be used. The choice of development depends on the type of activity that expresses personal choice of employee. The self-development principle is the basis for personal and professional development and professional fulfillment.

N. Mazhnyk and D. Kostin have defined self-development as a process of employee's conscious perception, which includes the self-improvement of knowledge, skills, personal and functional competencies, has ensuring the professional effectiveness [6, p. 104]. In this case in our opinion the main interest should be focused at the active employees. All external factors contribute to the development and formation of personality only when they interact with the internal mechanisms of its activity, i.e. with the needs, motivation and belief. The complex nature managing of the staff development requires the use of responsibility principle, which includes liability management for the assurance of qualitative development and employees' responsibility for their self-organization, i.e. corporate social responsibility.

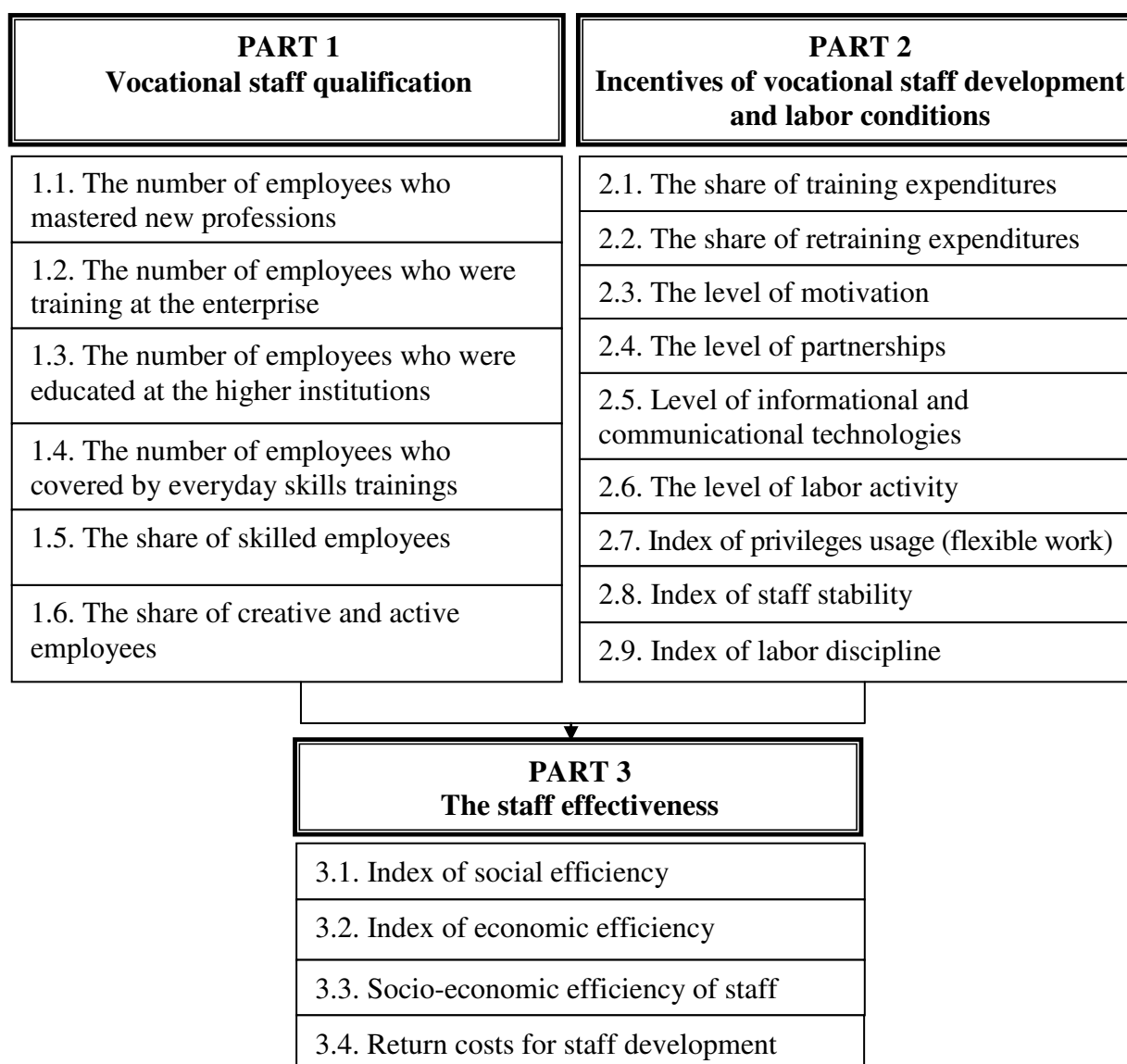


**Figure 1: Model of staff development on the basis of sintellectics and synergy**

*Source: created by author*

Another important principle, in our opinion, is continuity and perspectives principle as a basic condition for the functioning of any development system. The essence of continuity is to establish regular relations between the stages of development and the creation of professional psycho-pedagogical conditions for the use of various learning tools. Further development is to identify priority areas of use of knowledge, skills and competencies for the future career development and to provide creative life quality according to the concept of human development. To achieve the desired socio-economic performance is necessary to ensure the comprehensive implementation of these principles and functions as well as the use of various managing methods for the team development. There are such methods: economic, organizational, educational, social and psychological. Economic methods make possible to satisfy the needs of employees and to ensure the implementation of the social justice principle in the personal development. Organizational methods are the mechanism for the realization of economic

methods. i.e. it is organizational and economic mechanism of regulation. Educational methods are the employee's belief in development, necessity of creativity and responsibility for their results, i.e. influence on the employee's mind should be a dialogue based on the evidence, not the empty declaration. Personnel management can be successful if it corresponds to the psychological laws. There are the major social and psychological methods: 1) method of changing the social status of the profession; 2) personal example; 3) social prevention; 4) protection of social interests; 5) psychological motivation; 6) creating of socio-psychological relations; 7) team building and 8) labor humanization methods. The use of these techniques is the need for systematic sociological research to identify the real picture of the employees needs. The successful management of the team development requires developing evaluation tools. It is important that they will be recognized. In this case, the synergistic effect will be. *Figure 2* shows three groups of indicators to measure the development and effective staff use. The enterprises need to raise the intellectual level of the staff by means of finding interactive teaching methods that could allow to ensure the acquisition of new important qualities and competencies in conditions of limited financial resources and time. We defined the teaching methods in our previous scientific paper [2], but methods of the staff effectiveness evaluating during training need clarification. Staff effectiveness should be assessed before, during and after training.



**Figure 2: Scheme of staff evaluation**

Source: created by author

There are several models for evaluating the training influences [5]: 1) Kirkpatrick's model provides four levels of evaluation (reaction, mastering, behavior, results); 2) Phillips's model ROI assesses the investment effectiveness in trainings; 3) Stufflebeam's model provides educational context evaluation; 4) Byrd's model provides evaluating of baselines and feedback evaluation of trainings effectiveness.

## DISCUSSION AND CONCLUSIONS

We examined individual components of the conceptual managing model of the staff development based on sintellectics and synergy. Nowadays only human resources can generate the highest synergistic effect providing harmonization the traditional system of the team development and self-development that will join the collective intelligence and will create the conditions for obtaining high results. In further researches it is necessary to consider the construction of the staff self-organizing system, to reveal the psychological characteristics of self-development and their influence on the improving creativity individuals and teams.

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# CHANGES IN THE WORLD FINANCIAL SECTOR AS A BASIS FOR DESIGNING THE EFFECTIVE DEPOSIT INSURANCE SYSTEMS

**Valentina Didenko**, PhD in Economics, Senior Lecturer,

*Monetary Relations and Policy Department,  
Financial University under the Government of Russian Federation, Moscow*

**Abstract:** *The author of the article determines the influence of the global financial crisis consequences on the banking systems. The analysis of the deposit insurance systems in the developed countries and developing countries is presented in this article. The advanced experience to resist the financial crisis is described here. Particular the experience of the USA, EU and post-soviet CIS countries is learnt. The measures for increasing stability of the banking systems by means of designing of the effective deposit insurance systems are suggested.*

**Keywords:** *insurance, deposits, banks, financial stability, world experience*

## INTRODUCTION

Recently the world crises, uncertainty, growing business instability and wrong policy become the determining issues in the society and its citizens. The analysis of the scientific papers shows a range of methodological and practical problems in the sphere of banking system stability and difficulties in the banking work with private and juridical entities. The search of both a new organizational models to manage world and national finances and more effective national banking systems due to the appearing of insurance deposits systems in different countries lead to realization the measures aimed at decreasing risks and implementing changes into the legislative base of structures which are responsible for the banking system stability.

The influence of the financial crisis to the *banking* services and clients can be expressed by several ways: 1) marketing events, which are directed to rising in the interest rates, are changing permanently; 2) acceptance (as the result of the world financial crisis) of the new legislative acts in order to stabilize of a banking system by means of implementing current changes into the control over the deposit insurance systems activity.

Consequently, repeating financial crises have negative effect on the banking system stability. That is why our research has to study two problems: 1) determination of the direction for the organization of deposit insurance on the modern stage of the financial system development; 2) development of the organizational mechanism for the effective deposit insurance system. In order to solve the set of above-mentioned tasks we emphasized the necessity of reforms in the sphere of deposit insurance in USA, EU and CIS countries which have the practical interest.

## MATERIALS AND METHODS

Methods of analysis and synthesis were used in our research. Applied methods of description and content-analysis were used in the characterization of the advantages and disadvantages of systems guaranteeing the deposits worldwide. Comparative analysis is applied for the justification of measures to improve the stability of banking systems by designing an effective system of deposits insurance.

## ORGANIZATION OF DEPOSIT INSURANCE SYSTEMS

**The United States of America:** The first system of deposit insurance appeared in the USA. Initially the aim of insurance system creation was the protection of the paying systems from "banking panics". On June, 13, 1933 the Government adopted the Law which supposed the formation of the Federal Deposit Insurance Corporation (FDIC). In 1934 the depositing insurance proceeds amounted about 2500 dollars per one depositor. The involved in the system banks had to pay an enrolment fee into the deposit insurance fund that amounted to 0.5% of the insuring deposits. A half of the deposits has to be delivered immediately and



another half of the deposits has to be delivered on demand of the FDIC. FDIC is functioning due to incomes got through the deposits insurance payments made by the insured banks. According to assessments they amount to the 1/12 of 1% of bank deposits. They guarantee both saving accounts, i.e. deposits and current accounts belonging to the private persons and organizations. On June, 30, 2011 the FDIC has included 6413 commercial banks (87876 deposits) and 1100 loan-saving banks (10317 deposits) as a members. The amount of the insured deposits was 7 trillions USD [1]. In order to increase the protection level of citizens under the conditions of the financial crisis in 2008 the insurance compensation limit was increased from 100,000 USD to 250,000 USD according to the "Paulson plan".

FDIC takes part in: 1) audit of the paying capacity; 2) audit of the ownership activity; 3) control of the registered state establishments; 4) implementation of the consumer legislation; 5) secure fulfillment of the legislative papers; 6) control of the anti-trust law abidance; 7) deposits' insurance. Also up to 2011 FDIC has supported banks that were at the bankruptcy threat. But after the Dodd-Frank's act acceptance in 2010 (legitimated on July, 15, 2011) any targeted support of banks is prohibited [2]. The aim of this act's acceptance was the providing of the financial stability of the USA and protection from the unfair banks, which activity had led to the financial crisis of 2008. The USA has 2 acting patterns in case of bank bankruptcy or its illiquidity: 1) method of acquisition and absorption and 2) method of the direct payment performed by FDIC. According to the FDIC data, 51 financial organizations were out of business in 2012 in the USA; 92 financial organizations were out of business in 2011 and 157 financial organizations were out of business in 2010. It means that during mentioned 3 years 300 financial organizations went out of business. 14 banks were closed in the USA from the beginning of 2013; having the assets on 19 billion USD approximately their deposit fund is less than 1.2% of the total sum of insured deposits. In 1993 FDIC introduced the system of the scaled insurance payments [3].

**EC:** The world financial crisis had influence on the European Community's development that has initiated a range of measures for improvement of the deposit insurance systems aimed at increasing of the depositors' protection. In 2010 EC has issued an Order 2009/14/EC that has provided the minimum ultimate level of deposit protection in all EC countries up to 100 thousand Euro from December 2010 [4]. Also an Order has included the decision about the amendments to the current EC order "About the deposit guaranteeing systems" 94/19/EC [5]. It has included such requirements: 1) national deposit insurance system shall guarantee the deposit safety on the territory of all EC countries, if they have the subsidiary bank of this country; 2) banks' compulsory participation in the deposit insurance systems; 3) maximal quota of the complete insurance liability during the Order's issuing included 20 thousand Euro (15 thousand Euro for Spain and Portugal). Some countries including Belgium, Cyprus, Greece, Lithuania, Luxembourg, Malta, Portugal, Spain and Netherlands increased the amount of insurance indemnity up to 100 thousand Euro in the end of 2009. Such countries as Austria, Hungary, Germany, Denmark and Slovenia have imposed unlimited state's guarantee for deposits. The main changes implemented according to the Order 94/19/EC are: 1) transfer of all deposit guarantee systems to the advance-financing (ex-ante); 2) establishing of the unified target amount of deposit guarantee fund of 1.5% of the amount of insured deposits (shall be reached in 10 years); 3) urgent levying' ability; 4) ability of the reciprocal crediting by the national deposit guarantee systems; 5) incorporation of the scaled payments' system to the funds of deposit guarantee, which is based on the assessment rates unified for all EC countries (75-200% of the basic rate); 6) unification the range of insurable tools excluding the state agencies' and financial organizations' accounts; 7) ability to establish an increased amount of indemnification for individual deposits, which are results of real estate transactions and some life events (inheritance etc.) during 12 months; 8) indemnification of the charged interests for the deposit; 9) decreasing of the payment deadline up to 7 calendar days; 10) cancelling of the reciprocal claims while calculating indemnification; 11) regular stress-testing of the deposit guarantee systems; 12) transfer of banking duty to be able at any time to provide the informational system on that issue; 13) establishing of the unified standards to inform depositors while acquiring deposit product [6].

The measures suggested by the European Committee are aimed at the profound reforming and further unification of the deposit guarantee (insurance) system of the EC countries with the prospect of creating a unified Europe-wide system [7].

**CIS Countries: Having approximately the same start points in the financial system formation, CIS countries have chosen different ways of banking sectors development but the corresponding deposit guarantee systems. The CIS countries have different regulatory framework of deposits guarantee (insurance) in the credit-financing agencies.**

**The Republic of Belarus:** The acceptance of Law on indemnification deposits allows to determine the legal bases of the indemnification of private persons' funds in cases when a bank cannot fulfill its obligations to the citizens [8]. The approaches in this Law relate to the state guarantees of the individual persons' funds indemnification which take place in the bank deposits of the Republic of Belarus. They fit with the international standards. The deposits indemnification is performed by Subsidiary corporation for bank deposits indemnification, i.e. State agency, formed by the Council of Ministers of the Republic of Belarus and the National Bank of the Republic of Belarus. Its main tasks are the accumulation of bank payments, other means and deposits' indemnification of private persons. Participation in the forming deposits' indemnification system is compulsory for all banks which have license for rising funds of private persons. The Law regulates the order of registration and deregistration of banks; the order of calculation and payment of the compulsory payments; relations of the Subsidiary corporation with the banks and the state in Belarus; interaction of the Subsidiary corporation with the Council of Ministers of the Republic of Belarus and the National bank of the Republic of Belarus. Financial reserves of the Subsidiary Corporation are formed for the account of proportional payments of the Government of the Republic of Belarus and the National Bank of the Republic of Belarus, compulsory payments and part of incomes of the Subsidiary Corporation. According to the Law the private persons are guaranteed the return of 80% of their deposits in each bank, but for the sum equivalent to not more than 5000 Euro. Moreover, for the deposits equivalent to sums up to 200 Euro, 100% of fund return is foreseen.

**The Republic of Kazakhstan:** In Kazakhstan all the deposits of private persons are protected by Deposit Guarantee Fund which pays the guaranteed deposits' indemnification in case of the forced bank liquidation. The maximal amount of the guaranteed indemnification per one depositor is 5 million tenge (approximately 32 thousand USD). According to the Kazakh legislation each bank having the license for deposits acceptance, opening and managing accounts of private persons (excluding Islamic banks) automatically becomes a participant of the system of compulsory deposits guarantee. The entrepreneurs' accounts in the banks-participants of the system of compulsory deposits guarantee are covered by the guarantee of the Fund. In case of the forced bank liquidation the owner of the bank account will have a guaranteed full indemnification for this account but no more than 5 million tenge. Today almost all deposits are under the guarantee of the Fund. Thus, the number of deposits is 99.6% of the general amount of deposits in all banks-participants of the system of compulsory deposits guarantee. On April, 1, 2013 the number of depositors in the banks-participants of the system of compulsory deposits guarantee is 14.5 million people and the average amount of deposits is 180 thousand tenge (1157 USD).

**Russian Federation:** The Federal Law "On the insurance of deposits of private persons in the banks of the Russian Federation", issued in December, 2003 [9] has provided the necessary legal basis for the state protection of the depositors' interests and has established legal, financial and organizational bases for the effective functioning of the deposit insurance system. Today the legal basis of the Bank of Russia establishes the assessment methods of the bank financial stability; provides transparency of the evaluation of banks complying to the requirements of participation in the deposit insurance system; provides openness of the process of consideration of banks petitions on the appeal and decision making on the banks compliance with the required criteria for acceptance into the deposit insurance system [10, 11, 12]. The Russian deposit insurance system is financed by means of advance method. Since October, 2008 the limit of insurance indemnification was increased (up to 700 thousand rubles) and 10% franchise reduction was cancelled [13].

The conducted analysis of the deposit insurance systems allows to divide them into 3 types: 1) governed by the state (most countries); 2) governed by the private (Austria, Argentine, Luxembourg, Lichtenstein, Malaysia, Moldova, Italy, Finland, France); 3) mixed system. Also the analysis shows that the deposit insurance system positively influences on the stability of a separate bank as well as on the banking system worldwide. At the same time there is a strengthening of the market discipline and the banks' financial development. On the other hand, if the undertaken risks don't lead to the financial losses and if they are carefully controlled, the deposit insurance system will be able to provide long-term stability for the bank [14].

Theoretical investigations show that the deposit insurance system contributes to the moral risks' appearance that can be expressed in two forms: 1) protection of depositors can reduce their watchfulness while choosing a bank; 2) knowing the fact that the deposit outflow is hardly possible, owners and bank managers can take the additional risks while placing assets, decreasing the level of capital and liquid reserves.

In the world practice of deposit insurance the main mechanism of minimizing possible negative effects of moral risks was the proportional insurance and the system of differential rates for insurance payments, which are calculated individually for each bank and depend on the risk level (we mean the organization of deposit insurance system, when the participation in the insurance system turns out to be more expensive for risk-tended banks than for traditional ones). The mechanism of proportional insurance (franchise) presupposes that in case of occurrence of the insured event a certain part of the deposit sum per one person must be indemnified. By means of theoretical researches it was stated that this mechanism motivates depositors, who preserve the risk of loss a part of their savings. Today the countries, which have ever used the proportional insurance mechanism, they consider it ineffective and don't use it any longer. At the same time, the geography of the countries where the system of differential rates for insurance payments is used, is broadened [15].

It should be noted that the existing systems of differential payments differ, first of all, by their composition and by number of parameters, which are used for the evaluation of bank risks and degree of their differentiation for levels of insurance payment rates [16]. At the same time the world experience shows that the system of insurance payments which are differentiated according to the level of risk, is unacceptable for all countries. For example, the General Guide for the Creation of systems with the differential payments founded by the International Association of Deposit Insurers states that the adequate accounting and the financial statement which displays the real banking risks are the necessary condition for the effective work of such system.

As a first step in Russia towards the decreasing of the possible negative moral risks we suggest the establishing of increased contributions to the deposit insurance fund for banks, which use "non-market" interest rates for deposits. The mechanism suggested by the Russian Federation's Deposit Insurance Agency is considered as a prototype of the differential deposits insurance system. Its use in combination with the improving of the banking supervision will allow minimizing the moral risks at increasing of the insurance indemnification [17].

## CONCLUSION

1. World crises influence the banking sphere and, vice versa, the banking sphere often generates crises. An effective tools used in banking systems of each country were created in order to restrain banks' bankruptcy and to prevent the decreasing trust to the banking system in common. It is the deposits insurance system. Initially it was aimed at the protection of credit organizations from the funds outflow, but later its social significance became apparent, i.e. funds protection of bank clients.

2. Deposit insurance systems showed their effectiveness in all economically developed countries, contributing the involvement of citizens' savings into the real sector of economy.

3. The comparative analysis of the legislation on deposits protection shows the goals' and principles' unity that is the basis for the deposit insurance system functioning in the USA, Europe and CIS countries [18].

4. The policy of guarantees extension can stop the depositors' panic during the banking crises. However, depositors' trust depends on financial abilities of the government, which are aimed at fighting of systematic untenability. Honohan's and Klingebiel's researches based on the data of 40 world financial crises [19] show that the unlimited guarantees for deposits, support of the liquidity, regulation and supervision can increase budget expenditures, related to overcoming the banking crisis.

5. The protection of deposit insurance system functioning creates the possibility of its multiple use in the future. But on other hand, expectation of the constant guarantees can undermine market discipline in the long-term perspective and can destabilize the financial system.

6. Deposit insurance system should be a part of a stable financial system. Deposit guarantee system can decrease the consequences of the financial instability.

7. It is necessary to develop the effective deposit insurance systems in order to support market discipline and to minimize the increasing the risks of credit organizations.

8. Reforming of the deposit insurance system will be a difficult task, if the banking stability problems are not solved. There are several methods of adequate evaluation of the insurance fund. The common element of these methods is the definition of potential losses/damages of the deposit insurance fund. The most widespread approach is the study of the former experience concerning the banks bankruptcy. A lot of countries with the cash reserve use this approach [20]. It should be noted that the participation in the deposit insurance system is more expensive for the banks which tend to risks in comparison with the traditional banks.

9. The issues of interaction of the state and market entities (including state and banking sectors) need further theoretical and practical researches with the purpose of generalization and developing the possible ways to overcome economic crises. Creation of the effective deposit insurance system must be based on the: 1) permanent evaluation of the economy and banking system; 2) effective management of the entities, who are the part of the financial system safety; 3) sustainable system of the prudential regulation and supervision; 4) improvement of the legal base of the accounting and order of informational disclosure for indemnification forms which are financed by the government.

## DISCUSSION

1. Anti-crisis banking measures should be developed for each country individually, since banks' bankruptcies can be turn into the global uncontrollable banking crisis. This crisis can lead to the forced expropriation of bank deposits and to the destruction of the whole banking system.

2. It is necessary to solve problems of risks management in order to prevent the development of the world banking crisis on the basis of effective creation of deposit insurance systems.

3. The analysis of the tendencies of deposit insurance systems shows necessity of compulsory participation of all country's banks in this system with the providing of differential insurance payments, which should foresee a difference in rates of assessment in order to stimulate banks to reduce risks. It will provide the stability, increasing of the trust and developing of the general reliability system.

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# MOTORIZATION INDEX AS A CAUSAL FACTOR OF NATIONAL ECONOMIES' POTENTIAL COMPETITIVENESS WITH THE GDP PER CAPITA CRITERION

Nikolai Dubenetskiy, PhD in Economics, Associate Professor,  
Irina Kalinovskaya, PhD in Technical Sciences,  
Ekaterina Chukasova-Ilyushkina, PhD in Technical Sciences, Associate Professor,

*Vitebsk State Technological University, Republic of Belarus*

**Abstract:** *In our study of the causal connection between the criterion and factors of national economies' competitiveness, the casual significance of motorization index (i.e. ratio the number of vehicles to the number of population in country) has been proved. As a particular criterion of national economies' competitiveness, authors took the indicator of GDP per capita, calculated at purchasing power parity (PPP). Using this criterion, rating of national economies' potential competitiveness has been built for any country to increase the real and potential competitiveness of the national economy. Increasing the potential competitiveness requires funding of capital-intensive logistic projects that could be implemented in the long term (over 5 years).*

**Keywords:** *motorization index, national economies' competitiveness, index GDP per capita, competitiveness index, purchasing power parity (PPP).*

## INTRODUCTION

Evaluation of the national economies' competitiveness is a necessary element of modern research programs of famous influential UN structures and "independent" international agencies. It is assumed that the competitiveness index will be used by states that seek to eliminate obstacles on the way their own economic development, as a tool for the analysis of problematic issues in their economic policies and development strategies to achieve the sustainable economic growth.

The *purpose of our research* is to establish a causal connection between the criterion and factors of national economies' competitiveness and the quantitative measurement of this connection.

## MATERIALS AND METHODS

In modern methodologies, distinction of criteria and factors of competitiveness are absent often. E.g. the World Economic Forum (WEF) defines national competitiveness as the ability of the country and its institutions to ensure the stable economic growth that would be sustainable in the medium term [3]. Authors emphasize that countries with a high indicators of national competitiveness tend to provide a higher level of well-being of its citizens.

However, when the criterion of national competitiveness is qualitatively determined, researchers are silent on quantitative indicators, which reflect the stability of economic growth. The reason is that competitiveness index is based on the subjective-empirical synergy of competitiveness factors.

Researchers of the World Economic Forum include next elements to these factors: 1) quality of institutions; 2) infrastructure; 3) macroeconomic stability; 4) health and primary education; 5) higher education and professional training; 6) goods and services market efficiency; 7) labor market efficiency; 8) financial market development; 9) technological development level; 10) size of the domestic market; 11) companies' competitiveness; 12) innovative potential.

Integral competitiveness index of the national economy is built on the basis of expert assessment of each factor, and then the ranking of national economies is formed. But this approach is subjectively hypertrophied; it gives unlimited right for authorial voluntarism.

## RESULTS

To distinguish the criterion and factors of competitiveness it is methodologically important to highlight two scientific aspects.

Firstly, this approach gives possibility to use the potential and real competitiveness categories. When measuring quantify the competitiveness criterion, it is possible to get an idea of the real competitiveness of national economies. When comparing the real indicator of competitiveness with the theoretically expected indicator, it is possible to make conclusions on causes of discrepancies.

Secondly, a quantitative measurement of competitiveness criterion gives the possibility to use correlation analysis, which allows estimating the empirical scientific importance of subjective authorial perceptions of any factors' influence on the competitiveness criterion.

The main stream in modern methods of economic and statistical analysis of the regional economies' competitiveness is the desire to build only one integral index of competitiveness. This approach is contrary to the principle of comparative advantage, theoretically grounded by D. Ricardo in the first quarter of the XIX century.

Usage of the integral competitiveness index ignores the relative competitive advantages of the one regional economy in relation to the other. For instance, one country may have advantages in the natural resources' structure and stock in relation to the other country, when losing its productivity at the same time.

In our research the particular criterion of national economies' competitiveness is the indicator of GDP per capita, calculated at purchasing power parity (PPP) in USD. *Ceteris paribus* this indicator is the most important in terms of the material well-being of the population; therefore it takes undoubted interest for the government of any country regardless of its political system and regime.

Distribution of countries by indicator of GDP per capita leads to certain conclusions on the real competitiveness of national economies. Dynamics of GDP per capita over the past 50 years reflects the stability of differentiation of this indicator between East and West, North and South. Naturally, the question arises on the reasons for such differentiation.

Neoclassical theory defines a labor, ground and capital as a basic factors determining the value of real GDP. Each of these factors is not reducible to the others; they are accurately localized. However, the quantitative measurement each of these factors is an important statistical problem. The essence of this problem is the extreme heterogeneity of elements that should be summarized in the framework each production factor.

In our opinion, causally significant in relation to GDP per capita is a factor, which we defined as the motorization index (i.e. ratio of the number of vehicles to the quantity of population). Contrary to stereotypes, own car is not a consequence, but the premise of the personal, and then the public welfare. G. Ford understood this fact very well, that's why he organized mass car-production in the USA, as well as their purchases' lending. In case of any original productive infrastructure, available vehicles increases the competitiveness of all national economy' sectors, allowing to reach distant sources of raw materials and energy resources. Motorization is a powerful factor of economic growth of any economy. There is no market without cars; there is no labor or capital mobility; there is no effective private entrepreneurship; there are no opportunities for deep specialization and productive cooperation.

To prove the thesis on the casual importance of motorization index in relation to the index of GDP per capita we used single-factor correlation model. Its main task is to determine the correlation coefficient ( $r$ ) between motorization index and the actual value of GDP per capita in purchasing power parity in USD. 50 countries have been included to the sampling, whose total area is 90% of the land area. We used statistic data of 2008-2013.

Motorization index ( $MI$ ) is calculated by formula (1), where  $V$  is the number of all kinds vehicles in the country;  $P$  is population in the country;  $k$  is highways quality index.

$$IM = \left( \frac{V}{P} \right) \cdot k \quad (1)$$

Highways quality index explains the significant difference in the vehicles' speed while driving on the highways and dirt roads. The assumption is that driving car on the dirt road is a half the speed on the highway.

To calculate the highways quality index we propose the formula (2), where  $L$  is the total length of roads;  $L_D$  is the length of dirt roads.

$$K = (L - 0,5 \cdot L_D) / L \quad (2)$$

The variation range of highways quality index is from 0.5 to 1. If  $k = 0.5$ , it means that all roads in the country are dirt. In case of dirt roads' absence (all roads are highways)  $k = 1$ .

Motorization index has been calculated absolutely and relatively. Relative value is obtained as a ratio the absolute value of motorization index for each country to the absolute value of Russia's motorization index.

The relative values of GDP per capita in our research were obtained as a ratio the actual values of this index for each country to its absolute value for Russia.

The relative values of motorization index and GDP per capita are used to determine the correlation index and building of regression line. Correlation analysis has showed a high dependency between motorization index and GDP per capita, i.e.  $r = 0,857$ .

Using the regression equation (3), potentially attainable level of GDP per capita was calculated, where  $Y$  is relative value of the potential level of GDP per capita;  $r$  is the correlation index between motorization index and GDP per capita;  $Z_X$  is Z-score of motorization index;  $S_Y$  is standard deviation of real GDP per capita;  $M_Y$  is average value of real GDP per capita in its relative terms.

$$Y = r \cdot Z_x \cdot S_y + M_y \quad (3)$$

Using the potential level of GDP per capita as a criterion, we built rating of potential competitiveness of national economies. To construct the real ranking of national economies' competitiveness we should use the real value of GDP per capita at PPP in USD. The discrepancy between the ranking of countries on the potential and real competitiveness is quite natural. The linear regression equation implies a deviation of GDP real per capita from potential. This deviation in the context of the national economies' competitiveness can be interpreted as:

- 1) if real GDP per capita deviates from potential in the range (-10%, + 10%), the scale of such variation can be considered a normal sign of real competitiveness;
- 2) if real GDP per capita is less than the potential more than 10%, such a deviation can be seen as a sign of low real competitiveness of the national economy;
- 3) if real GDP per capita overcomes potential more than 10%, then such excess will be a sign of high real competitiveness of the national economy.

Assessment of real competitiveness of national economies is shown in *Table 1*.

## DISCUSSION AND CONCLUSIONS

Typical causes of low real competitiveness are ethnic, religious and civil wars, high level of banditry, absence of seas access, poor set of mineral deposits, low quality of exported goods and so on.

As characteristics of high real competitiveness we can define civil peace and consensus, low level of criminality, richness mineral wealth with strategically important minerals, seas access, high-quality goods for export etc.

It is actually for any country to increase the real and potential competitiveness of the national economy.

Ceteris paribus the increasing the real competitiveness is achievable in the medium term (up to 5 years). Increasing the potential competitiveness requires funding of capital-intensive logistic projects that could be implemented in the long term (over 5 years).



Table 1

## Real competitiveness evaluation of different countries

Nr.	Country	Real GDP per capita in PPP, USD	Potential GDP per capita in PPP, USD	The relative deviation of real from potential GDP per capita, %	Real / actual competitiveness
1	2	3	4	$5 = [(3-4)/4] * 100\%$	6
1	Norway	60534	35555	70	high
2	USA	46817	43282	8	normal
3	Switzerland	45549	35881	27	high
4	Netherlands	42887	35881	20	high
5	Denmark	39591	37532	5	normal
6	Austria	39569	38185	4	normal
7	Sweden	39284	26034	51	high
8	Iceland	39036	36044	8	normal
9	Canada	38820	30295	28	high
10	Australia	38092	35555	7	normal
11	Finland	37786	32762	15	high
12	Germany	37651	36534	3	normal
13	Belgium	36879	34576	7	normal
14	UK	36195	36044	0,4	normal
15	France	34050	39000	-13	low
16	Italy	33934	46238	-27	low
17	Spain	33294	41141	-19	low
18	Greece	29564	30295	-2	normal
19	Czech Republic	25062	33251	-25	low
20	Saudi Arabia	24877	16330	52	high
21	Russia	20387	19979	2	normal
22	Poland	18594	28318	-34	low
23	Mexico	15614	15331	2	normal
24	Belarus	15488	19775	-22	low
25	Kazakhstan	15435	15005	3	normal
26	Romania	14892	12049	24	high
27	Bulgaria	13982	24709	-43	low
28	Argentina	12529	15005	-16	low
29	Brazil	10380	11070	-6	normal
30	Iran	9666	10907	-11	low
31	South Africa	9533	9093	5	normal
32	Peru	8625	5301	63	high
33	Ukraine	8163	12864	-36	low
34	Angola	7893	4485	76	high
35	Algeria	7383	11723	-37	low
36	Colombia	7148	5301	35	high
37	China	6013	5301	13	high
38	Egypt	4938	5301	-7	normal
39	Bolivia	4490	5464	-18	low
40	Indonesia	3923	7115	-45	low
41	Mongolia	3124	5464	-43	low
42	India	2891	3996	-28	low
43	Mauritania	2072	4974	-58	low
44	Sudan	2063	4811	-57	low
45	Chad	1693	3343	-49	low
46	Moldavia	1486	12436	-88	low
47	Mali	1091	3507	-69	low
48	Ethiopia	787	3343	-76	low
49	Niger	620	3343	-81	low
50	Congo	304	3405	-91	low

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# CONSUMER BEHAVIOR IN A MIRROR OF ECONOMIC SECURITY OF AGRIBUSINESS

**Sergij Gasanov**, PhD in Economics, Associate Professor,  
Honored Economist of Ukraine,

**Sergij Petruha, Nina Petruha**

*Academy of Financial Management  
Ministry of Finance of Ukraine, Kiev, Ukraine*

**Abstract:** *The agricultural sector has leading position in the Ukrainian economy. In recent years the intensifying competition among producers has been noticed also on territories far from the conventional agricultural centers. It is connected with the expansion of national and foreign agro-industrial enterprises that caused a fierce struggle for the distribution networks, which can lead effectively to final consumer, as well as an increasing of the sensitivity of marketing (sales) to the company policy in the sphere of its own economic security. The latest trends of falling effective demand of Ukrainian end-consumer are forcing us to approach more carefully to forecasting and planning "food basket". Also this is due to simultaneous drop in exports of food to the Customs Union countries, especially to the Russian Federation – within 6 months of 2014 the export of Ukrainian agricultural products to Russia amounted USD 655,5 million, which is on 31.4% or USD 299,5 million less than in the same period in 2013. Furthermore, there is change in Ukrainian consumers preferences under the influence of economic factors (including crises), as well as under impact of changes in lifestyle of the modern person under the influence of the pro-European culture of consumption goods. As a consequence, the rational reaction of the population on sharp rise in prices was the increase of the average propensity to consume only in the period before 1995. But In relatively stable price period (1995-2006) this phenomenon was not observed which has led to increasing requirements to reliability and reasonableness of prognoses concerning of sown areas, based on typologization of consumer behavior during the analyzed period (1966-1991 and 1991-2006) with subsequent approximation on the economic security of agribusinesses.*

**Keywords:** *agricultural sector, foodstuffs, consumer behavior, economic security*

## INTRODUCTION

Variability of the environment where agri-business of Ukraine's economy operates is a combination of external and internal factors as well as the variety of their interaction. High competitive ability of these enterprises and manifestation of risk situations reduce the economic security of both agricultural enterprises and agro-processing enterprises. Such properties of the world economy as opened borders of the national economies, favorable natural factors in different economies and international movement of resources, goods and services are intensifying their competitive ability. One of the most important external factors that are directly concerned with an economic security of agrarian enterprises is a consumer behavior.

## MATERIALS AND METHODS

Scientific papers of CIS authors [1, 2, 4], as well as international organizations' statistics (FAO and the OECD), are devoted to the questions of consumer behavior evolution as a factor affecting the economic security of the agribusinesses. But at the same time: 1) mostly, the fundamental studies deal with solving a task of dividing the population to some classes or defining line (level, border) between the different layers with following discussion around the methodological tools for the projecting of results on the level of economic security of agricultural enterprises. It comes with the use of so-called "composite index"; 2) applied

researches are dedicated to the increasing of representativity initial statistical data of the living standard regarding the general aggregate of data in the context the factorization of correlation field of the economic security level of agribusinesses, while forgetting about the influence of consumer behavior on the private and multiplicative sources of its definition.

The aim of our research is to develop rational approaches to the consumer behavior and to find variants of strategically effective investment decisions which affect positively to the economic security of agribusinesses.

## RESULTS

There are well-known theoretical models that help to determine the company's economic security dependence from the consumer's behavior: the Keynesian and Classical. In Keynesian model a consumption function includes two parts: 1) an autonomous and 2) variable, which depends on the user income [3]. It is calculated by the formula (1), where  $C$  is consumption;  $C_a$  is autonomous consumption;  $MPC$  is the marginal propensity to consume;  $Y$  is income.

$$C = C_a + MPC \times Y \quad (1)$$

By Keynes law [3], the consumption increases according to increasing the population's income; however, the degree of income' changes (i.e. marginal propensity to consume) is reduced and the degree of savings changes increases. It means the average propensity to consume decreases with the increasing of the population's welfare. By Keynes, this dependence between the growth of income ( $Y$ ) and consumption ( $C$ ) is the fundamental psychological law [7]. A part of consumption ( $C$ ) in the income ( $Y$ ) is determined by consumer behavior, i.e. by means of habits, traditions and psychological tendencies. But the rest of this part ( $S$ ) arises and increases with the increasing income (*Table 1*).

Table 1

Dynamics in real income, consumption and savings of the population

Real income ( $Y$ )	Consumption ( $C$ )	Savings ( $Y - C = S$ )
100	100	–
200	160	40
300	210	90
400	250	150

However, according to Kuznets' researches [9], this law needs to be adjusted. On the basis of statistics Kuznets showed that in the long-term perspective (over 10 years) the average propensity to consume is not reduced with increasing of income. F. Modigliani and M. Friedman have proposed own law of consumption; its essence reflects the contradictoriness of dynamics of the average propensity to consume in the short and long-term. Their law of consumption is based on the ideas of the Fisher's theory, i.e. the theory of the life cycle and intertemporal choice. Proposed by F. Modigliani and M. Friedman equations assume [8; 10]: 1) the hypothesis of intertemporal consumer's choice, which is presented by equation (2), where  $C_1$  and  $C_2$  are consumption in the first and second periods of life;  $Y_1$  and  $Y_2$  are the consumer's income in above-mentioned periods;  $r$  is a percentage rate;  $1 / (1 + r)$  is a discount multiplier; 2) life cycle is defined by the equation (3), where  $\Omega$  is the property;  $Y$  is the labor income;  $\alpha$  is the marginal propensity to the property's consumption;  $\beta$  is the marginal propensity to the income's consumption; 3) function of the stable income is calculated by means of formula (4), where  $\mu$  is the index that determines the proportion of regular consumable income;  $Y^n$  is the constant income.

$$C_1 + \frac{C_2}{1+r} = Y_1 + \frac{Y_2}{1+r} \quad (2)$$

$$C = \alpha - \Omega + \beta Y \quad (3)$$

$$C = \mu Y^n \quad (4)$$

These equalities define the behavior of the "rational consumer". Such consumer tries to maintain the same level of consumption throughout the life cycle, providing consumption by loans and savings. According to F. Modigliani and M. Friedman, the rational behavior is common to all consumers.

Thus, they form the supply, that means the common behavior of people and organizations in macroeconomics is also rational. The estimating criterion of such rationality is dynamics of the average propensity to consume *APC*, i.e. the proportion of used income to the long-term consumption. In the modern market economy this theory of the life cycle and permanent income is interpreted as an idea of the relative constancy of the traditional consumption over a lifetime. For example, in American researches on the national income [2] this ratio looks like a formula (5), where *Y* is the income; *C* is the consumption; *S* the is savings.

$$Y = 0.75 C + 0.25 S \quad (5)$$

However, in "young" market economies (including Ukraine) a rational behavior is not formed yet. The data shown in *Table 2* prove it. The rate of growth of the average propensity to consume is accelerated for different reasons (the legacy of command administrative system and the distrust to the credit and financial systems). It is known that big deficit was observed for the industrial goods as well as for food products (meat products, cheese products, fish products and seafood, citrus, etc.) in the command administrative system. Increased consumption during the Brezhnev's era (10<sup>th</sup> and 11<sup>th</sup> Five-Year Plan) wasn't economically feasible, as the population of the country consumed more, than it was produced in a planned system. Moreover, such economy was protected from the market by means of "Iron Curtain". Since the 70s of XX century the rate of production slowed; in the early 80s this process already has stopped, but the increasing consumption is continued. Quite high level and rate of growth of household consumption were supported by means of oil export. Since 1981, when oil prices were decreased, the petrodollars flow was reduced and USSR was faced a threat of food disaster. Asserted at this time "Food Program" hasn't been fulfilled.

Table 2

Dynamics of the average propensity to consume in the USSR and Ukraine

Indicator	Years			
	1966-1975 [5]	1976-1984 [5]	1985-1994 [5; 6]	1995-2006 [6]
The average propensity to consume	0,7	0,76	0,80	0,87
The growth rate of the average propensity to consume, %	–	+5,56	+5,26	+8,75

Socio-economic losses that are inevitable during the transition to a market economy, resulted in changes at the consumer market, including food market. Big flow of commodities gradually has filled domestic deficit. It was reflected on the increase in the average propensity to consume by 8.75% in 1995-2006 compared with the previous decade.

Irrational behavior is determined by stereotypes of the "Soviet thinking" when the great importance have subjective and objective factors in the consumers reaction to the increasing of prices. From the one side, consumers' behavior is explained by market relations undevelopment, from the other side, it leads to the low level of trust in the country.

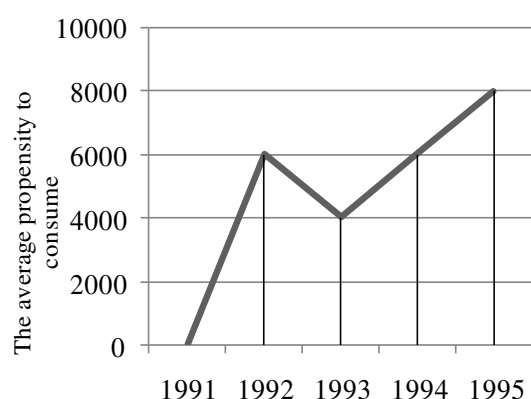
In countries with established market traditions the consumer behavior is rational. If the inflation is increasing, the consumers behavior justifies the "effect of savings", which is described by formulas (6), where *APC* is an average propensity to consume; *MPC* is a marginal propensity to consume; *APS* is an average propensity to save; *MPS* is a marginal propensity to save [1]. In other words, the population consumes more than receives as the current income and thus, moves the consumption in time. It is possible when such conditions take place: 1) absence of the trade deficit; 2) population has savings; 3) people can take loans.

$$\begin{aligned} APC &> 1; MPC > 1 \\ APS &< 0; MPS < 0. \end{aligned} \quad (6)$$

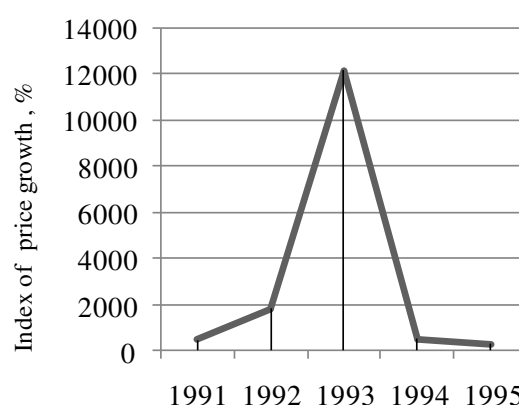
The trade deficit and bankrupt of the monetary system show that "effect of savings" doesn't work even in times of hyperactive growth of prices (in Ukraine from 1991 to 1995); it is presented in the Table 2. The economic crisis that began in 1991 has led to the decreasing of industrial production. That is why depreciated money couldn't be invested in the industrial durable goods. The savings have been lost due to the bankruptcy of the Soviet monetary system. Banking assets were not available to everybody. However, certain well-informed leading members of the ruling party used the possibility to take advantages from the access to banking resources.

The rate of infusion investments ( $I$ ) is connected with the indicator of economic security. It is theoretically supposed that savings ( $S$ ) are equal to the investments ( $I$ ); i.e.  $S = I$ . In practice the rate of investment growth lags from the offer of funds at the capital market. However, the savings are the main source of bank credit, i.e. it is the stimulating factor of the economic recovery. But conditions that determine  $S$  are affecting the  $I$ . As a regulator of economic growth, investments have such functions as increasing of demand for means of production and labor as well as increasing the total supply of goods. If consumption is effected on the investments, it threatens by reduction of  $GDP$ . It means, "Discounting of the future" occurs, i.e. the future' pinching for the benefit of nowadays as M. Bunkina and V. Semenov have noted [1]. At the same time resources are unclaimed, including labor. In particular, reaction to the depreciation of the payments and the loss of trust to the governmental monetary institutions are factors, which reduce consumption and savings.

According to data of the Table 2 since 1992 in our country  $MPS$  has been decreased; it is a reaction to the depreciation of payments and the loss of trust to the governmental monetary institutions, while  $MPC$  is growing. The marginal propensities react quickly to changes in the income, but the strong factors of the distribution are characterized by average propensities. In the behavior of domestic households and population such an atypical for Western consumers' way appeared to preserve savings in the foreign currency. The savings in the currency mean a loss of the resources in the chain "income – costs", therefore crisis payments of import-oriented economy is escalating and inflationary expectations are intensified. If the consumers' reaction to the rising prices of food products is denoted graphically in 1991-2006 and separated into 2 intervals (1991-1995 and 1996-2006), we will obtain the situation shown in the Figures 1-4.



**Figure 1: Graph of APC in 1991-1995**

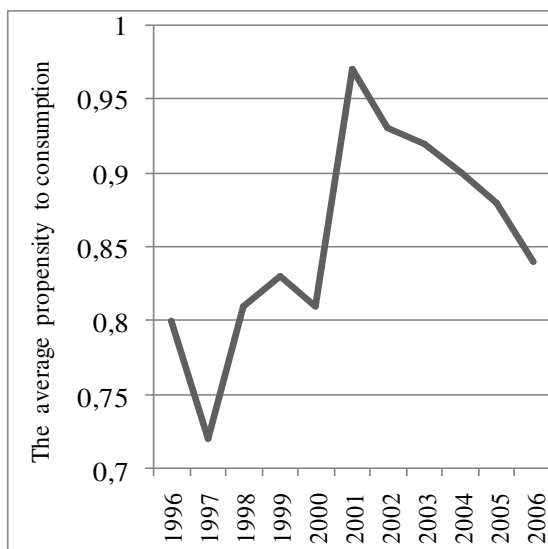


**Figure 2: Graph of price growth index of food products in 1991-1995**

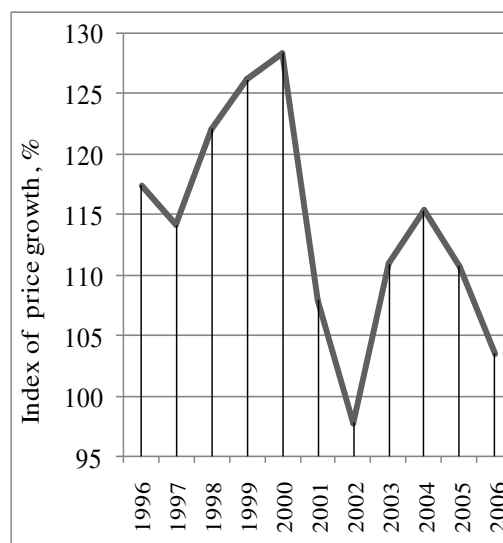
## DISCUSSION AND CONCLUSIONS

As is obvious from the graphics system in general a rational reaction of the population to rise in prices was the increase of the average propensity to consume only before 1995. In quite stable price period this phenomenon is not observed. We have checked mentioned interpretation

through regression analysis. Results confirmed a very weak connection between the function "average propensity to consume" and the factor "growth index of food prices" ( $R^2 = 0,071$ ). It confirms the hypothesis of the absence of rationality in the behavior of Ukrainians. Such uncertainty in consumers' behavior doesn't predict the growth and economic security of the country as a whole and agribusiness in particular.



**Figure 3: Graph of the APC in 1996-2006**



**Figure 4: Graph of price growth index of food products in 1996-2006**

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# THE EVOLUTION OF REQUIREMENTS FOR SPECIALISTS ON THE LABOR MARKET

**Olga Gorbunova**, PhD in Economics, Associate Professor,  
**Yuliya Shestakova**, Master in Economics,  
**Julia Gorbunova**, Assistant,

*Tambov State University named after Derzhavin, Russian Federation*

**Abstract:** *The process of developing requirements for a specialist on the labor market in the social progress conditions is discovered in our article on the basis of historical analysis. Authors have characterized the peculiarities of different types of society with marking the requirements for the employees on each stage of social development. Also the main features to employees' development are described. Special attention is paid to the formation of qualifying criteria, which each company should have for specialists development on the modern stage of the informational society. Accent is done on the necessity to get the fundamental knowledge for employees' development.*

**Keyword:** *specialists, modern employees, traditional society, information society, post-industrial society, qualification, progress, knowledge fundamentalization, labor market*

## INTRODUCTION

Social progress is going by overcoming three stages, corresponding to the three most important types of society, i.e. pre-industrial, industrial and post-industrial.

The separation of these stages takes place according to the nature of industrial relations that underlie each of the stages. *Traditional (pre-industrial)* society is a society which is based on the agrarian way of life (predominantly the subsistence farming), on the hierarchical structure of class relations, having a slow moving construction with traditional methods of socio-cultural regulations. This type of society is characterized by hand labor with the extremely low rates of economic growth and minimal satisfying people's needs. *Industrial society* is a society which is based on the industrial process of farming, with a flexible, dynamic and modified structure, with the method of socio-cultural control that combines personal freedom and public interests. *Post-industrial society* is a society that has the information base to replace the production (in a traditional society) and recycling (in an industrial society). Nature's products come from the information's acquisition and recycling, as well as the priority development of the services (instead of the traditional agricultural society and manufacture in the industrial) [5].

The information is the foundation of the post-industrial society. It allowed to identify a fundamentally new type of society, i.e. informational society.

Thus, the informational society is a concept which is based on a social development factor and using the information. Its basics are described by J. Brzezinski, D. Bell and A. Toffler. Each of the above-mentioned types of society imposes special requirements on the individual as a member (specialist) of the employment relations.

## MATERIALS AND METHODS

During our research the method of comparative analysis of historical stages of the society development was used. Based on this analysis and on the identification the main features of the labor market on the each stage of social development the main requirements to a specialist and a set of qualifications were formalized. Observation and description of the modern social development allows creating a "new" way of specialists' activity within the framework of the informational society.

## RESULTS

In general, traditional society is characterized by the dominance of collective interests over private on background of the predominating interests of the existing hierarchical structures.



Individual abilities were not appreciated as their position in the hierarchy was assessed [3]. Industrial period of social development has allowed satisfying the human needs majority. This period witnessed the transformation of qualitative changes. A new technologies implementation has entailed changes in the nature of individual labor, in the providing of new equipment for employees and new opportunities. The movement of social and economic processes has made unviable the traditional principles of employees in the changed circumstances for different fields, this concerned first of all the educational sphere and professional training of employees. Due to this need was formed for a theoretical analysis of understanding the nature of work and solutions of the vocational guidance problems [3].

Thus, according to A. Toffler industrial society has required workers, who are almost independent of the scope their work and "unconditionally will follow instructions coming from superiors" and who "will constitute the unified workforce, where is necessary to combine an electromechanical technology and production lines for the manufacture"[1]. Due to such circumstances large-scale training has promoted the acquisition of knowledge, as well as the punctuality, obedience and readiness to do mechanical (monotonous) work [1]. Each deviation from the established norms and rules was punished; the manifestation of the creative initiative was seen as a threat the existed way of things.

S. Mihneva in her article identifies the following employee characteristics of the new type of the information society [4]: 1) high professional level, creativity, innovativeness, ability to see the flaws and to find ways to overcome them, desire to improve the employees' intelligence and their training; 2) new economic concept leads to the determination the best ways to raise the enterprises' efficiency; 3) technological mastery to use modern IT and project management; 4) high technical and technological culture focused on the most rational use of economic and natural resources; 5) acquisition of a new organizational and managerial knowledge for the effective work organization as well as an effective team building etc.; 6) development of special psychological qualities, i.e. mindedness, conscientiousness, diligence, employees loyalty, psychological stability and so on.

Thus, professional activity of employees in the information society has correspond with [7]: 1) promote the continuing growth of employees' professional knowledge, competencies and skills that can be useful in their work; 2) ability to organize professional work competently as for employees as well as for the company; 3) development of the professional thinking and professional liability. In terms of personal qualities the specialist should [6]: 1) promote the growth of corporate cultural knowledge; 2) recognize the priority of the human values; 3) form a deep human responsibility; 4) look for ways to improve the society's culture according to the changing paradigms.

According to Daniel Bell, post-industrial society promotes the occurrence of intellectual human class. Its foundation is the capability to prepare representatives at the political level to act as consultants, experts or technocrats [2].

High-tech production makes possible a creative and intellectual work, forming in this way the newest type of skilled employees to serve modern technique according to their professional education.

All above-mentioned allows concluding that the informational society helps to change the socio-professional image of the employee and widens the boundaries of special skills. Employees have reached a higher level of managing modern high-performance machines, not just supplementing them any longer. The newest professions have extended beyond the narrow specialization and require special knowledge, competencies and skills to solve complex industrial problems. Modern business has to be an adaptive that quickly takes hold of a new technique and a new professions.

## **DISCUSSION AND CONCLUSIONS**

Thus, first and foremost, the fundamentalization of employees' knowledge must be among the requirements to the modern specialists. It enables to develop the effective strategies for the scientific and technological progress [8].

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# ANALYSIS OF FACTORS INFLUENCING THE INVESTMENT ATTRACTIVENESS IN KALUGA REGION

**Natalia Gubernatorova**, PhD in Economics, Associate Professor,

*Kaluga Branch of the Financial University  
under the Government of the Russian Federation*

**Irina Sergeeva**, PhD in Economics, Associate Professor,  
Head of the Accounting, Finance and Taxation Department,

*Moscow University of Finance and Law, Russian Federation*

**Abstract:** *The factors that make Kaluga region attractive for foreign investment are investigated in our article. Special attention is paid to the analysis of the index of industrial production in the Kaluga region and the highlighting of the fastest growing industries in the industrial sector. The following groups of factors have been separated and analyzed: factors contributing to increased investment flows into the regional production and constraints on the investment attractiveness of the Kaluga region. The statistics which prove the creating of favorable investment climate is characterized. Accent is done also at the improvement of legislation in the region, contributing the preferences for investors.*

**Keywords:** *investment, regional economics, factors, regional development, industrial production, foreign investment, Kaluga region*

## INTRODUCTION

Modern society under conditions of world integration processes is facing with a large number of economic tasks which fulfillment should provide a favorable environment for economic growth, improving the life quality of the population. One of the methods to achieve this task is to attract investments in the real sector of the regional economy since the rate of investment growth in fixed assets are considered to be an indicator of regional investment significance. Accordingly, the growth of investment attractiveness provides an additional capital inflow and leads to economic growth [6].

Regional authorities due to their high economic activity have increased investment in the economy and contributed to the increased investment attractiveness of their territories over the last several years. Attracting investment to the regions is one of the priority tasks of the Administration of the Russian Federation. In difficult economic conditions the authorities are actively looking for the most effective ways to create in the regions a favorable climate required for the realization of joint investment programs. Creation the favorable conditions for business development and investment and improving the competitiveness of the region are priorities of the economic regional policy [7]. The regional ability to attract investments directly depends on Russia's prestige on the world arena.

## MATERIALS AND METHODS

Thus, in 2012-2013 the total foreign direct investments decreased by 18.3%. In 2012 the reducing of global flows of foreign direct investment amounted to 18.3%, i.e. 1.3 trillion USD. In the CIS-countries foreign direct investment fell by 9.9%. Its reduction was 78 billion USD in Russia. At the same time Kazakhstan and Ukraine, on the contrary, have aroused the interest of investors and increased FDI by 13.4% and 11.5% respectively. Nevertheless, total achievements these countries were not enough to offset the decline in investment in Russia [11].

The number of regions is growing in Russia, where local administrative governmental authorities intensively support and encourage the investment activity. At the same time the list of regions which are leaders in the formation of investment culture and organization of the investment process is formed [10].

Kaluga region is situated in the central European part of the Russian Federation. Every fourth employee works in the industrial sector. Tax revenues from industrial enterprises include about half of all tax revenues in the regional budget. According to Russian statistical service, Kaluga region today has the highest index of industrial production in the country 125% in average. The percentage of big and medium-sized enterprises in the volume of industrial production is more than 90%. Over the past five years the industrial production increased more than twice. Kaluga region is an example of the industrial region with a dominant position in the industry. The percentage of industrial production in the regional structure of economy in the field of high-tech industries is increasing annually. The share of machine-building complex reached up to 63.7%, food production up to 11.2%, steel production up to 7.6% and timber processing complex up to 3.7% [9]. In recent years Kaluga region is among the most dynamically developing regions of Russia. The state of industrial complex has been strengthened by the use of industrial parks and industrial zones. Over the last fifteen years Kaluga region has developed from a depressed region to an area with the best conditions for the development of any business. The clear policy, well thought and based on the international standards of investment ensures the success of the region. Its basic tools are: 1) permanent state support; 2) tax benefits; 3) effective institutions and infrastructure; 4) availability of attractive industrial parks/zones for investors.

## RESULTS

The region became the first to receive loans from The Bank for Foreign Economic Affairs on development of industrial parks, and now all available public-private tools of partnerships are successfully used there. In general, a favorable tax climate for investors has been created in the region. In 2003 reducing of property tax was approved by Law "Corporate Property Tax" in Kaluga region from November, 10, 2003, No. 263-OZ. The tax rate on property has been fixed at 1.1% for the newly created or acquired property. Moreover, from 01, January, 2013 organizations are exempted from taxation on the property with the reconstruction, technical re-equipment, modernization and with the investments: 1) from 10 mln RUB to 30 mln RUB for a one tax period; 2) from 30 mln RUB to 70 mln RUB for a two tax years; 3) over 70 mln RUB for a three tax periods [1]. Also the amendments to the Law "On the reduction of the tax rate on corporate income, payable to the Kaluga region's budget for investors who are doing investments in the Kaluga region" have been adopted on December, 29, 2009, No. 621-OZ. According to the Act, for the taxpayer, who invests in the modernizational program, the tax rate on income is set depending on the amount of capital investments in the reconstruction: 1) from 10 mln RUB to 30 mln RUB 15%; 2) from 30 mln RUB to 70 mln RUB 14%; 3) over 70 mln RUB 13.5% [2].

Investors listed in the Register of modernizational programs of production, may apply a reduced tax rate in calculating the income tax for the tax period, where such capital expenditures have reached an appropriate size from January, 01, 2013 to December, 31, 2015. Thus, the investment attractiveness of the Kaluga region is shown by means of results: 1) dynamic and sustainable regional economy; 2) presence of the largest consumers market in the region (the distance from Moscow to the administrative center of Kaluga region is 180 km; the distance from Moscow to Kaluga region border is 0 km; proximity to the capital is the largest competitive advantage); 3) one of the best investment climate in Russia (according to the World Organization of Creditors, Kaluga region occupies the 1st place in the ranking of investment attractiveness; Kaluga region received the largest grant of the Government of the Russian Federation 2 bln RUB in 2011 and achieved the best results in attracting investment and establishing of modern industries and new jobs; 4) business industries are clear to investors (industrial parks allow to locate the legal environment for the production quickly and clear; they are located in different parts of the area 5 thousand hectares and prepared for the distribution with the adjacent engineering infrastructure); 5) development of the transport and logistics infrastructure (Kaluga region has the necessary infrastructure for a continuous process from the delivery of raw materials to getting the final product by the consumer); 6) complex system of institutions development (favorable administrative environment provides the institutions' development, for example, Kaluga Region Development Corporation is engaged in the creation of industrial parks, Regional Development Agency supports the state advisor, Industrial Logistics is a

company that manages the transport and logistics infrastructure, Agency of innovative development operates for the development of high-tech economic sectors); 7) attractive tax system (legislation of Kaluga region offers tax incentives on income tax and property tax; amount of tax benefits depend on the investment volume); 8) clear strategy for the further development (developing the new economy, oriented on innovation; the investment strategy of the Kaluga region is designed as a continuation of the socio-economic strategy of the Kaluga region development up to 2030 "Person is the center investments"; it is directed to the creation of effective business tools for the regional priorities development; 9) innovative approaches to the vocational education in colleges and universities in Kaluga region; 10) transparent administrative environment (investors receive a complex administrative support, including the reduction and simplification of administrative procedures related to the support of projects; there is legislation governing the tax benefits procedure for investors) [3, 4, 5, 8].

Constraints: 1) overcoming of demographic situation, restraining the growth of the population (stimulating of birth rate and promoting a healthy lifestyle; supporting young and large families; supporting of interregional migration processes); 2) overcoming of staff shortage due to churn in the Moscow-city (creating a more comfortable living environment in the regional centers; promotion of housing construction; creation of jobs for the youth); 3) overcoming of development disparities between the north and south of the area to create an attractive environment for investors in the undeveloped areas.

## DISCUSSION AND CONCLUSIONS

Analyzing the experience of Kaluga region, we can conclude that the significant progress has achieved in the regional development through a systemic approach and proper selection of tools. It contributed the creation of favorable conditions for business, i.e. accommodation into industrial parks; development of the engineering and transport infrastructure; establishment of regional development institutions; development of tax incentives system. In 2012 Kaluga region entered to the region's top-10 rankings [12]. The region prolongs a policy of a comfortable investment climate creation. It is important that climate is favorable for both as for the multinational corporations, as well as Kaluga's enterprises, following the path of modernization. Cluster initiatives have been chosen as the basic model for further regional development.

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# STRUCTURAL AND LOGICAL MODEL OF HUMAN RESOURCE DEVELOPMENT IN THE COMPANY

Viktoriia Hontiuk, PhD-Student,

*Department of Management of Innovative and Investment Activity  
Taras Shevchenko National University of Kiev, Ukraine*

**Abstract:** *Human Resources Development is essential for any company that would like to be dynamic and growth-oriented. The aim, objectives, current measures and the strategy of Human Resources Development are components of HR-Management system. They are related and have many-sided influence on each other. A structural and logical model of Human Resource Development is developed in our article. It helps to realize individual and organizational goals. Author identifies the measures of Human Resource Development in the company and divides them into operational, tactical and strategic levels. This study shows the relationship between purpose, objectives, current measures of Human Resources Development and strategy of Human Resources Management. Based on results, the author concludes that the proposed structural and logical model of Human Resource Development can be used by each company.*

**Keywords:** *structural and logical model, Human Resource development, strategy, HR-management, operational level, tactical level, strategic level*

## INTRODUCTION

Human Resources Development forces employees to contribute effectively and productively of the company's goals and objectives. Therefore Human Resources Development is an important managing tool to ensure success in the company. Thus, L. Nadler and Z. Nadler argued that Human Resources Development is a process to correct employees' behavior within a certain time in a certain conditions [5]. R. Desimone, J. Werner and D. Harris have considered that Human Resources Development is a systematic and a planned by company process to provide its employees with the opportunities to learn a necessary skills and competencies to satisfy current and future job demands [2]. A. Haslinda has considered the Human Resources Development as a process of development and maintenance of existing knowledge, skills, abilities and competencies of employees [3].

A number of Human Resources Development techniques have been developed in recent years to perform the above-mentioned tasks based on a certain principles. Nowadays a scientific justification of Human Resources Development is insufficient. The existing Human Resources Development theories reflect fragmentary the socio-economic aspects of employees' activity. Therefore the *object of our research* is the process of Human Resources Development in the company. The *aim of our research* is to form the structural and logical model of Human Resources Development. In order to achieve the aim of the research the following *specific stages* should be fulfilled: 1) find the connection between the aim, objectives and current evaluating measures of the Human Resources Development process and strategy; 2) identify the effective ways of Human Resources Development; 3) divide the measures of Human Resources Development at the operational, tactical and strategic levels; 4) create an effective model of Human Resources Development in the company.

## MATERIALS AND METHODS

Our research is conducted involving following scientific methods: systemic analysis to identify the measures of Human Resources Development; structural and logical methods to form a model of Human Resources Development in the company. The main purpose and objectives of Human Resources Development are to increase the company's opportunities at the market, to form the effective changes in management, to create the favorable conditions and to provide the capabilities for employees' development. First of all, the aim and objectives

of Human Resources Development should be directed to improve the employees' efficiency. Such authors as M. Lengnick-Hall, S. Lengnick-Hall, N. Andrade and B. Drake have noted that strategic Human Resources Management covers the adopted Human Resource strategies and controls its influence to the performance [4]. W. Bloisi, C. Cook and P. Hunsaker have identified 4 main points to establish the effective Human Resource strategy [1]: 1) analysis of the current state of the workforce; 2) definition of the internal strengths and weaknesses; 3) definition of the external opportunities and threats; 4) choosing the effective way of Human Resource strategy creation. The strategy of Human Resources Management is a comprehensive approach to manage employees, to create the effective workplaces, culture and working environment. The new stage of Human Resources Development involves strategic direction. To create a model it is necessary to consider the current measures of Human Resources Development in the company. The sequence of current and proposed measures improves the staff effectiveness and promotes its development. The proposed measures of Human Resources Development consist of 3 levels: operational, tactical and strategic.

*Operational level* consists of such measures: 1) improving the system of labor organization and work conditions; 2) rationing of the labor; 3) providing the transparency, high responsibility and accountability for the tasks performance; 4) professional ethics' control; 5) providing the employees' awareness.

*Tactical level* includes: 1) labor planning, monitoring of the functional responsibilities of employees, productivity forecasting, implementing a new software for the labor organization; 2) improving of the staff hiring; 3) staff development, i.e. expanding of the policy of employees' training, development, motivation and stimulation; 5) improving the stimulating system through the employees' effective work, achieving of high results, implementing of effective tools for moral encouragement and spreading strict disciplinary measures; 6) providing of the employees' evaluation and attestation (implementing of the innovative evaluation methods, formation a common base of criteria and indexes, ensuring of the simplicity of staff evaluation and the staff audit); 7) studying and analyzing the results of the staff evaluation; 8) creating an effective system of employees' education, training and retraining; 9) planning of the employees' careers; 10) forming and implementing of the staff reserve based on pre-selection mechanism; 11) organization of the staff adaptation system; 12) improving of the organizational structure.

*Strategic level* of Human Resources Development includes: 1) improving the social development programs; 2) improving the adaptive capacity and the innovative skills of employees; 3) updating the professional training standards; 4) implementing the personal staff security and their working stability; 5) providing the organizational development through increasing the decision-making influence; 6) developing the HR potential; 7) effective using of human resources; 8) using of opportunities, avoiding of threats, developing of strengths and reducing of weaknesses in the company; 9) corporate events to improve team spirit; 10) creating a favorable environment to increase the intellectual human resources.

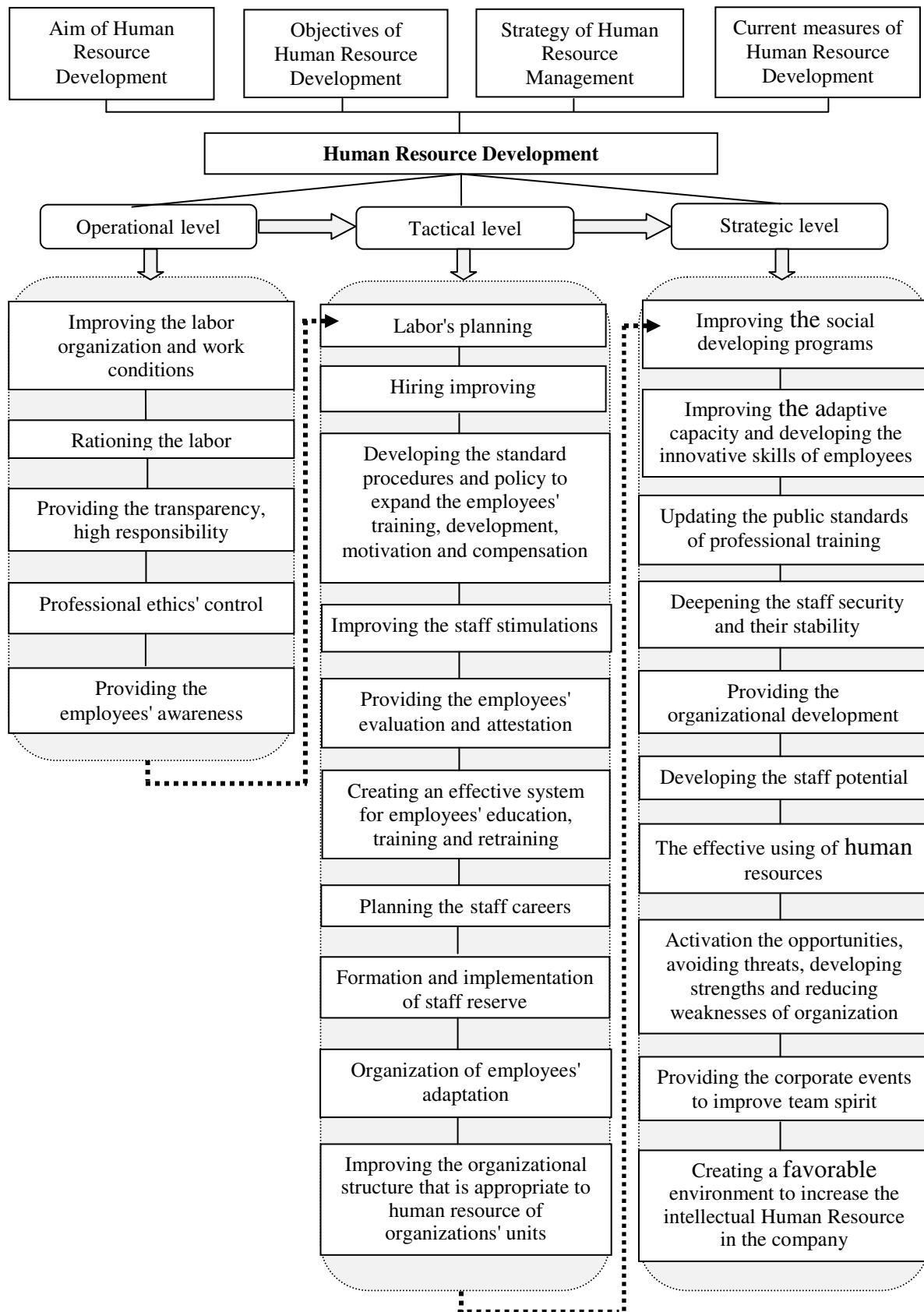
## **RESULTS**

The structural and logical model of Human Resource Development is shown in Figure 1. The basic element of the model is Human Resource Development, which consists of operational, tactical and strategic levels. Each level consists of certain measures. Such elements influence on the model creation: 1) aim of Human Resource Development; 2) objectives of Human Resource Development; 3) strategy of Human Resource Management and 4) current measures of Human Resource Development in the company.

## **DISCUSSION AND CONCLUSIONS**

Human Resources Development is essential for any company that would like to be dynamic and growth-oriented. The aim, objectives, current measures and the strategy of Human Resources Development are components of HR-Management system. They are related and have many-sided influence on each other. A structural and logical model of Human Resource

Development helps to realize individual and organizational goals. The measures of human resource development include such levels as operational, tactical and strategic. Based on results, the author concludes that the proposed structural and logical model of Human Resource Development can be used by each company.



**Figure 1: Structural and logical model of Human Resource Development**

Source: created by author



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# INVESTMENT MAINTENANCE OF AGRICULTURAL ENTERPRISES DEVELOPMENT

**Tetiana Hrynychuk**, PhD-Student,

*Vinnitsa National Agrarian University, Ukraine*

**Abstract:** *The main sources of investment to ensure the development of agricultural enterprises in the region are defined in our article. Investment inflow dynamics in agriculture of Vinnitsa region is analyzed. Basic conditions for increasing the level of investment activity have been determined. The main obstacles to increasing investment in agricultural sector of the region have been revealed. Measures for expanding scales and funding sources were proposed. To increase the scale and sources of investment financing it should be ensured: 1) strengthening the financial base of investors through improved depreciation policy; 2) create conditions and mechanisms to attract investment from personal savings and provide the necessary guarantees to ensure contributions; 3) crediting of investment projects at the expense of leasing operations; 4) creating a favorable investment climate for foreign investors; 5) protecting the rights and interests of investors and ensuring free access to information about the objects.*

**Keywords:** *investment resources, sources of investment, investment security, leasing, agricultural enterprise, capital investment, foreign direct investment.*

## INTRODUCTION

Agribusiness in Ukraine is characterized by an imbalance of resources; its material and technical base doesn't fit to the modern requirements. The deepening global economic crisis led to a sharp decrease in the agricultural enterprises' ability to attract investment resources in the required amount. Finding effective sources of agricultural enterprises' financing becomes actual nowadays.

Investment maintenance problems are considered in the scientific papers of Ukrainian scientists, including N.I. Demchuk, T.V. Mayorova, A.A. Peresada, N.P. Resnik, P.T. Sabluk, L.V. Smoliy, G.V. Spasskiy, Yu.M. Hvesik, and others. Significant contribution to the development of investment basics have been made by foreign scientists J. Bailey, W. Behrens, G. Birman, K. Boulding, F. Lutz, J.M. Keynes, P. Havranek, W. Sharpe and other researchers. However, issues related to the definition of the main sources of investment for agricultural enterprises and ways of enhancing the investment activity of these enterprises still are undisclosed and require deep scientific researches.

The subject of our research is a set of theoretical and practical aspects of the investment ensuring of effectiveness for agricultural enterprises' functioning. The objectives of our research are: 1) definition of the main sources of investment to ensure the development of agricultural production enterprises in the region; 2) analysis of investment in agriculture of Vinnitsa region; 3) definition of the basic conditions for increasing the level of investment in agriculture; 4) identifying the main obstacles to the investment development of regional agriculture.

## MATERIALS AND METHODS

To perform the tasks of research the following methods have been used: abstract-logical, economic-statistical and systemic analysis. The informational base for our research are scientific works of domestic and foreign scientists, statistic materials of Vinnitsa Regional Statistical Service, personal observations.

## RESULTS

Investment activity of agricultural enterprises can be carried out using their own and borrowed funds. Other sources of investment can be depreciation, profit of enterprise, public funds, investment credit and leasing, budget financing and funds of foreign investors.

Nowadays in economy of Ukraine the halting of amortization mechanism is observed. It is manifested in the deterioration of the material and technical base of agricultural enterprises that requires the search of relevant sources of investment. In these circumstances production assets should be overestimated systematically; and rising prices for their replacement should be restrained by the state influence. The depreciation rate should be changed to make possible to increase the depreciation amount, and hence, and real investments. The mechanism of depreciation calculation should be improved in terms of relevant indicators characterizing the uses of depreciation funds for investment purposes.

An important source of investment is profit of agricultural enterprises, which allows purchasing tools and developing the social sphere. Today this source in the Ukrainian economy is unused. Other sources of investment are savings of the population and economic entities. According to the Keynes theory, savings are the deferred consumption or part of income that is not currently being consumed but invested; they are equal to the difference between income and personal consumption [3, p. 241].

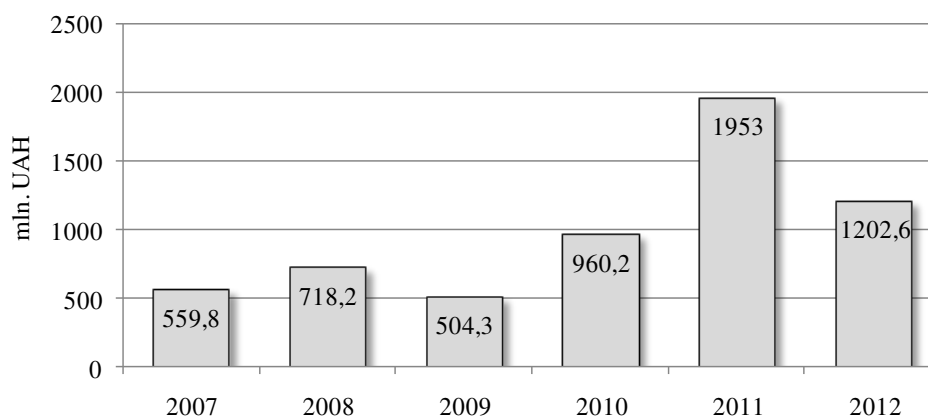
Insufficient amount of own funds of agricultural enterprises for technical renewal of the agricultural machinery requires the search for new forms, methods and sources of investment. N. Demchuk notes that the best way to solve this problem is to use advantages inherent in the activities of the various credit organizations. Skillful use of this experience in modern conditions is a guarantee of sustainable economic development through the creation of a competitive environment in banking activity and it makes credit cheaper for investors agriculture [2, p. 9].

Financial leases are important in ensuring the investment of agricultural enterprises. Purchase of equipment on a lease versus credit has significant advantages: 1) collateral size and the interest rate are significantly less than the loan; 2) due to the payments periodicity (2 times a year on a lease and 12 times a year under the loan agreement terms), farmers are able to use the released funds for other purposes; 3) purchase on a lease easier than getting a loan because the leased property could be the collateral, etc. [4, p. 81].

Attraction of foreign investment into agriculture is an essential to cover the investment deficit of producers. Important is, that bilateral relations with foreign investors are based on mutually beneficial relations and made without intermediaries. The main condition for foreign investors is to realize their economic interests. To facilitate the search for a foreign partner it is advisable to consider the proposals of foreign firms and companies, their intentions and wishes. Some of this information is concentrated in embassies, consulates and missions of foreign countries in Ukraine [1, p. 73].

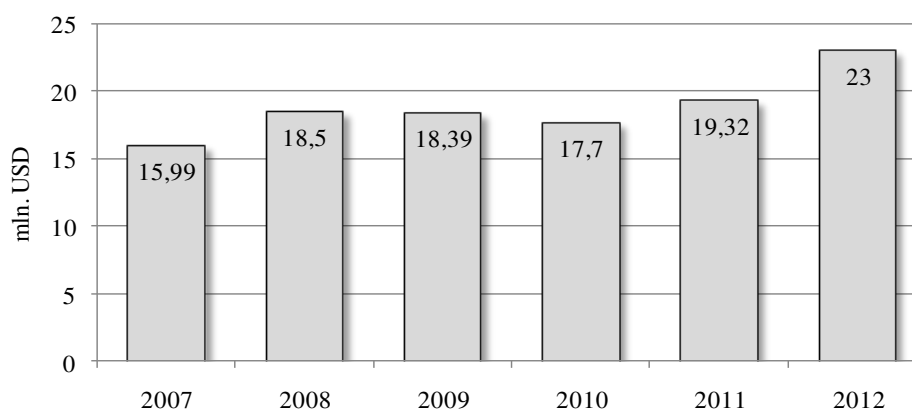
One of the main components of the company's investment policy is the management of investment attractiveness, which allows providing greater flexibility in the formation of investment resources by reducing the costs of raising and expanding the range of potential investors. Based on these factors, the company forms its own competitive advantages in the industry and among other consumers of investment resources.

Vinnitsa region has a high level of investment activity among the other regions of Ukraine. This is facilitated by a favorable geographical location, favorable climate and favorable preconditions for business. It is confirmed by the dynamics of attracting investment in fixed assets in agriculture (*Figure 1*). The maximum increase of investment in the agriculture of Vinnitsa region has been reached in 2011, when compared to the previous year their volumes increased by more than in 3.4 times. But the instability of the region's economic development in 2012 led to the decrease in attracting capital investment to 750.4 million UAH. During last years the regional agricultural industry by attracting investment in fixed assets has occupied the second position after processing industry. It attracted from 21.2 to 24.9% of total investment in the regional economy. The positive trend in the investment process is the growth of foreign direct investments attracted to the agriculture of the region in 2012 (*Figure 2*). Increase in investment income amount 7010 thousand USD. Total foreign direct investments sent to the economy of the Vinnitsa region as of December 31, 2012 amounted 245,358 thousand USD that is 8.4% more than investments at the beginning of this year. This indicator amounted 349.96 USD per one person.



**Figure 1: Dynamics of capital investment in agriculture of Vinnitsa region in 2007-2012, mln. UAH**

*Source: created by author according to [6]*



**Figure 2: Foreign direct investment in agriculture of Vinnitsa region in 2007-2012, mln. USD**

*Source: created by author according to [6]*

Despite the positive trends of increase investment in agriculture, their maintenance doesn't fit to the needs.

To provide the effective functioning of the agricultural enterprises it is advisable to determine the criteria to increase investment in agriculture, as well as to identify the main obstacles of their development. First of all it is necessary to increase the investment attractiveness of certain areas and settlements, to ensure the effective functioning of special (free) economic zones and to impose economic incentives for the depressed areas' development. Increase of investment activity requires an effective institutional environment formation. It provides the implementation of effective forms of the investment process' organization, including the establishment of financial and industrial groups, investment banks, leasing and investment companies, etc. [5, p. 95].

When developing the strategy of foreign direct investment into the agricultural enterprises it is necessary to focus on the principles set out, for example, in a program of direct investment by Western NIS Enterprise Fund. This Fund invests directly in the medium-sized enterprises; amount of investment includes from 500 thousand USD up to 5 million USD. This Fund invests when it is convinced that investments will lead to the creation of additional jobs and will provide a refund in accordance with the existing investment risks [1, p. 73].

The main obstacles to invest in agriculture are: weak investor protection; low level of the market infrastructure development; weak development of the stock and insurance markets; long and inconsistent order of market reform; legal, economic and political instability; imperfect

financial-credit and tax system. An important problem to increase the investment attractiveness is business informatization. There is lack of the necessary information for investors on the official websites of agricultural enterprises. Publication of booklets, manuals, catalogs and creation of CD or DVD-presentation in a suitable format contribute the effective decisions making [5, p. 88].

## DISCUSSION AND CONCLUSIONS

The problem of investing in Ukraine requires solutions at the enterprises' level as well as at the state level. In order to improve the investment policy, appropriate conditions to form the necessary legislation for the activity of agricultural enterprises should be created. To increase the scale and sources of investment financing it should be ensured: 1) strengthening the financial base of investors through improved depreciation policy; 2) create conditions and mechanisms to attract investment from personal savings and provide the necessary guarantees to ensure contributions; 3) crediting of investment projects at the expense of leasing operations; 4) creating a favorable investment climate for foreign investors; 5) protecting the rights and interests of investors and ensuring free access to information about the objects. All above-mentioned will help to find additional sources of investment and expand the ways to access them.

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# ON THE SYSTEM OF STRATEGIC STATE REGULATION OF INNOVATIVE DEVELOPMENT UNDER MARKET CONDITIONS

**Ihor Halytsia**, Doctor of Economics, Professor,

*Department of Business Economics, Competitive Policy  
and Innovative Development, University "KROK", Kiev, Ukraine*

**Michael Schaefer**, Doctor of Economics, Professor,

*President L' Association 1901 SEPIKE, Poitiers, France*

**Oleksandr Halytsia**, PhD in Law, Associate Professor,

*Kyiv State Maritime Academy named after  
Hetman Petro Konashevich-Sahaydachnyi, Kiev, Ukraine*

**Mykola Shevchenko**, PhD in Physics and Mathematics, Senior Researcher,

*Research Center of Scientific and Technological Potential and History of Science  
named after G.M. Dobrov, National Academy of Sciences of Ukraine, Kiev, Ukraine*

**Abstract:** *The necessity to maximal use the creative potential of individuals at both the macro- and micro- levels is proved. It should ensure a sustainable economic development and create additional benefits for the national economy. To solve above-mentioned problem at the macro-level, we proposed implementation of the System of Monitoring, Forecasting, Planning and Maintenance of Innovative Activity. Components (subsystems) and the functional mechanism of the proposed system are considered in detail in our article. Authors pointed that in most cases SMFI doesn't require the creation of new institutions and organizations. It changes the connections between existing institutions, which involved in innovative activity, combining them into the single permanent system and achieving through this a synergistic effect.*

**Keywords:** *innovative development, state regulation of innovative development, System of monitoring, forecasting, planning and implementation of innovative activity (SMFI)*

## INTRODUCTION

Issues on innovation development at all levels of management in modern conditions acquire theoretical and practical interest. And it is quite natural, since under conditions of exhaustion of economic factors innovation becomes the main lever for competitiveness and economic growth and, ultimately, the main source of wealth of any country and its population. Therefore, issues on state regulation of innovative development in advanced and emerging market economies are a subject of this article.

## MATERIALS AND METHODS

Methods of system analysis and synthesis have been used in our article.

## RESULTS

Innovations as a driver of economic development are very important today. It explained by the fact that civilization comes to the new stage of development that is fundamentally different from all previous stages. This stage can be characterized as "economic stress" or postindustrial bifurcation stage, which is quite different from previous periods of development. Firstly, informational and innovative resources associated with the creation, accumulation, processing of information and its transformation into concrete innovations, which are ready for immediate practical use have become an important at this stage. Secondly, if qualitative leaps in the public life and in the economy at the previous stages of development (a kind of "economic stresses"

or bifurcations) were impermanent and have occurred periodically over a longer or shorter time, then at the postindustrial bifurcation stage they have a permanent character and pervade all economic space. The qualitative leap is such level of development of a certain type of activity where the same task can be solved in a short time by means of more effective methods in comparison with the previous periods of development [1-2].

Moreover, qualitative leaps become permanent because of the simultaneous action of 3 major factors: 1) accelerating pace of the social and economic life; 2) creation and retracting into the economy a significant amount of new productive factors and their combinations; 3) significant strengthening of mutual influence and interdependence of the world. Constant "economic stresses" lead to the emerging and functioning system of most important principles at the postindustrial bifurcation stage, i.e.: 1) further progressive acceleration of the public and economic life; 2) significantly raised competition, especially for the informational and intellectual resources; 3) accelerating changes of knowledge generations; 4) accelerating changes of generational techniques and technologies and reducing their "life cycle"; 5) rising productivity of capital goods and labor productivity; 6) increasing the role of health as a competitive resource [2].

In the context of "stress economy" generational change of knowledge as well as change of generations of equipment and technologies is greatly accelerated. Simultaneously, there is a progressive reduction of "life cycles" of technique and technologies. It leads to a rapid increase in the number of innovations and improvement of their quality. However, the productivity of the innovation process is determined by the efficiency and effectiveness of its organization. These mechanisms determine how quickly the results of fundamental research will be transformed into the practical results, how rapidly applied results will be turned into the concrete innovations and how quickly innovations will be implemented at all levels of the social and economic activity.

A number of countries with developed and developing economies have clear legislation on innovation, scientific and technological activities. Also they have significant scientific developments on the innovative processes [3-11].

However, in the context of globalization and increasing international competition they cannot stop, they go further. Life requires the creation of permanent, nationwide System of monitoring, forecasting, planning and implementation of innovative activities (hereinafter SMFI). It should be noted that the individual elements of this system are used in many countries, but proposed by the authors SMFI as a holistic system is implemented in the scientific usage for the first time. At the pre-industrial and industrial stages of development to ensure a high competitiveness it is enough to use of the creative potential of the individual skilled professionals and their local groups. Massively creative potential has been used as an aid by means of rationalization systems. In "economic stresses" conditions the use of the creative potential of the individual specialists and their local groups is insufficient. Now it is necessary to use the creative potential of individuals as much as possible at the macro- and micro- levels for sustainable economic advantages creation. SMFI is developed for efficient use of intellectual potential at the macro-level.

## **METHODOLOGICAL BASICS OF SMFI FUNCTIONING**

First of all, SMFI must be constant; it should be consistent with the national system of the market economy' regulation, as well as it should be its integral subsystem. It is advisable that SMFI would consist of the following subsystems:

1. *Informational and analytical subsystem* that provides certification and analysis of the innovative development in the world and in a certain country, based on the use of all available information sources and materials of all involved agencies.

2. *Subsystem (institute) of governmental and non-governmental scientific and technical experts*, which is aimed at reforming and restructuring of these institutions and the use their intellectual results in the preparation and implementation of innovative policy.

The state scientific and technical expert (hereinafter the state expert) is a citizen of a certain country, a scientist or highly qualified specialist with outstanding achievements in a certain area(s) of scientific and technical or professional activity, who has passed the competitive

selection, took the oath of public expert and who has been warned about responsibility for the expertise's preparation. Highly qualified specialist is a specialist who has outstanding achievements in a concrete area(s) of scientific and technical or professional activity in accordance with specific criteria established by the government. State experts make expert conclusions personally and bear personal responsibility for them. Current law should provide necessary material and moral incentives for the state experts who had this status during certain period of time and did their work responsibly. In the case of deprivation of this status because of the expertise's rules violation or substandard expertise, state experts lose the right to receive material and moral incentives. State experts should be formed into a special expert groups on their activities' directions. Strategic forecasts of the global innovative processes' development, strategy of country's innovative development, medium-term strategic forecasts and plans of development are formed and adjusted on the basis of the conclusions and proposals of state experts. A set of state experts is the best part of the national scientific and technical elite of a certain country; they constitute the most effective part of country's aggregate intelligence and they are the most competitive resource. Using the structured institution of state experts allows to involve the best intellectual resources to the forecasts and plans development. A national coordinating centre of subsystem that forms state and non-state scientific and technical experts should provide the work on the formation, structuration and usage of the state experts' institute. In case of necessity, state experts can use materials and findings of non-state experts, who can be any legal entities or individuals with a certain knowledge and best findings and who can give these materials to state experts. Non-state experts work voluntarily.

### *3. Subsystem of the strategic forecasting of innovative activity.*

The purpose of the subsystem is to develop a strategic forecast of the global development of innovative processes based on program-target method and by means of set of available informational resources that come from the informational and analytical subsystem and subsystem of state and non-state scientific and technical experts. Using materials of this forecast, existing and future resources<sup>34</sup> forecast and strategy of innovative development of a certain country can be developed. System of strategic forecasting of innovative development should function according with the real needs of the country, assess the possibilities of the existing scientific and technical potential and scientific schools, as well as results of scientific researches and registered objects of intellectual property, material, technical and financial capacity of a certain country. The forecasting system should include scenarios of different variants of the specific priority areas development, options for their state support, as well as an assessment of the expected results and their impact on the economy and quality of life. Based on the analysis of forecasts and their expert evaluation, the strategy of innovative development of a certain country for 15 years should be developed.

4. *Subsystem of medium-term strategic forecasting* provides an establishment of the strategy of country's innovative development for a five years based on strategic forecasts of world innovative development. It determines: 1) overall objectives of innovative development of the country and its regions; 2) resources needed to achieve these goals; 3) list of conditions that can cause a change in strategy; 4) clear mechanism for making changes into the strategy.

5. *Subsystem of medium-term planning.* State plans of the innovative development are developed on the basis of medium-term strategy for every five years. They provide formation of plans development and providing changes in legislation in accordance with the objectives, which are carried out with the direct or indirect state support. It is necessary to establish that the medium-term strategies and plans should be adjusted only in accordance with the established changes' mechanism.

6. *Subsystem of medium-term plans' implementation and monitoring* provides their coordination and control.

7. *Security subsystem.* Both generated by SMFI information and its functioning are an important competitive resource of a certain country and therefore should be a state secret.

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<sup>34</sup> We understand perspective resources as resources that are not used currently, but could be involved in the future periods of development.



This subsystem provides security both information and SMFI activity. It should be emphasized that the main indicators that can be used to carry out full-scale monitoring of innovative activities include: 1) number of enterprises (as a whole and by economy's sectors) that implement innovative processes, new productions and new goods/services; 2) number of creators (inventors, authors of industrial designs, innovators); 3) number of applications for protection of intellectual property in the country and abroad; 4) number of obtaining protection documents for intellectual property objects in the country and abroad; 5) number of intellectual property objects used in the country's economy; 6) number of manufactured innovative products; 7) sales amount of innovative products in the domestic and foreign markets and so on.

### **MECHANISM OF SMFI FUNCTIONING<sup>35</sup>**

Functioning of SMFI mechanism is formed from a series of operations (steps) i.e. concerning to the complete actions, which are the elements of this mechanism and connected with other operations in a certain way.

*Step 1:* Central state executive authority in the field of science and innovation generates and provides overall guidance of coordinating bodies of such subsystems: 1) informational and analytical; 2) institute of state and non-state scientific and technical experts; 3) strategic forecasting of the innovative development; 4) medium-term strategic forecasting of the innovative development; 5) medium-term planning of the innovative development; 6) implementation and monitoring of the medium-term plans of the innovative development; 7) security. Coordinating body of a separate subsystem is an existing or specially created governmental agency (institution), which according to its function, organization and experience most of all fit to the entrusted tasks.

### **FUNCTIONING MECHANISM OF THE INFORMATIONAL AND ANALYTICAL SUBSYSTEM**

*Step 2:* A national coordinating body of Informational and analytical subsystem on the basis of information coming from different sources conducts passportization: 1) finished national scientific researches; 2) current national scientific researches; 3) developed into the country intellectual property objects; 4) researchers; 5) scientists who are engaged into the scientific and innovative researches; 6) scientific organizations; 7) scientific organizations that are engaged into the scientific and innovative researches. Passport for each of the mentioned areas should be developed in details. It should contain the necessary information to decisions making. If the existing statistical statements don't contain all required information, it is advisable to enter additional statistical reporting legally.

*Step 3:* Collection and processing of the information on the innovative processes development in the world and in the separate countries.

*Step 4:* Formation of databases on scientific and technological state and economy's innovative development in each country, including databases: 1) finished national scientific researches; 2) current national scientific researches; 3) developed into the country intellectual property objects; 4) researchers; 5) scientists who are engaged into the scientific and innovative researches; 6) high qualified specialists; 7) scientific organizations; 8) scientific organizations that are engaged into the scientific and innovative researches.

*Step 5:* Constant adjustment of above-mentioned databases (old data' removal and their replacement by a new data) in accordance with a new information.

*Step 6:* Providing information for all other subsystems of SMFI at their request.

### **FUNCTIONING MECHANISM OF A SUBSYSTEM (INSTITUTE) OF THE STATE AND NON-STATE SCIENTIFIC AND TECHNICAL EXPERTS**

*Step 7:* Analysis of the information of the Subsystem (institute) of state and non-state scientific and technical experts obtained from databases regarding scientists (including those who engaged into the scientific and innovative researches) and highly qualified specialists.

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<sup>35</sup> Here is described a final modification of the mechanism, which is the most efficient in the modern world from the point of authors' view. Base modifications of the mechanisms, which synthesize a final modification, here is not shown, as they cannot be considered within a single article.

*Step 8:* Defining the criteria described requirements to get the status of the state expert.

*Step 9:* Creating a list of applicants for the status of the state experts.

*Step 10:* Development and approval of the expert committee on the preliminary review of applicants' files for the status of state experts.

*Step 11:* Development and approval of the special expert committees to review applicants' files for the status of state experts.

*Step 12:* Review of the applicants' files for the status of state experts and selection of candidates for the assignment this status in accordance with established criteria. Providing list for consideration of Committee.

*Step 13:* Review and approval (not approval) of applicants.

*Step 14:* Taking the oath of the state expert and warning of future state experts on their responsibility for expertise's providing.

*Step 15:* State experts' structuring on the scientific, technological and innovative area.

*Step 16:* Creating of Disciplinary Commission to review personal files of state experts.

*Step 17:* Reviewing by Disciplinary Commission private files of state experts who have violated the oath and submitting proposals on deprivation of the status of the state expert.

*Step 18:* Consideration by the Committee of the Disciplinary Commission's submission and approval (not approval) proposal for deprivation (not deprivation) of the status of the state expert.

*Step 19:* Informational provision by the Committee other subsystems of SMFI.

### **FUNCTIONING MECHANISM OF SUBSYSTEM OF STRATEGIC FORECASTING OF INNOVATIVE DEVELOPMENT, SUBSYSTEM OF MEDIUM-TERM STRATEGIC FORECASTING OF INNOVATIVE DEVELOPMENT AND SUBSYSTEM OF MEDIUM-TERM PLANNING OF INNOVATIVE DEVELOPMENT<sup>36</sup>**

*Step 20:* A national coordinating body of Subsystem (Strategic Forecasting of Innovative Development, the medium-term Strategic Forecasting of Innovative Development and medium-term Planning of Innovative Development): 1) receives all necessary information from other subsystems of SMFI; 2) forms the working programs.

*Step 21:* A national coordinating body of Subsystem (Strategic Forecasting of Innovative Development, the medium-term Strategic Forecasting of Innovative Development and medium-term Planning of Innovative Development) forms: 1) working groups from state experts to perform tasks of program activities; 2) an expert body to assess the submissions by the working groups; 3) appellate body to review the results of the expertise provided by an expert body.

*Step 22:* Working groups perform their tasks within the programs framework and they prepare materials for the expert body.

*Step 23:* Expert body provides the expertise of materials prepared by working groups. In case of positive results, it transfers these materials for the consolidation to the national coordinating body of Subsystem.

*Step 24:* In case of negative results, working group may submit prepared materials the appellate board, which will conduct the expertise once again.

*Step 25:* Appellate board conducts an additional expertise. In case of positive findings of the appellate board, materials of working groups are transmitted for the consolidation to the national coordinating body of Subsystem. In the case of negative conclusion, an issue on deprivation of the status of state expert for the working group members is considered.

*Step 26:* National coordinating body forms the final document, which is the result of a Subsystem's activity on the basis of the working groups' materials that have been tested by the expert and appellate bodies. The final document for the Subsystem of Strategic Forecasting of Innovative Development is the forecast of global development of innovative processes and the innovative development strategy of a certain country for 15 years. The final document for the Subsystem of medium-term strategic forecasting of innovative development is the country's

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<sup>36</sup> In terms of methodology, functioning mechanisms of these subsystems are identical.

innovative development strategy for 5 years. The final document for the Subsystem of medium-term planning of innovative development is state innovative development plans. It should be noted that the final document of the previous subsystem creates the basis for subsequent subsystem's activity. Thus, the strategy of innovative development of the country for 5 years is the basis for the development of national innovative development plans.

*Step 27:* A national coordinating body corrects the final document, which is the result of a Subsystem's activity in case of: 1) new information is received from other Subsystems; 2) state experts initiated corrections.

### **FUNCTIONING MECHANISM OF SUBSYSTEMS OF THE MEDIUM-TERM PLANS IMPLEMENTATION AND MONITORING**

*Step 28:* A national coordinating body of Subsystem coordinates the implementation of medium-term plans and monitors them.

### **FUNCTIONING MECHANISM OF THE SECURITY SUBSYSTEM**

*Step 29:* A national coordinating body of this Subsystem provides the secrecy of both the information generated by SMFI and its activity.

### **CONCLUSION**

It should be noted that usually the establishment of SMFI requires the additional public and private funds. In most countries, this System can be fully established within the funds on science and innovations. In most cases SMFI doesn't require the creation of new institutions and organizations. It changes the connections between existing institutions, which involved in innovative activity, combining them into the single permanent system and achieving through this a synergistic effect.

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# GRÜNE LOGISTIK: WESEN, ERFAHRUNG UND INSTRUMENTE

**Kurt Klose**, Dr. in Engineering, Professor,

*Hochschule Ostwestfalen-Lippe, Lemgo, Deutschland*

**Nadiia Khvyshchun**, PhD in Economics, Associate Professor,

*Lutsk National Technical University, Ukraine*

**Abstract:** *The most common approaches to understanding the essence of Green Logistics is considered in our article; barriers, starting points and objectives of Green Logistics are identified. It is determined that the essence of Green Logistics is a logistic activity that should be based on green technologies, i.e. technologies that do not or only cause minimal negative impact on the environment, while being economically and socially efficient.*

**Keywords:** *logistics, green logistics, green logistic goals, logistic activities*

## EINLEITUNG

Bis heute besteht Problem der nachhaltigen Entwicklung der modernen Zivilisation, die am Anfang des XXI. Jahrhunderts einen neuen qualitativen Zustand erworben hat, und damit einen extremen Grad erreichte. Es wird offensichtlich, dass die Wirtschaft auf den Grundsätzen der Technokratie und des ungleichen sozio-natürlichen Stoffwechsels erbaut wurde, welches keine langfristig nachhaltige Entwicklung des Staates, der Gesellschaft oder des Geschäfts gewährleisten kann.

Nach der Meinung eines renommierten Experten für Umwelt-und Wirtschaftsfragen (E. Weizsäcker), hat die Menschheit das umweltbewußte Zeitalter begonnen, da kurzfristige wirtschaftliche Ziele haltlos wurden und dem langfristigen ökologischen Imperativ nicht untergeordnet werden können. Dabei zeichnet die Mehrheit der Experten die verantwortungslosen menschlichen Aktivitäten zur Erschöpfung der natürlichen Ressourcen, Umweltverschmutzung, sowie die Verschlechterung der allgemeinen Umweltbedingungen verantwortlich. Logistik als die Sphäre der praktischen Tätigkeit leistet einen negativen Beitrag zu diesem Prozess und damit sollte die Logistikbranche als Wissenszweig Umweltfragen im Rahmen ihrer Tätigkeit berücksichtigen.

## MATERIALIEN UND METHODEN

Primär bei der Untersuchung der Probleme und Auswirkungen der Logistik-Aktivitäten auf die Qualitätsparameter der Umwelt und möglicher Lösung gehören Werke wie ausländischer Wissenschaftler, wie: M. Porter, S. Wan der Lind, R. Dannu, D. Lamber, Stock, R. Kopiki, Samir K. Srivastava. Es sei darauf hingewiesen, dass ihre Untersuchungen oft auf einen einzigen Funktionsbereich der Logistik konzentriert sind, z.B. Ressourcenschonung.

Die Rahmenbedingungen von Transport- und Logistikunternehmen veränderten sich im Laufe der Jahrzehnte und die Branche steht nun vor immer größeren und vielseitigeren Herausforderungen. Einige dieser Trends sind die steigende Anzahl kundenindividueller Aufträge, Globalisierung, Weiterentwicklung der Informationstechnologie, oder die Veränderung der Märkte durch geringere Wertschöpfungstiefe und zunehmende Arbeitsteilung. Eine übergeordnete Entwicklung in dieser Branche liegt auf den steigenden Umweltschutzbestimmungen, deren kosten- und ressourceneffizienter Umsetzung sowie der Schaffung eines betriebsbedingten Umweltbewusstseins<sup>37</sup>.

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<sup>37</sup>Baldauf, Andreas (2010), Grüne Logistik abseits von CO<sub>2</sub>-Emissionen: nachhaltiges Management in der Logistikbranche, *Schriftenreihe des Instituts für Transportwirtschaft und Logistik - Logistik*, Nr. 02/2010, Institut für Transportwirtschaft und Logistik, WU Vienna University of Economics and Business, Vienna.

## ERGEBNISSE

Den daraus resultierenden allgemeinen Wohlfahrtsgewinnen der Volkswirtschaften stehen zum einen hohe Umweltbelastungen und zum anderen ein suboptimaler Ressourceneinsatz gegenüber. Erstere sind besonders Luftverschmutzungen, verursacht durch verschiedenste motorisierte Transportträger, Lärm sowie Austritte toxischer oder gefährlicher Substanzen bei Transportunfällen. Weiterhin sind nicht wieder verwendbare bzw. schwer recycelbare Verpackungsmaterialien umweltschädigend.

Der zweite Punkt betrifft den suboptimalen Einsatz von Ressourcen, der überwiegend in der ineffizienten Nutzung von Treibstoffen im Straßengüterverkehr bei der Distribution von Waren liegt. Dies kann an einem schlecht organisierten Verteilungszentrum, dessen Verteilerstrecken, oder an den Verteilungsmethoden liegen, sodass ein höherer Treibstoffanteil verbraucht wird<sup>38</sup>.

Als Ergebnis charakterisiert sich die gegenwärtige Phase der Wirtschaftsentwicklung mit der zunehmenden Aufmerksamkeit auf die Auswirkungen der industriellen Tätigkeit auf die Umweltparameter, was neue Marktanforderungen bezüglich der hergestellten Produkte verursacht. Heutzutage spielen immer mehr Produkte eine führende Rolle in der Konkurrenz um eine ökologische Orientierung, denn auch Verbraucher beginnen, über die Umweltfreundlichkeit der verbrauchten Produkte, nachzudenken.

Daher sollten die Hersteller zur Produktion von umweltfreundlichen Produkten und Dienstleistungen bereit sein, was die Entwicklung einer wirksamen Umweltpolitik erfordert: die Einführung von Umweltproduktionsprozessen in Unternehmen, die Ideenumsetzung der Schaffung einer so genannten "grünen" Lieferkette (Lieferketten, Organisations- und Funktionsstrukturen sowie Betriebsarten, deren Ausnutzung einen Höchstwert an Ressourcenschonung auf allen Ebenen der Kette gewährleistet), usw. Die Entwicklung und Implementierung all dieser Aspekte garantiert eine erfolgreich Realisierung in der Praxis in eine neue Richtung der Umwelt-Logistik (Ökologistik oder "Green Logistics").

Zum Beispiel strebt Norwegen nach Medienberichten an, im Jahr 2030 ein Land nahezu ohne industrielle CO<sub>2</sub>-Emissionen zu werden. Deutschland will bis 2040 zu 100% auf erneuerbare Energiequellen bauen. Schweden wird im Jahr 2020 die meisten Häuser auf brennstofffreien Betrieb umstellen. Islands Regierung fördert aktiv die Nutzung grüner Technologien. Um zu verstehen, wodurch die Aktivierung dieser Bewegung entstand, ist es zu beachten, dass eine Hauptrolle die Verschärfung der Umweltgesetzgebung und staatliche Subventionen spielt.

Aber trotz der aktiven Entwicklung von Umweltinnovationen in der Praxis und in der Wissenschaft existiert derzeit keine einheitliche Definition für den Begriff "Green Logistics". Dies bestätigt den Bedarf weiterer Untersuchungen und Forschungen. Dies ist zum einen bedingt durch unterschiedliche historische Entwicklungen und zum anderen durch unterschiedliche Zielsetzungen der wissenschaftlichen Literatur. In der nachfolgenden Tabelle werden Definitionen zu "Green Logistics" vorgestellt. Eine Differenzierung zwischen Logistik und Supply Chain Management erfolgt nicht. Untersuchungen<sup>39</sup> zeigen dass u.a. unter "Green Logistics" CO<sub>2</sub>-arme Logistikdienstleistungen (53%), umweltschonende Technik bei Fahrzeugen, Anlagen und Abläufen (63%), Carbon Footprint (26%) und Effizienzsteigerung (53%) verstanden wird. Moderne Unternehmen müssen sich in einem Spannungsdreieck zwischen Umwelt, Gesellschaft und Wirtschaftlichkeit bewegen. Es wirken mehrere Einflussfaktoren auf das Unternehmen ein: der Staat durch Regulierungen; Kunden und Konsumenten durch ein stetig wachsendes Bewusstsein und Interesse am Kauf von umweltfreundlichen Produkten und Dienstleistungen; Mitarbeiter durch die Arbeit in einem Umwelt- und sozialverantwortlichen Unternehmen; die Gesellschaft durch immer stärker werdende Forderung nach Unternehmensverantwortung (Corporate Social Responsibility) und durch das Unternehmen selbst durch die anhaltende Beschäftigung mit der Thematik.

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<sup>38</sup> Vgl. Chungang Q. et al. (2008), S. 162 f.

<sup>39</sup> Herne, Herten (2010), Lastmile Logistics Netzwerk Gelsenkirchen, S. 8.

Unter den Bedingungen des modernen Weltwarenaustausches und der Globalisierung hat die Entwicklung und die Verbesserung des aktuellen Instruments "grüne" Logistik in den Aktivitäten transnationaler Unternehmen sicherlich einen bedeutenden positiven Einfluss auf die Optimierung und Verbesserung ihrer Operationen in der Weltwirtschaft für die Rettung der Ökologie des Planeten eingenommen.

Der Expressdienstleister DHL hat einen Service GoGreen gestartet, deren Wesen darin liegt, dass DHL die Menge der CO<sub>2</sub>-Emissionen beim Transport ein jeder Fracht von deren Übernahme bis zum Zeitpunkt der Auslieferung an den Empfänger berechnet. Der Kunde kann 3% mehr zahlen als der Standard- Tarif, DHL investiert das Geld in weltweite Klimaschutzprogramme. Die japanische Reederei K-Linie installierte Computersysteme auf einzelnen Schiffen, die eine kontinuierliche Überwachung von Wetter und hydrographischen Bedingungen anzeigt, um die Motorleistung zu verbessern, die wiederum zu einer 1% Reduzierung der schädlichen Emissionen in die Atmosphäre führt. Der Operator UPS Express-Lieferung hat vor kurzem 130 Fahrzeuge mit Hybrid-Motoren gekauft, die während eines Jahres ca. 66.000 Gallonen Kraftstoff (ca. 35%) weniger verbrauchen, als LKWs mit Verbrennungsmotor. Ebenso reduzierten sich die CO<sub>2</sub>-Emissionen um 671 Tonnen im gleichen Zeitraum. Der deutsche Beförderer "Deutsche Bahn Schenker Rail" hat zum ersten Mal in der europäischen Eisenbahnindustrie ein Verfahren der Warenlieferung vorgeschlagen, welche die Emission von Kohlendioxid völlig eliminiert. Im Rahmen des Projekts Eco Plus erhält das Unternehmen den Strom für seine Elektrolokomotive aus erneuerbaren Quellen, wobei die Kosten aus zusätzlichen Gebühren an den Kunden weitergegeben werden, z.B. an den Autohersteller Audi, dessen Autos per Bahn vom Werk zum Verschiffungshafen transportiert werden. So beabsichtigt die Deutsche Bahn als Teil ihres Klima-Schutz-Programms, bis zum Jahr 2020 in seiner weltweiten Geschäftstätigkeit die Verringerung der CO<sub>2</sub>-Emissionen um 20% gegenüber dem Jahr 2006 zu reduzieren.

Der Logistik-Dienstleister Green Cargo wurde sich auch den Zeichen der Zeit bewusst. Im Laufe der Jahre investierte das Unternehmen in Lokomotiven mit geringerem Energieverbrauch. 60 Millionen Euro wurden in den Bau der "Nord Stream" durch das etablierte Konzept der "grünen" Logistik gespart. Darüber berichtete der Leiter der Abteilung für Umwelt-Management der Firma Nord Stream AG Bruno Helg: "Nord Stream " hat sich dem sichersten und umweltfreundlichsten Weg verschrieben, um Gas in der Welt zu transportieren. Nach der Ansicht von Experten wird die Verringerung der CO<sub>2</sub>-Emissionen in den nächsten 50 Jahren des Gasleitungsbetriebs über 200 Millionen Tonnen betragen.

Das Logistikzentrum "Toyota" in der belgischen Stadt Eeubryugge baute Anfang 2013 zwei Windkraftanlagen. Jede von ihnen erzeugt 3 MegaWatt Strom. Darüber hinaus errichtete "Toyota" in Betrieben in Großbritannien und Frankreich Solarkollektoren zur Stromerzeugung.

Man sagt, "Nachhaltige Logistik" wird oft mit "Grüner Logistik" gleichgesetzt. Das ist allerdings falsch, denn es gibt einen Unterschied zwischen den beiden Begriffen.

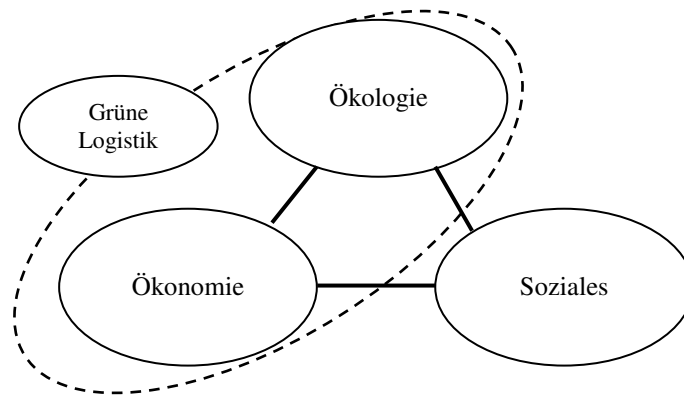
Nachhaltigkeit fußt auf drei Säulen: Ökonomie, Ökologie und Soziales. Das bedeutet, dass die wirtschaftlichen, ökologischen und sozialen Aktivitäten eines Unternehmens in Einklang gebracht werden müssen, um nachhaltig aufgestellt zu sein.

Diese drei Säulen sind auch als Nachhaltigkeitsdreieck bekannt. Die folgende Grafik zeigt die Einordnung „Grüner Logistik“ ins Nachhaltigkeitsdreieck<sup>40</sup> (Abbildung 1).

Im Gegensatz zur Nachhaltigen Logistik bezieht sich die Grüne Logistik lediglich auf den Einklang der beiden Säulen Ökonomie und Ökologie. Umwelt- und Klimaschutz stehen dabei im Mittelpunkt. So ist beispielsweise die Entscheidung, den Kraftstoffverbrauch zu senken, in der Regel durch die sich daraus ergebenden Kosteneinsparungen motiviert. Gleichzeitig werden aber auch die Treibhausgasemissionen gesenkt, was wiederum einen positiven Effekt auf die Umwelt hat. Grüne Logistik ist also ein Zusammenspiel von Wirtschaft und Umwelt. Soziale Komponenten, wie zum Beispiel gesellschaftliches Engagement, spielen dabei keine Rolle.

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<sup>40</sup> IHK Region Stuttgart (2011), S. 20.



**Abbildung 1: Nachhaltigkeitsdreieck**

*Quelle: erstellt von Autoren*

In der Hochschule Heilbronn identifiziert Prof. Dr. Dirk Lohre die folgenden Absatzpunkte für Grüne Logistik. Hemmnisse für Grüne Logistik sind: Engpässe und Staus auf Straßen; Be- und Entladeschnittstellen sowie ein fehlendes Angebot alternativer Verkehrsträger. 94% der Antwortenden identifizierten Engpässe in der Infrastruktur als Ursache für ökologische Ineffizienzen.

Die Ergebnisse einer Befragung von Unternehmensführern ergab, dass Umwelt- und Ressourcenschutz in der Logistik nicht nur ein "Modethema" ist. Bereits mehr als die Hälfte der befragten Unternehmen beschäftigen sich mit der Thematik. Viele glauben auch, dass Umwelt- und Ressourcenschutz in Zukunft die Logistik der Unternehmen stärker beeinflussen wird. Der Großteil der befragten Unternehmen führt Maßnahmen zur nachhaltigen Logistik nicht nur aus Eigenmotivation (32%) durch, sondern reagiert auf Kundenwünsche (15%) und Auflagen des Gesetzgebers (7%).

In den Unternehmen ist das Thema so wichtig, dass Entscheidungen dazu auf der Ebene der Geschäftsführung (80%) getroffen werden. Für einige Unternehmen spielt der Umwelt- und Ressourcenschutz allerdings noch keine Rolle. Sie empfinden, dass sie für eine "grünere" Logistik zu hohe Investitionen (35%) tätigen müssten oder dass Konflikte zu bestehenden Geschäftsprozessen (20%) unüberwindbar seien.

Auch hindern fehlendes Wissen über mögliche Lösungen (22%) oder fehlende Angebote, Tools, Konzepte und Forschungsergebnisse zum Thema (20%) sie daran, sich "grün" zu orientieren<sup>41</sup>.

Nicht nur jene Unternehmen, in denen noch keine Umwelt- und ressourcenschonende Maßnahmen Anwendung finden, wünschen sich staatliche Unterstützung.

Auch Unternehmen mit bereits "grüner" Logistik können sich Fördermaßnahmen in Form von Verbesserung der Infrastruktur (55%) oder finanziellen Anreizen (56%) sowie stärkerer Innovations- und Technologieförderungsmaßnahmen (49%) vorstellen. Für die Logistikdienstleister heißt das:

1) Nachweis über Nachhaltigkeitsstrategien erbringen, um im Wettbewerb attraktiver als die Konkurrenz zu sein.

2) Die "Mehrkosten" werden im Markt nicht akzeptiert (Preis und Angebot sind ausschlaggebend).

3) Maßnahmen zur Nachhaltigkeitssteigerung sind dann effektiv, wenn es für den Dienstleister Vorteile bringt (Kommunikation in den Markt).

4) Für Image und Reputation im Wettbewerb kann das Thema Green ein Erfolgsinstrument sein.

5) Logistikunternehmen, die das Thema jetzt besetzen, werden zukünftig und in der Erwartung der Auftraggeber Wettbewerbsvorteile haben.

<sup>41</sup> Köhler, Silke (2010), "Grüne" Logistik – Modethema oder Nachhaltigkeit? Unternehmensbefragung zu "Green Logistics – nachhaltige und umweltschonende Logistik".

## DISKUSSION UND SCHLUSSFOLGERUNGEN

Für die Entwicklung einer Grünen Logistik ist es notwendig, Instrumente der Regulierung einzuführen:

### 1) *Traditionelle Instrumente:*

Solche Instrumente umfassen alle Einschränkungsmassnahmen, die verschiedenen Arten von Aktivitäten begrenzen oder die Herstellung/Nutzung bestimmter Produkte verbieten.

### 2) *Ökonomische Instrumente:*

Im Gegensatz zu den traditionellen Instrumenten, sind wirtschaftliche (Marktinstrumente) Instrumente im Einflussbereich auf die Umwelt nicht verboten, sondern versuchen, die richtigen Anreize zu schaffen. Die teilnehmenden Seiten sind aufgefordert, Emissionen durch finanzielle Anreize zu reduzieren. Sie gewährleisten, dass die Hersteller und die Verbraucher den Zweck der Eindämmung von CO<sub>2</sub> in allen Entscheidungen berücksichtigen.

Wirtschaftliche Instrumente umfassen Emissionshandelsprogramme und CO<sub>2</sub>-Steuern; zeichnen sich durch die Förderung von CO<sub>2</sub> armen Technologien und finanzielle Unterstützung für die Verminderung von Emissionen aus und fördern die Investitionen in der Entwicklung einer effizienten Nutzung von Kohle.

Die vorangegangene Studie lässt den Schluss zu, dass die Essenz der "Green Logistics" die Logistik-Aktivitäten auf grüne Technologien umstellen soll, d.h. Technologien keine oder nur minimale Schäden der Umwelt verursachen, aber zugleich wirtschaftlich und sozial effizient sein sollen.

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5. Vgl. Chungang Q. et al. (2008), S. 162 f.



# MODEL OF INTERACTION BETWEEN THE BUSINESS AND STAKEHOLDERS UNDER CONDITIONS OF MODERNIZATION IN RUSSIAN ECONOMY

**Natalya Kuchkovskaya**, PhD in Economics, Associate Professor,

*Volgograd State Academy of Physical Education, Russian Federation*

**Abstract:** *The analysis of the formation of Russian model of interaction between the business and stakeholders is considered in our article. A conceptual framework is adopted by the evolution of communicational patterns of interaction with the theory of stakeholders' activity. It is shown that the both parties' concerned business and proper business in varying degrees can influence the agents of national economy modernization and society. The sequence of transition to different models of interaction between the business and government in Russian Federation, as well as nodules-cies group of stakeholders with the typology of business interests are described in order to conduct an effective research on this topic. Agents of modernization of the Russian socio-economic system have been classified according to the justification their functional roles.*

**Keywords:** *business, government, society, stakeholders, interested groups, interests, model of interaction, social responsibility, institutions, modernization, agents of modernization*

## INTRODUCTION

At the country's level, it is possible to single out three main relatively independent groups of participants of socio-economic processes: government, business and society. Their interaction at different stages of market relations development in Russian Federation has been characterized by means of existing at that time structural models. Mainly these models explain the basic range of issues and specific features of interaction between the authorities and entrepreneurs at the federal and regional levels. They ultimately boil down to the negotiation process, which determines the basic principles and areas of above-mentioned groups' cooperation. Agreements' accomplishment between the participants of social interactions is aimed at establishing of balanced partnership relations and creating of stimulus to increase a social responsibility of business. The main subject of agreements is the development of their activities aimed at reaching a mutually acceptable level of interests' coordination and mutual interest of the parties.

## MATERIALS AND METHODS

Entrepreneurship deals with production of goods and services and seeks for an increase of their sales and profit. Thus, it creates the basis for extended reproduction and increase in the state income in general. Business acts as the main entity of capital investment into innovative projects, creates investment sources and participates in the social sphere financing. Commodity producers and state authorities perform social functions, ensuring a certain degree of information openness to the society. Lately there has been an increase in responsibility for targeted and voluntary funding of social expenditures in their various forms on the part of entrepreneurs. Participation in various social programs improves business reputation, image and authority and creates conditions to acquire additional competitive advantages at the same time. Coordinated interaction between the state authorities and business on the social issues' decision making with account of their economic interests and on the basis of socially responsible behavior guarantees long-term sustainable growth of the national economy [1]. Actuality of researches on the evolution of various models of interaction between the business and state authorities in Russian Federation is conditioned by the presence of objective prerequisites. Firstly, global competition objectively generates demand on the part of Russian business for state backing, that forms an favorable environment for more intensive interaction of Russian companies with regional and local authorities. Secondly, considering the implemented budget reforms and delineation of powers between the Federal center and subordinated Federation entities, financial capacities of regional authorities reduce, but at the same time they reserve most of their previous obligations, which objectively lead to the changing policy towards business.

## RESULTS

Doing business is a comprehensive process, which engages stakeholders. Therefore, it is reasonable to conduct research on the necessity to form the model of interaction between business and authorities in conjunction with the main conclusions of the stakeholders theory. Stakeholders or participants interested in the company's activities society-wide to a variable degree perform the functions of potential agents of Russian economy modernization. Over the short period of market relations development in Russia, the interaction between the business and authorities has evolved within the framework of several models. As Russian and foreign publications emphasize, the initial period was characterized by the model of "state capture" or "power privatization" by big business. This model presupposes active reallocation of resources from the state to specific companies or business groups. A wide range of empiric researches of the late 1990s has confirmed the presence and relative prevalence of above-indicated model in Russian Federation and CIS countries concerning to big business. According to A. Yakovlev's justified remark, such practice was accompanied by the "grabbing hand" model, which, in contrast to the "helping hand" model was implemented in its different forms in Central and Eastern Europe and China, that presupposes creation of artificial barriers to business conduct [2]. Later it developed into the model of "business capture" or patronage, which is characterized by the predomination of authorities' administrative pressure on business for the purpose of deriving benefit for themselves. Modern Russian Federation is defined by the prevalence of the interactions partner system in most of its regions, which is often implemented in the form of "exchange" between the authorities and business. It is rightful to single out the following distinctive features of such a model: 1) resource exchange as the basis of relations; 2) large businesses' awareness of the need to do business exclusively and refuse from participation in power struggle; 3) reaching high production efficiency as the basis for coordinating interests of business, authorities and society; 4) development and implementation of joint comprehensive programs of social and economic development of regions. When interaction between the state and business is based on the "exchange" system, there usually exist simultaneously two groups of enterprises that are engaged and not engaged in this system [3]. For enterprises of the first group, closeness to regional authorities and possibility of receiving subsidies from them condition a large volume of social obligations. Representatives of the second group, as a rule, distance themselves from the state and do not receive support, but don't bear additional expenses. It is argued in [4] that the phenomenon of city-forming enterprises serves as a reason for relative popularity of this model in Russian Federation. They provide population of the corresponding cities with heating and other services, getting support from local and regional authorities in return. In their latest publications, Russian scientists pay attention to the appearance of new approaches to interaction between regional authorities and business. This is connected with accelerating globalization processes, when market borders become diffused and favorable conditions appear for moving production not only to other regions but also to other countries, that ultimately leads to increased competition between them for attracting capital and investments. New conditions of competitive pressure on the state at the national and regional levels create prerequisites for stimulation the active state support for competitive, growing and more effective business. Besides, support provision mechanisms change towards reducing risks and corruption. In Russian authors' researches these phenomena are qualified as prerequisites for the formation of a new regional industrial policy, which should be regarded as another model of interaction between business and authorities according to a range of researches. Brief description of evolution of the models of interaction between business and authorities since the time of transition to market economy in Russia is given in *Table 1*. Within the framework of the considered interaction models, close and multilateral relations of business with stakeholders are implemented. In this context, the state represented by power structures at the federal, regional and local levels acts as one of the parties that are most interested in successful business conduct by entrepreneurs by helping them implement market mechanisms of effective production, distribution and consumption of goods and services as well as by creating a stable financial and monetary system and stimulation of business for social support of population. Alongside with the state, other participants are interested in business effectiveness.

Table 1

## Evolution of Models of Interaction between Business and Authorities in Russian Federation

Interaction Models	Brief Description
"State Capture"	Reallocation of resources from the state to specific entities and business groups.
"Business Capture"	Creation of artificial barriers to business conduct by small and medium-scale entrepreneurs.
Model based on the system of "exchange" between the state and business	The peculiarity of the model consists of the predominance of two company groups: companies, which are close to authorities, receive subsidies and incur social obligations; companies, which aren't involved in the "exchange" system.
Model based on the implementation of "New Regional Industrial Policy"	Newly formed conditions of the global competitive pressure at the national and regional levels create objective prerequisites towards transformation of the support provision mechanism for reducing risks and corruption.

In general case, the role of participants interested in corporations' activity is performed by means of people or organizations (stakeholders) that have an influence on the company or are subject to its influence. For instance, these are the firm's employees, customers, government agencies, public organizations. They can be also divided into interior (employees, shareholders, managers of the company) and exterior participants (trade unions, public organizations, suppliers, creditors). Each of them has their own interests and needs; their optimal combination and coordination promote the economic growth, competitive ability and welfare improvement [5]. Detailed classification of the participative groups' influence and typology of their interests is shown by the author according to the classification of A. Zyb [6] and illustrated with the help of Table 2.

At the level of an individual business unit, strategic planning and management presuppose the use of influencing groups, which may influence the organization or be influenced by it. The main influencing groups are shareholders, institutional investors, top managers, organization's employees, consumers, distributors, suppliers, corporation's financial experts, representatives of the state and municipal authorities, social and public groups.

As it follows from the interest typology of the business influencing groups, mainly they are differently directed, i.e. parties' interaction is notable for the conflict nature of the interests. Effective management of interest conflicts in the external and internal environment of the company is carried out on the basis of corporate social responsibility (CSR), which is implemented with the help of such tools as social investments, inter-sectoral social partnership, corporate communications and social accounting. Besides, CSR not only stabilizes the current situation, but also promotes sustainable growth of the company's performance indicators in the long run. Moreover, CSR in the organization management system is the mechanism that regulates the organizational behavior and its exterior and interior stakeholders within the framework of hybrid agreements where they coexist in the modern economic conditions when the company has extended purposes of functioning. The hybrid agreement is a form of contractual relations, which is characterized by bilateral dependence without complete integration.

## DISCUSSION AND CONCLUSIONS

Ongoing constructive dialogue helps the company and all interested parties (both external and internal) reduce their transaction expenses. Both the regular process of social accounting and dynamic communicative activities of the company enhance the positive effect.

The above-mentioned hybrid relations have a conflict nature, since their major attribute is a blurred separation of powers among the agents. Comparison of different models of interaction between business, authorities and society (nonprofit organizations) helps to determine the importance degree of various stakeholders. In our opinion, "New Regional Industrial Policy" which is recognized as an interaction model makes sense and could be effectively implemented only under conditions of democracy and free competition. The point is that the situation of confrontation between the state and business in Russian Federation still exists because of the fears that businessmen will pretend to receive power authorization. The effective dialogue between these two parties is important, since its results have an effect on the society and create foundations for modernization of the whole socio-economic system of the country. Thus, there are grounds to believe that as long as the success of business is measured by the contentment of stakeholders, it is they who act as modernization agents to a varying significance degree.

Table 2

Main Influencing Groups of Organizations and Typology of Their Interests	
Interested parties	Content of Emerging Interests
Shareholders	<ul style="list-style-type: none"> <li>- increase in dividends by the end of the financial year;</li> <li>- increase in the value of the company's shares;</li> <li>- stable tendency of growth in the company's value and its economic efficiency;</li> <li>- volatility of the market value of a share.</li> </ul>
Investors	<ul style="list-style-type: none"> <li>- high-risk investments;</li> <li>- investment portfolio optimality;</li> <li>- consideration to obtain high profits.</li> </ul>
Top managers	<ul style="list-style-type: none"> <li>- amounts of salary and consistently paid bonuses;</li> <li>- possible types of additional incomes;</li> <li>- social package;</li> <li>- delegated powers and responsibility levels;</li> <li>- number of appearing service problems and importance of their resolution.</li> </ul>
Employees	<ul style="list-style-type: none"> <li>- stability in provision with work and high employment guarantees;</li> <li>- salary level;</li> <li>- conditions and opportunities of career advancement;</li> <li>- stability and transparency of employment conditions;</li> <li>- maintenance of work satisfaction atmosphere.</li> </ul>
Company's financial services	<ul style="list-style-type: none"> <li>- company's ability to incur its liabilities and loans;</li> <li>- timely payment of interest;</li> <li>- effective management of money flows.</li> </ul>
Consumers	<ul style="list-style-type: none"> <li>- quality of products and their compliance with the real needs;</li> <li>- stability of prices and predictability of their change;</li> <li>- expectations of new products under the terms claimed by the company;</li> <li>- environmental friendliness and safety of products;</li> <li>- assortment variety of products to choose from.</li> </ul>
Company's distributors	<ul style="list-style-type: none"> <li>- maintaining the required level of after-sale service;</li> <li>- ensuring timely and reliable deliveries;</li> <li>- high quality of the products supplied.</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>- maintaining the stability of orders;</li> <li>- making payments in time and in accordance with the contractual conditions;</li> <li>- creating an environment where the company depends on the supplier's conditions.</li> </ul>
Representatives of state and municipal authorities	<ul style="list-style-type: none"> <li>- provision with employment on the presence territory;</li> <li>- compliance with requirements of the federal and local legislation;</li> <li>- repayment of taxes in time and in full volume;</li> <li>- increase in contribution to the economic growth of the region;</li> <li>- stability of local budget proceeds.</li> </ul>
Social and public groups	<ul style="list-style-type: none"> <li>- compliance with legislation on the environment and its protection;</li> <li>- compliance with international standards of socially responsible behavior;</li> <li>- fulfillment of nonprofit organizations' requirements and support of the local public activity;</li> <li>- compliance with requirements to listen to the influence groups.</li> </ul>

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# THE GIST AND COMPONENTS OF MANAGEMENT MECHANISM OF INVESTMENT ACTIVITY

**Pavlo Kukhta**, PhD in Economics, Associate Professor,

*Department of Innovation and Investment Management  
Taras Shevchenko National University of Kyiv, Ukraine*

**Abstract:** *This paper covers the gist and components of management mechanism of investment activity at enterprise; and summarizes principles of effective management mechanism of investment activity, full and consistent implementation, which will allow achieving in the shortest time of the set investment objectives and solve the main tasks of economy development at enterprise. The mechanism of the investment activity control represents as an integral organizational and economical system of the investment process which is an integral part of the general structure of the enterprise economic mechanism, system of main constituent parts which regulate the process of development and implementation an investment solution at the enterprise.*

**Keywords:** *investments, investment activity, mechanism, management*

## INTRODUCTION

Theoretical grounding of the nature of the investment activity control mechanism, determining its structure and constituent parts is an important task of investigations aimed at forming an efficient investment policy, solving problems of resources' provision for the investment process and discovering the impact of investments on the economic development.

Building up a mechanism of investment activity management is highlighted in a number of scientific investigations and practical recommendations. Among them one should mention scientific research results of M.P. Denysenko [3], D.A. Maljarov [6], M.A. Nikolaev [8], V.V. Puhalsky [11], and V.V. Chesnokova [14]. One should mention the contribution to the modern theoretical and methodological management instruments of investments, scientific papers of Yu.H. Drobenko [4], L.A. Sikoraka [12], V.S. Ponomarenko [9], and other investigators [1; 2; 10; 15]. But they are predominantly of the local organizational and economic character. Thus, its completeness is not provided.

The purpose of the article is to explain the notion "investment activity control mechanism" and its constituent parts, summing up the principles of forming an efficient mechanism of investment activity control.

## MATERIALS AND METHODS

This paper was used of general scientific research methods, such as: analysis and synthesis, generalization method, historical and logical methods, inductance and the deduction, and scientific techniques and methods, including statistical, information, structural and functional analysis.

## RESULTS

Notions "control mechanism", "investment mechanism", "investment activity control mechanism" are rather often used in the economic literature.

"Mechanism" derives from the Greek word and means tool, instrument, and device: 1) set of movably interconnected parts which transfer and reproduce the movement; 2) set of intermediate conditions or processes of certain phenomena [13]; 3) from the philosophical point of view, the mechanism is a set of conditions and processes which form any phenomenon, internal structure, management system. The most useful for us is the second definition: mechanism is a set of processes, methods, approaches, determined/required actions for the goal achievement [5].

According to the general meaning, the mechanism is an internal structure, system of constituent parts and different variants of their interrelations, the set of which forms the condition and content of processes under implementation. Explaining the essence of the notion "control mechanism" in the context of the economic science and from the position of the complex approach in the enterprise management system, one can single out several relatively separated but interconnected and interdependent elements: apparatus of developing purposes and tasks of the production management (management apparatus); system of functions and methods of control (for the successful solving of set tasks, employees of the management apparatus should have the corresponding means and methods of control); control process; means of providing the control process which are implemented on the basis of the corresponding laws and principles; mechanical improvement of control.

The above-mentioned components characterize the substantive aspects of the control mechanism. With the using of the systemic approach in investigating the structure of the control mechanism, one presumes that the specific feature of the object is not limited by the peculiarities of its elements but is first of all connected with the character of interrelations between its elements. There are interdependent connections between all components of the control mechanism. The logic of these relations is the following: laws and regularities generate control principles; principles in their turn generate purposes and management challenges; the other parameters of the control system including style and means which provide the control process depend on functions and methods.

One of main mechanisms of economics control is the mechanism of investment processes control which provides the implementation of management functions such as forecasting, planning and interaction organizing, regulating, motivation, and control. An important place in the control mechanism is occupied by the feedback which promotes increasing control efficiency. The mechanism of investment processes control is the sequence and way of control; sequence of processes and stages, corresponding procedures and instruments; set of institutional and organizational structures, and set of forms and methods used by them; sequence of using different ways. The structure of the mechanism of investment processes control consists of the following elements: legal, regulatory, informational provision, investment processes control methods, investment strategy and policy, leverages which influence the implementation of developed programs. The mechanism of investment processes control is an integral part of the financial mechanism which in its turn is an important element of the national economy. It is necessary for providing normal trouble-free running of the economic system, implementation of the investment policy of the state. At the micro-level, it provides the implementation of investment processes in the organizations, at the enterprises.

One should differentiate the notions "investment management", "control over investments" and "investment mechanism". The investment management provides using forms and methods of object stimulation. Control over investments besides the investment management also includes statistics, financial recording, marketing researches, information and technical support; it is aimed at the impact on the movement of investment resources, control over them with the help of institutional and organizational structures and forms and methods used by them. Now the in the scientific literature, there is authentication of the investment mechanism with the financial and credit mechanism. That has happened as the result of the non-sufficient differentiation of the existed mechanisms of investment resources attraction and allocation [12, p. 218]. The investment mechanism is a part of the investment system of economic enterprises development. Its content depends on the specific features of all elements of the investment activity. The investment control mechanism is one of the integral components of the investment mechanism [12].

Investments control at the enterprise is included to the general system of financial management as the most important functional subsystem which provides the implementation of predominantly strategic tasks. In this context, the investments control can be considered as the complex of measures aimed at taking and implementation of management decisions connected with the implementation of different aspects of enterprise investment activity and aimed at the achievement of set goals.

Considering the mechanism of the investment activity control it should be born in mind that it contains elements of qualitative and quantitative transformation of constituent parts of the investment activity, control over the terms of the investment activity, strengthening of trust of the investment activity participants.

The mechanism of the investment activity control should be represented as an integral organizational and economical system of the investment process which is an integral part of the general structure of the enterprise economic mechanism, system of main constituent parts which regulate the process of development and implementation of enterprise investment solutions.

The structure of this mechanism includes: 1) market mechanism of self-regulation and price formation on the basis of demand and supply at the investment markets; 2) state regulatory legal regulation of the investment activity; 3) internal mechanism of the enterprise investment activity regulation (on separate directions, regulation is performed with the help of the developed investment strategy and target investment policy, internal norms and requirements to the investment activity on its different aspects); 4) system of specific control methods with the help of which one is going to achieve certain results of the investment activity [15].

The investment activity control mechanism consists of the scientific and technical, informational, social and economic, organization and management, manufacturing, regulatory legal, tactical, strategic, and other interconnected elements which provide achievement of manufacturing interests.

On this basis, the investment activity control mechanism is aimed at the motivation and intended use of organizational forms of management in the manufacturing and social spheres.

It is implemented via formation of targets, tasks, key functions of control, principles of its functioning, methods, organizational structure of management, factors and criteria of control efficiency assessment.

The efficient mechanism of fulfilling the investment activity by the enterprise gives the opportunity to gain maximum fast fixed goals and solve main tasks of developing the economics of the enterprise.

It promotes efficient fulfillment of specific functions of controlling an efficient activity the complete and consistent practical implementation of which is a reliable basis of active investment policy and efficient economic activity of the enterprise.

The operation of the investment activity control mechanism can be successful only if it is built on the grounded system of principles (rules and provisions which are used for its formation).

All principles of the implementation of the investment activity control mechanism can be represented via a set of systemic, organizational, tactical, and strategic principles.

Systemic principles include principles of integrity, hierarchy and self-organization; organizational principles include principles of coordination and complexity; tactical principles include principles of professionalism, proportion, structuring, efficiency; and strategic principles include principles of forecasting, communicativeness, adaptability, and dynamism.

Using the above-mentioned principles will provide the quality, reliability, cost effectiveness and firmness of the formed mechanism.

## **DISCUSSION AND CONCLUSIONS**

Thus, the constituent parts discovered by us and marked principles of forming the investment activity control mechanism of the enterprise give the possibility to develop the most efficient investment programs which correspond to the modern requirements.

Regarding the complex of these elements will finally allow provide maximum favorable conditions for achieving investment goals taking into accounts changes of both internal and external environments of the enterprise.

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# FINANCIAL TOOLS FOR STIMULATING THE HOUSING CONSTRUCTION IN UKRAINE

**Liubov Lysiak**, Doctor of Economics, Professor,  
**Tatjana Salnikova**, PhD-Student,

*Financial Department,  
Dnepropetrovsk State Financial Academy, Ukraine*

**Abstract:** *Basic legal financial instruments used for the housing financing are elucidated in our article. Considered tools can be used also for stimulation of housing construction. The used indexes some of tools are considered with the reflection of dynamics for a few years. These indexes reflect a dynamics of financial tools' using. The possible alternative methods of financing are recited. Priority directions of housing financing development and alternative financial tools, which can be used both as an independent and as an addition elements of operating tools are designated. The role of the state for stimulating the housing construction with the financial and tax tools using is defined. Stimulating the housing construction has been researched in both directions as stimulating of building houses and as stimulating of the housing supply increase.*

**Keywords:** *financial tools, stimulation, housing construction, real estate funds, fund of construction's financing, leasing, factoring, bonds*

## INTRODUCTION

Construction industry (including housing construction) depends on the economic situation; it responds to the crisis at first. Stimulating the housing construction can support the economic growth and can solve social problems in society [8]. The need to stimulate housing construction is determined by the reduction of its volumes, reduction of housing affordability and investment activity in this sector, as well as significant increase in the costs of the developer and by other factors. Scientific papers of many domestic and foreign researchers are devoted to the consideration of housing financing problems. The current level of housing financing in Ukraine shows the need to find additional funding tools.

## MATERIALS AND METHODS

Our research was conducted based on the information of the legal framework, analytical reports, official statistics, reports of Regulatory Commission in the field of financial services and Commission for Control of securities and the stock market. The main research method is the analytical method.

## RESULTS

It is considered that stimulation of investment activity and the development of industry sectors is the state duty. In this case, state is the guarantor, initiator of different programs, organizer and controller. Financial and tax levers of influence on the different sectors development of the economy are also in his charge. State development programs envisage the affordable housing providing for certain population groups (such as young families, militaries, young specialists and families with low income who need to improve their living conditions). Therefore stimulating the housing construction is needed. Balanced financial policy of the state can provide economic benefits of housing construction. The real estate market of Ukraine in 2011-2013 and the first quarter of 2014 is characterized by depression; economic and political problems are destabilized the market even more. The volume of construction work in the beginning of 2014 decreased by 1.6% compared to 2013. Housing construction has reached 20.8% of constructed buildings. However, index of housing commissioning has a positive dynamics. 2346.9 thousand housing sq. m. was commissioned in 2014 (10.9% more than at the beginning of 2013) [3].

In order to solve the existing problems, the state should stimulate financially housing construction with the involvement of private investment. For this purpose, such mechanisms as governmental funding of social housing, raising long-term funds for rental housing, governmental subsidies, funds accumulation for lending, mobilization of population funds through savings and savings building fund. In this case, public funds is a catalyst of investment processes, increasing their attractiveness and reducing risk.

To promote and ensure the development of housing construction in Ukraine, primary and derivative financial tools are used. Primary financial tools include the use of bank deposits, lending, factoring, equity participation in the funds formation, leasing and bank guarantees. Derivative financial tools include forward contracts for the purchase of property rights to real estate under construction, futures contracts, options and so on

In this case, subjects of forward contracts are the real estate and/or property rights.

In addition to the financial incentive tools, tax instruments are used [8]. The state should provide for developers the comfortable tax conditions for the development, partial exemption from VAT, tax benefits, compensation etc. An important element in the sale of real estate under construction is to hedge risks, especially the price risks.

Today in Ukraine the official sources of housing financing and stimulating funds are financing the construction funds, real estate funds, joint investment institutions and emission of targeted corporate bonds.

The main sources of housing financing are credit funds and own funds of the population that are accumulated in the financing funds and can be used as investment resources. Beneficial way to accumulate funds is accounts in pension funds, funds of bank management and securities.

Private pension funds can be an alternative to housing finance.

During the period 2011-2013 the number of open pension funds decreased from 70 to 57, the professional from 10 to 8 and corporate increased from 8 to 9. The total assets increased from 1.38 up to 2.13 billion UAH [6].

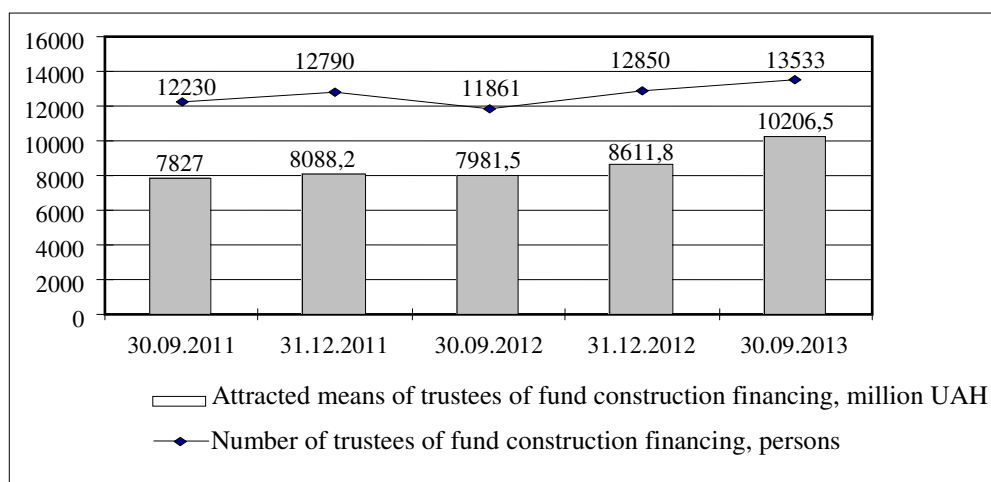
It is assumed that these funds will accumulate insurance premiums that will be invested to get income in the favor of the insured persons or will be issued by the bank in the form of credit secured by property [4].

Recently, the construction sector lending is increased, including governmental programs, but in the structure of the corporate portfolio a part of construction loans remains under domestic trade and agriculture (8% in 2013) [1].

The advantages of housing bonds are their clear legislative regulation, limiting allowable emissions, ban for changes the terms of issue, usage of the secondary market as an independent tool. Their disadvantages are the lack of control by the State Commission on Securities and Stock Market, security of buildings under construction and the lack of binding to a specific residential facility [2].

Using financing schemes through the issuance of housing bonds gives the opportunity to optimize taxation, receive tax benefits, benefits to pay value added tax. In addition, the issue of housing bonds is a cheap way of attracting investments in the construction sphere (the cost of the bond issue is 0.4% of their nominal value). In 2013 the registered issue of bonds for the construction industry amounted 8.15%. In 2013, 46 financial companies have received a license to raise funds financing for the construction and implementation of real estate contracts. The total number of trustees has included 13.53 thousand persons, where 13.42 thousand are individuals and 117 are legal entities [5]. Starting in 2011 the number of trustees of fund of construction financing (FCF) is gradually increased, as it is seen in *Figure 1*. This tendency shows the confidence's restoration from the side of trustees in FCF and a gradual increase in the solvency of individuals and legal entities.

Over three quarters of 2013, 15 financial companies were authorized to issue certificates of real estate funds, but only 4 companies have created 6 such funds. At the same time, raising funds in this way had no significant effect.



**Figure 1: Dynamics of change in the trustees' number of the fund of construction financing and attracting their funds in 2011-2013**

*Source: created by authors according to [5]*

Factoring can be considered as a perspective tool in housing financing; its performance in the construction sphere is gradually increasing. In the construction sphere factoring is a way of collection of trade receivables of customer to the builders and sellers of real estate and a financial tool to get non-recurring revenues. Factoring is a convenient tool for suppliers of building materials to work with builders [7].

However, 5685 factoring agreements were active in 2013; 64383 contract to 4807.7 million UAH were concluded and 55837 contracts to 3960.4 million UAH were performed for 9 months 2013. In general, for 9 months 2013 compared with the same period in 2012 the number of factoring contracts increased by 3.3 times and their value by 33.8%. 2.5 million UAH refers to the construction sphere in 2012-2013, which is 0.8 million UAH more than this indicator in 2011. The construction share in factoring contracts by industries spheres is 0.052%. The main source of financing are own funds (66% in 2011 and 47.7% in 2013). The share of bank lending has increased since 2011 and it is 45.6%. The share of loans is 4.8%.

Financial leasing is becoming an alternative form of housing financing growth. 8172 leasing agreements have signed (29793.9 million UAH) for 9 months 2013 [5]. In comparison with the same period of 2012, the cost of financial leasing contracts in construction decreased by 590.6 million UAH and amounted to 2.3%.

The main role among the financing sources belongs to bank loans and borrowings (88.4% in 2012 and 83.5% in 2013). I.e. the leasing market has a positive trend and can be an alternative to finance [5].

Along with stimulating the financing housing construction development, the state stimulates the proposal already finished housing through the provision of capital grants, issuance of securities, providing subsidies for maintenance, repair and rehabilitation of housing.

## CONCLUSION

Having considered the various ways of financing housing and forms of financial stimulating, we can say that the existing sources and funds to finance construction and real estate transactions do not justify their status. The main ways are loans and the use of savings of population. However, the perspectives and priorities can be the use of leasing, factoring for the construction, as well as pension funds. To ensure a stable housing financing and effective stimulation of its development we should remember that support for the sector should be comprehensive, i.e. by the state, the private sector and the public. It means the different ways' use to raise funds for financing and implementation of government programs to promote housing construction, the use of temporarily idle resources, the tax influence on developers and the population, ensuring transparency of funding.

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# IMPACT ASSESSMENT OF PROVISIONS OF WTO ACCESSION AGREEMENT AND EU ASSOCIATION AGREEMENT ON TRADE DEVELOPMENT OF AGRICULTURAL AND FOOD PRODUCTS

Iuliia Makhanova, PhD-Student, Lecturer,

*Department of International Economic Relations,  
V.N. Karazin Kharkiv National University, Ukraine*

**Abstract:** *The effects of WTO accession agreement and EU association agreement on the development perspectives of a qualitative agricultural production as one of Ukraine's export-oriented sectors are considered in our article. The issue of asymmetry between "old" and "new" WTO members with regard to market opening conditions is researched in our article, namely asymmetric commitments concerning the export of agricultural products, which Ukraine has accepted, implications with regard to imports and others. It is pointed that in order to protect itself from the EU's asymmetric non-tariff regulations, Ukraine may resort non-tariff barriers in the trade in agribusiness products: 1) measures to protect human health, ensure food security and protect the environment; 2) trading policy's measures, including export support, export duties, import licensing, import quotas, production subsidies, state trading and import monopolies, safeguard measures; 3) a wide range of administrative import obstacles, including customs clearance delays, non-transparency and contradictions in customs procedures, excessive bureaucratic documentation requirements, etc. The competitiveness of Ukrainian agricultural products possible to increase because of the implementation of the health care and citizen protection standards conforming with the EU standards.*

**Keywords:** *export, import, EU association agreement, WTO accession agreement, sanctions, agricultural production*

## INTRODUCTION

Ukraine's joining the World Trade Organization (WTO) in May 2008 and signing the EU Association Agreement (EUAA) in June 2014 brought to a focus the problem of assessing the impact of these foreign trade agreements on the development prospects of agricultural good production as one of Ukraine's export-oriented sectors.

The problem of the impact of international agreement on Ukraine's trade in agricultural goods and their production was dealt with by leading Ukrainian scientists and experts, such as V. Heiets, V. Tochylin, V. Sidenko, I. Klimenko, O. Fedirko, I. Us, T. Ostashko, L. Voloshchenko, I. Kobuta, O. Borodina, I. Pokopa, Ie. Hotsuenko, N. Hotsuenko, I. Dashkovska, V. Piatnytskyi, I. Burakovskiy, V. Movchan, D. Liapin, A. Honcharuk, N. Nychai, M. Kyzym, I. Matiushenko et al. At the same time, aggravation of the national food security issue in terms of the Russian Federation's blocking the import of Ukrainian agricultural products during 2014 made the problem of searching new markets and adjustment of Ukrainian agricultural producers to the conditions of applicable and new international agreements even more topical.

## MATERIALS AND METHODS

The method of comparative analysis and the historical approach to describe WTO accession agreement and EU association agreement on the developing perspectives of agricultural production as one of Ukraine's export-oriented sectors of development were used in our research. Based on this analysis and on the identification the main features of above-mentioned processes were formalized. The observation and description of the modern tendencies in Ukrainian agribusiness have been done.

## RESULTS

Ukrainian agricultural production that the asymmetry between "old" and "new" WTO members regarding to market opening conditions, which is the most striking. It provides for

stricter requirements exceeding those generally established. In general, Ukraine has accepted the following asymmetric commitments concerning the export of agribusiness products [1]: 1) not to apply mandatory minimum export prices; 2) to reduce export duties on oil crop seeds, live cattle, cattle hides, ferrous and non-ferrous metal scrap, reserving the right to apply them to other goods; 3) cancel export duties on grain (implemented in 2008, but in 2010 Ukraine returned to applying quotas to grain exports replacing them with export duties in 2011); 4) not to subsidize export of agricultural goods.

Ukraine's membership in the WTO has the following implications with regard to imports: 1) reduction of import tariff protection level; 2) binding rates of import duties. Arithmetic mean rate (final bound) of the import tariff for agricultural goods amounts to 11.16%; 3) joining sectoral initiatives aimed at reducing import tariff rates for chemical and textile goods; 4) joining "zero" sectoral arrangements for agricultural equipment; 5) applying maximum rates of import duties for sugar (50%) and sunflower oil (30%).

Asymmetry in the rate and forms of import duties for agricultural and food products has the following manifestations [2]:

A) Considerably lower rates of import duties for most goods than those applicable in WTO founding members and most member states. Thus, the weighted average rate of the customs tariff in 2014 was 5.09% compared to 7.02% before the WTO accession, including 10.07% (against 18.19%) for agricultural goods [3; 4].

B) 2615 subcategories of goods in the applicable customs tariff of Ukraine (23.6% of the total number of ten-digit product tariff codes), that are liable to lower rates of import duties than specified in Annex 1 to the WTO Accession Protocol [5]. For instance, lower rates are applicable for live cattle, meat, fish, and milk; vegetables, coffee, tea, grains, and wheat;

C) Introduction of zero rates of import duties for 10% of tariff lines of agricultural goods and for over one third of tariff lines of industrial goods (making a major part of the imports). For example, Ukraine has introduced zero rates of import duties for agricultural equipment since 2005 and for distilled alcohols since 2011 [5];

D) Application of ad valorem and non-ad valorem customs tariffs as compared to the developed countries. The share of Ukrainian imports, such as agricultural goods, that are subject to non-ad valorem duties (i.e. differentiated within one product category) is tens of times lower as compared to Ukraine's strategic trade partners. EU customs tariff may be rather differentiated within one agricultural product category (four digits according to the Harmonized Commodity Description and Coding System) with obvious signs of escalation depending on the processing rate. This share averages 25% in the Customs Union countries, which is 10 higher than in Ukraine, while this parameter is even higher in the EU and the USA. According to the binding commitments, the share of subcategories of agricultural goods subject to non-ad valorem duties in Ukraine is 1% [6];

E) Ukrainian customs tariff structure does not provide for considerable escalation of the customs tariff depending on the processing rate, besides, peak rates for certain goods, aimed at actual ban on their import, are not applied. Thus, variation rate, calculated as a ratio between standard deviation value of duty rates and the arithmetic mean rate of tariff lines based on the available data on applicable rates, amounts to around 41 in the USA, 32 in the EU, approximately 28 in Russia and Belarus; 22 in Kazakhstan; and 2.8 in Ukraine [5]. It means that the degree of customs tariff homogeneity for agricultural goods is much higher in Ukraine than in the EU and Customs Union countries.

Asymmetry of the specified non-tariff measures that cannot be grounded according to the provisions of the WTO Agreement is evidenced by the following [2]:

A) Cancellation and prohibition of imposition of quantitative restrictions on imports. Imports shall be licensed according to the relevant WTO Agreement based on the principle of non-restriction of trade. Thus, Ukraine has undertaken to only impose an import tariff quota on one agricultural product (!) – cane raw sugar (final quota was fixed at 267 800 tons). Ad valorem rates of import duties shall be applied for importing all other agricultural goods (excluding excisable goods) without any quantitative limitations on total imports [5; 6; 7];

B) Implementation of anti-dumping duties, which were imposed by WTO member states against Ukrainian exports 52 times in the period from March, 29, 1995 up to January, 01, 2012 according to the information of the WTO Committee on Subsidies and Countervailing Measures, including 41 duties against non-ferrous metals and products, and 9 – against chemical goods and products of related industries. In its turn, it was 28 times Ukraine has informed the WTO of such measures [4]. At the same time, since anti-dumping measures are not imposed against all import sources, it may result in growing imports from other countries while reducing imports from the countries against which the measures have been taken. It means that Ukraine's implementing anti-dumping measures did not result in considerable decrease in imported goods in the Ukrainian market;

C) Countervailing measures, introduced no more than for three years as to the imported goods enjoying benefits from illegitimate subsidies (if access to it is provided by the responsible state authority of legislation only for certain (chosen on certain criteria) enterprises), were unable to safeguard Ukrainian producers against competition with imported products. According to the information from the WTO Committee on Subsidies and Countervailing Measures, WTO members initiated 262 and introduced 164 countervailing measures in the period from March, 29, 1995 up to January, 01, 2012 [4]. However, since the systems of subsidizing agriculture in the EU, USA and other developed countries cannot be defined as specific or illegitimate, there are only limited cases when Ukraine can introduce countervailing measures against their subsidized agricultural goods. Therefore, there is considerable asymmetry in introducing these measures to the developed countries, that are now world leading suppliers of basic agricultural goods and major importers for Ukraine;

D) Ukraine has undertaken not to introduce any WTO special safeguard measures, provided for by the Agreement on agriculture, which creates asymmetric conditions of trade in agricultural goods as compared to the developed countries that often take advantage of them (for example, EU) [5-7]. At the same time, general safeguard measures (GSM) may be introduced as specified by the WTO and the Law of Ukraine "On Introduction of Specific Measures to the Imports to Ukraine". It means that the introduction of GSM is a forced alternative to specific safeguard measures; may be a reasonable alternative to initiate reviewing commitments according to Art. XXVIII of GATT/WTO. For example, according to the WTO Safeguard Measures Committee, 234 general safeguard measures were initiated and 118 were announced in the period from March, 29, 1995 up to April, 30, 2012. From among 234 investigations initiated by the WTO members, almost a quarter (24%) concerned agricultural goods (codes I-IV according to the Harmonized System). Ukraine did not inform the WTO of introducing GSM against agricultural goods, though it initiated safeguard measures 10 times. The bottleneck restricting effective exploitation of emergency measures to protect agricultural and food market in Ukraine is lack of personnel, institutions, experience and discipline among producers.

Being a new member of the WTO, Ukraine is prohibited from exercising a series of measures aimed at supporting internal producers at the national level (while such measures are widely used by WTO founding members to support their producers). As a consequence, the WTO agreement establishes asymmetry in the export policy of Ukraine that committed itself [6-7]: 1) to abolish restrictions on grain exports (as a consequence, Ukraine's accession to the WTO automatically resulted in abolition of rent quotas that used to restrict Ukraine's export to the EU); 2) not to apply mandatory minimum export prices and to reduce its export customs tariffs for oil crop seeds, live cattle, cattle hides. At this, Ukraine may further exercise export duties as an instrument of tariff regulation; 3) not to exercise export subsidies in agriculture (industrial subsidies may be provided according to the rules and terms of the Agreement on Subsidies and Countervailing Measures); 4) not to ban production of antibiotics and hormones for increasing cattle growth rate in Ukraine allowing for the import of meat and meat products manufactured using growth hormones.

There is asymmetry in the implementation potential of financially powerful production and export support programs, in particular, regarding agribusiness goods of Ukraine and

developed countries (for example, EU). In addition, relative macroeconomic stability and maturity of financial markets and market institutions in general provide EU producers with incomparably better conditions in terms of availability of financial resources, and, as a consequence, potential to develop industry-based agricultural production than Ukrainian producers. It should be emphasized that, after accession to the WTO, Ukraine assumed quite concrete commitments related to ensuring comprehensive food security. It is because in terms of globalization they can drift from the internal market to the external one, harming not only producing countries but also its trade partners. Therefore, irrespective of where the food or raw material is produced, whether at big agricultural companies or village farms, the goods must be in compliance with the defined standards and requirements.

In order to meet its WTO accession commitments, Verkhovna Rada (Ukrainian Parliament) adopted the law "On Food Security and Quality" in 2009. The law became effective in January 2010, though a series of its provisions were deferred until 2015 because they could not be implemented without having to re-equip and modernize the whole structure of small-scale production.

Creation of FTA+ with the EU and signing the EUAA opens up new prospects for the development of the Ukrainian agricultural market [8].

*Thus, Ukrainian exporters will have comparative advantage* upon implementation of import tariff quotas as suggested by the EU *for EU-sensitive goods* that are usually excluded from the liberalization structure and become subject to common duties during customs registration. Ukraine may now import certain volumes of these goods without having to pay import duties. And it is not about restricting imports, but rather about the fact that imports exceeding the specified volume will be subject to common import rules, i.e. will be taxed according to the rules currently applicable in Ukraine). In particular, *the following* quotas are provided for duty-free export to the EU according to the information from the Ministry of Agrarian Policy and Food:

- 1.6 m tons of crops in the first year of the operation of FTA provisions with gradual increase up to 2.0 m tons over five years. EU export quota for wheat will be 950 thousand tons (1 m tons in five years), 250 thousand tons (350 thousand tons respectfully) for corn, and 400 thousand tons (650 thousand tons) for barley;
- 20 thousand tons of frozen dressed chicken and 16 thousand tons of processed products in the first year with gradual increase up to 20 thousand tons over five years;
- 3 thousand tons of shelled eggs and 3 thousand tons of processed egg products;
- 12 thousand tons of beef;
- 40 thousand tons of pork (processed pork and carcasses equally);
- 30 thousand tons of sugar, 27 thousand tons of molasses and sugar syrup;
- tariff quotas will also be applied to other products, such as honey, garlic, tomato paste, juices, etc.

In order to protect itself from the EU's introducing asymmetric non-tariff regulation measures, Ukraine may resort to the same barriers. All non-tariff barriers in the trade in agribusiness products are subdivided into three categories: 1) measures to protect human health, ensure food security and protect the environment, including bans on imports and exports, sanitary and phyto-sanitary requirements, standards and conformity assessment; 2) trading policy measures, including export support, export duties, import licensing, import quotas, production subsidies, state trading and import monopolies, safeguard measures (anti-dumping, safeguard measures and countervailing duties); 3) a wide range of administrative import obstacles, including customs clearance delays, non-transparency and contradictions in customs procedures, excessive bureaucratic documentation requirements, etc. Besides, competitiveness of Ukrainian agricultural and food products are likely to increase because of the implementation of the health care and citizen protection standards conforming with the EU standards.

Ukraine's significant achievement within the FTA+ Agreement was that the EU retreated from imposing export subsidies in its trade with Ukraine (though the EU actively uses export subsidies to promote its producers to the foreign markets, and, under the present



economic crisis, it has renewed export subsidies for milk and dairy products). At the same time, export subsidies for Ukrainian goods were maintained, though at a fairly low level (for example, export duties for sunflower seeds, contributed to the development of oil processing industry in Ukraine in spite of the criticism of trade partners).

## DISCUSSION AND CONCLUSIONS

Therefore, a conclusion may be drawn that representatives of the leading branches of the agricultural sector expect certain benefits from the implementation of the EU Association Agreement, since European markets will become more accessible for Ukrainian producers. These expectations are justified by the fact that Ukraine made considerable concessions in favor of the EU when it joined the WTO. The EUAA lion's share of which consists of the agreement on the creation of free trade area, largely remedies this situation, i.e. levels the conditions of cooperation for Ukrainian and EU agrarian and agro-processing industries and increases the accessibility of European markets for national producers.

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# **BANKING PROJECT FINANCING AS A MAIN DRIVER OF THE INVESTMENT ACTIVITY: FOREIGN AND RUSSIAN EXPERIENCE**

**Olga Markova**, PhD in Economics, Associate Professor,

*Financial University under the Government of Russian Federation,  
Moscow, Russian Federation*

**Abstract:** *This article reviews questions of increasing investment activity in country by strengthening role of project financing. Author performs research on risks of investment projects for borrowing companies. Expansion liability of banking project financing and features of applying it in separate countries are considered here. To describe the peculiarities of project financing in the Russian Federation and abroad, methods of analysis and synthesis have been used. A systemic approach has been applied to display the overall picture of the project financing status worldwide. Both comparison and logical structuring are helped to identify opportunities and to outline the main steps of the development the mechanism project financing in the Russian Federation.*

**Keywords:** *project financing, risk, rate of growth, investment potential*

## **INTRODUCTION**

Project financing is a quite new and developing form of financing investment projects. It is not fit for a long-term crediting, as it has a range of specific features. Usage of that instrument is clear in cases when risks of the investment project and (or) value of necessary financing, as well as the debt load on company is high enough, that makes unprofitable to attract credits or to add liabilities to the balance of the existing company, as it could cause default. Other causes of its usage are: 1) motivation to get tax concessions or 2) need of the company to become acquainted with new way of activity.

## **MATERIALS AND METHODS**

The general theoretical and empirical scientific methods have been used in our research. To describe the peculiarities of project financing in the Russian Federation and abroad, methods of analysis and synthesis have been used. A systemic approach has been applied to display the overall picture of the project financing status worldwide. Both comparison and logical structuring are helped to identify opportunities and to outline the main steps of the development the mechanism project financing in the Russian Federation.

## **RESULTS**

Meaning of the project financing for the bank consists in high profitability of this banking product, which estimates the project on the pre-invest stage in details and creates an adequate financial model for a project. During the further monitoring of project a bank can be sure in successful activity. At the same time, bank extends its own client base and can reckon on the further prolongation of loan relations by participation in such financing.

Project financing takes place on the national and international levels. At the international market a trend of decreasing growth of its volume could observed, but it develops by means of new participants, by means of technological development of crediting sphere and by means of accent's shifting in the usage of project financing in favor of developing countries. According to the expert's appraisal, the value of project financing worldwide in 2012 is reached 75 milliard USD, including 199 milliard USD attracted from commercial banks, i.e. this is about 53% of the world project financing<sup>42</sup>. The rest 47% are distributed between an own or budget financing, public option's selling, attraction of institutional investors and other sources.

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<sup>42</sup> Yescombe, E.R., Principles of Project Financing, Academic Press, Oxford, Ed. 1, 2002, p. 11.

However, if we will analyze market of project financing by means of borrowed financial resources then part of banks here is much higher, about 90%. In order to analyze a regional structure of the banks' project financing it is necessary to address to the materials of international journal "*Project Financing International*" (Table 1).

Table 1

Banking project financing in 2007-2012, million USD<sup>43</sup>

Country	Years						Max level, year
	2007	2008	2009	2010	2011	2012	
USA	25887	21602	9335	13424	18489	18427	2007
Canada	3799	4747	1540	4318	5134	4135	2011
Great Britain	17399	21582	8186	13021	10318	12019	2008
Germany	2859	6839	2340	2133	4039	4196	2008
Australia	13088	21170	12284	14592	24814	43042	2012
China	8381	865	88	154	240	1935	2007
France	8372	5913	2013	5351	11290	9162	2011
Japan	589	2737	1226	682	1524	2366	2008
Mexico	5078	2345	839	1710	1351	7167	2012
Brazil	3178	7257	5548	3059	8728	3505	2011
Chile	810	2814	1619	120	1118	2861	2012
Belgium	2966	2122	1314	2402	718	1106	2007
Italy	-	-	-	-	7118	3409	2011
Greece	6535	208	251	376	36	-	2007
Netherlands	2176	4238	1113	1437	354	774	2008
Spain	12207	22152	10105	17376	10342	3069	2008
Portugal	1603	11947	4117	4639	509	107	2008
Indonesia	913	2727	1652	2405	1886	1838	2008
South Korea	3041	5412	1322	2715	4612	6015	2012
Philippines	1538	819	377	1174	538	420	2007
Singapore	3041	5412	1322	2715	6479	7666	2012
Thailand	655	1423	875	2818	2736	2593	2011
Russia	2114	8877	3001	2754	11302	5096	2011
Uzbekistan	-	-	-	-	-	2914	2012
Turkey	4295	5673	2730	1720	2745	3110	2008
Saudi Arabia	8080	10310	1900	10000	3280	3467	2008
Egypt	4051	2111	-	1013	-	2600	2007
Qatar	9457	4396	949	-	4184	-	2007
Oman	3317	446	802	1361	1502	43	2007
United Arab Emirates	11718	4214	5433	1650	987	269	2007
South Africa	959	-	1138	510	235	2706	2012
Nigeria	4405	915	355	777	749	-	2007
Ghana	-	-	2750	1002	3085	3830	2012
Other countries	47475	59655	52662	90766	63045	38899	2010
Total	219986	250928	139186	208174	213487	198746	2007

Source: systematized by author

We can see from the Table 1 that 20 of 34 indicated countries have reached a peak in a range of project financing activity before 2008, i.e. before the global financial crisis. Till now most of developed countries couldn't restore pre-crisis volume of financing with the usage of this instrument (excluding Canada, Australia and France). Countries which have recuperated off the economic recession according to this index belong to the developing countries. Leaders in the usage of project financing by commercials banks' activities in 2000 and 2007 are U.S.; in 2008 is Great Britain, in 2009, 2011, 2012 is Australia, in 2010 is Portugal. The absolute champion in the value of provided bank resources in the range of this financing is Australia, which has financed over 42 milliard USD within the reviewed period.

<sup>43</sup> Created by author using materials from the journal "*Project Financing International*", Issues 353 (09.01.2008), 400 (26.01.2009), 424 (10.01.2010), 448 (13.01.2011), 472 (12.01.2012), 496 (16.01.2013).

In summary, in the reviewed period we can observe the shifting tendency in the volume of projects financing by banks from the most developed countries to less developed countries and developing countries. Russian market of project financing differs by instability due unstable economic situation in the country and by orientation to the biggest successful projects.

Review of regional dynamics of the project financing development in 2007-2012 we can observe in the *Table 2*.

Table 2

Rate of growth of banking project financing in 2007-2012<sup>44</sup>

Country	Rate of growth, %				
	2008-2007	2009-2008	2010-2009	2011-2010	2012-2011
USA	83,4	43,2	143,8	137,7	99,7
Canada	125,0	32,4	280,4	118,9	80,5
Great Britain	124,0	37,9	159,1	79,2	116,5
Germany	239,2	34,2	91,2	189,4	103,9
Australia	161,8	58,0	118,8	170,1	173,5
China	10,3	10,2	175,0	155,8	806,3
France	70,6	34,0	265,8	211,0	81,2
Japan	464,7	44,8	55,6	223,5	155,2
Mexico	46,2	35,8	203,8	79,0	530,5
Brazil	228,4	76,5	55,1	285,3	40,2
Chile	347,4	57,5	7,4	931,7	255,9
Belgium	71,5	61,9	182,8	29,9	154,0
Italy	-	-	-	-	47,9
Greece	3,2	120,7	149,8	9,6	-
Netherlands	194,8	26,3	129,1	24,6	218,6
Spain	181,5	45,6	172,0	59,5	29,7
Portugal	745,3	34,5	112,7	11,0	21,0
Indonesia	298,7	60,6	145,6	78,4	97,5
South Korea	178,0	24,4	205,4	169,9	130,4
Philippines	53,3	46,0	311,4	45,8	78,1
Singapore	178,0	24,4	205,4	238,6	118,3
Thailand	217,3	61,5	322,1	97,1	94,8
Russia	419,9	33,8	91,8	410,4	45,1
Uzbekistan	-	-	-	-	-
Turkey	132,1	48,1	63,0	159,6	113,3
Saudi Arabia	127,6	18,4	526,3	32,8	105,7
Egypt	52,1	-	-	-	-
Qatar	46,5	21,6	-	-	-
Oman	13,4	179,8	169,7	110,4	2,9
United Arab Emirates	36,0	128,9	30,4	59,8	27,3
South Africa	-	-	44,8	46,1	1151,5
Nigeria	20,8	38,8	218,9	96,4	-
Ghana	-	-	36,4	307,9	124,1
Other countries	125,7	88,3	172,4	69,5	61,7
Total	114,1	55,5	149,6	102,6	93,1

Source: systematized by author

Data of *Table 2* show that project financing is a dynamic developing form of the financing provision in 1980-2008. Its rate of growth is quite moderated; they reached over 15-20% seldom. It proves a high risk degree of this form of financing, which obliges banks to be more careful for the selection of potential borrowers.

If developed countries plan widening of project financing by activities of industrial investors, Russia is going to use this trend slowly. The most successful year of project financing development in Russia was 2011; in 2012-2014 its rate of growth significantly fell.

<sup>44</sup> Created by author using materials from the journal "*Project Financing International*", issues 353 (09.01.2008), 400 (26.01.2009), 424 (10.01.2010), 448 (13.01.2011), 472 (12.01.2012), 496 (16.01.2013).

It worked either by means of own activity or by means of banking resources, or by means of mechanism of public private partnership.

One of the main differences of Russian project financing from the most successful foreign competitors is a higher interest rate of investment credit (14-20% vs. 5-11%), as well as a lower level of services, that keeps down a Russian way of project financing. An average term of financing by Russian banks is 3-7 years, whereas this period is 10-15 years abroad. The biggest Russian companies either get project financing fully from foreign investors or they are financed by the Big Three – Sberbank, VTB and Gazprombank. Unlike of foreign practice, Russian way of banking project financing is carried out only with full feedback of borrower without usage of additional tools (*Table 3*).

Table 3

The largest bank-organizers of project financing

No.	Bank	Country	Number of deals	Sum, millions USD
1	Bank of Tokyo-Mitsubishi UFJ	Japan	96	11618
2	State Bank of India	India	32	10948
3	Sumitomo Mitsui Banking Corporation	Japan	68	7576
4	Muzicho Financial	Japan	51	6234
5	Korea Development Bank (KDB)	South Korea	27	5411
6	HSBS	Great Britain	34	4394
7	Crédit Agricole	France	36	4159
8	Société Générale	France	35	4084
9	BNP Parabis	France	35	3793
10	Banco Bilbao Vizcaya Argentaria	Spain	45	3521
17	UniCredit Bank	Italy	29	2789
20	ANZ	Australia	19	2457
x	VTB	Russia	6	26,5

Source: systematized by author

Data of *Table 3* show, that Russian scale of operations in project financing is very simple. Let us review the example. If Japan bank Tokyo-Mitsubishi has negotiated 96 deals with project financing in 2012 then VTB bank had only 6 projects in developing and only 5 leading specialists are able to work in the structuring deals for project financing. At the same time, domestic banks activity for project financing is very important in Russian economy development for its modernization and implementation of innovations, as well as increasing its competitiveness. By using this financial tool, money is invested in a real sector, i.e. in the effective projects. Attracted by Russian companies project financing contributes to the creation of a new working places and helps to solve of two main problems of Russian economy: 1) low investment level in the capital assets and 2) capital outflow from the country. Both favorable conditions of banking project financing and increasing the level its service facilitate to attract foreign investment in this sphere.

## DISCUSSION AND CONCLUSIONS

The analysis of project financing usage in banking sphere, as well as identifying areas for the improvement of potential scale its usage are the most important and actual for a modern stage of Russian economy development and increasing its investment potential.

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# CONVERGENCE OF NBIC-TECHNOLOGIES AS A KEY FACTOR IN THE SIXTH TECHNOLOGICAL ORDER' DEVELOPMENT OF THE WORLD ECONOMY

**Igor Matyushenko**, PhD in Technical Sciences, Professor,  
**Olena Khanova**, PhD in Geography, Associated Professor,

*Department of Foreign Economic Relations and Touristic Business,  
V.N. Karazin Kharkiv National University, Kharkiv, Ukraine*

**Abstract:** *The article highlights the basic model of economic development; attention is focused on industrial and postindustrial types of the economy. Basic factors of catch-up and advanced development' economies are justified, i.e. copying, borrowing, cooperation, innovation and self-reliance. Authors analyze the historical preconditions of socio-economic development' relations in the world economy with the hypothesis of Kondratiev's long waves, Schumpeter's theory of innovation and dissemination of technical and economic paradigms that reflect a certain level of scientific knowledge and potential market penetration. Periodization and the main characteristics of the six waves of innovative development of the world economy are determined, including the perspectives for social and economic development for the 2030-2080. The author's vision of the structure of sixth technological order of the world economy is presented. The perspectives of the NBIC-technologies convergence are described that could lead to revolutionary changes in the industry, economy and social structure.*

**Keywords:** *economic development models, NBIC-technologies convergence, technological order of the world economy.*

## INTRODUCTION

The aim of any technological innovation is to improve or "enrichment" conditions of human existence and the challenges facing humanity in general. There are many economic theories, which are an forecasting attempt to socio-economic development of society.

One of the first economists who proposed the historical periodization of economic life according to wavelength (cycles) approximately fifty years, was M. Kondratiev [12-13]. His ideas were developed by the Austrian-American economist J. Schumpeter, who was taking Kondratyev's approach as a base, insisted on innovative nature of long cycles [25-26]. J. Schumpeter identified five types of innovation and developed Kondratiev's hypothesis, recognizing the unique nature of each cycle and presenting economic development as a sequence of ascending pulsations caused by the spread of the corresponding clusters of interrelated innovations.

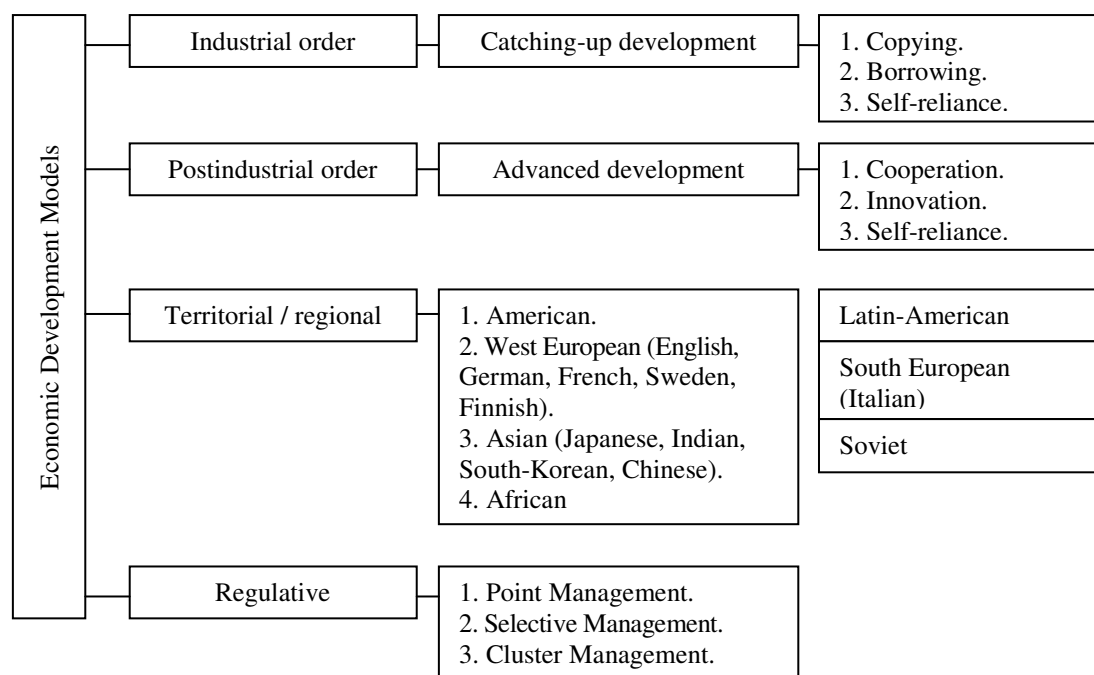
## MATERIALS AND METHODS

Content analysis has been used as the main method of research, which allowed to make a meaningful analysis of classic papers and researches of modern economists-theorists and practitioners devoted to the peculiarities of the innovative component of the world economy.

## RESULTS

It should be noted that the most widely used theories of Western specialists on the futurology and postindustrial society theory are researches of D. Bell, P. Drucker, J. Galbraith, F. Fukuyama, L. Thurow and M. Castells. Three main types of economy have been described in these works, i.e. pre-industrial, industrial and postindustrial.

There is a large number of economic development models according to the types of economies. They are shown in *Figure 1* [3, 10-11, 17, 20, 22]. As *Figure 1* shows, the industrial order is characterized by a catching-up model of the economy by means of copying, borrowing or self-reliance. In turn, postindustrial order is characterized by an advanced model of the economy with the help of cooperation, innovation or self-reliance.



**Figure 1: Main economic development models**

*Source: created by authors*

The experience of Japan, South Korea, Taiwan, Finland and Ireland shows that the path of intensive borrowing of advanced technological expertise can be used successfully for serious breakthrough and transformation in rich countries and then a gradual transition to own innovative activity might be appropriate.

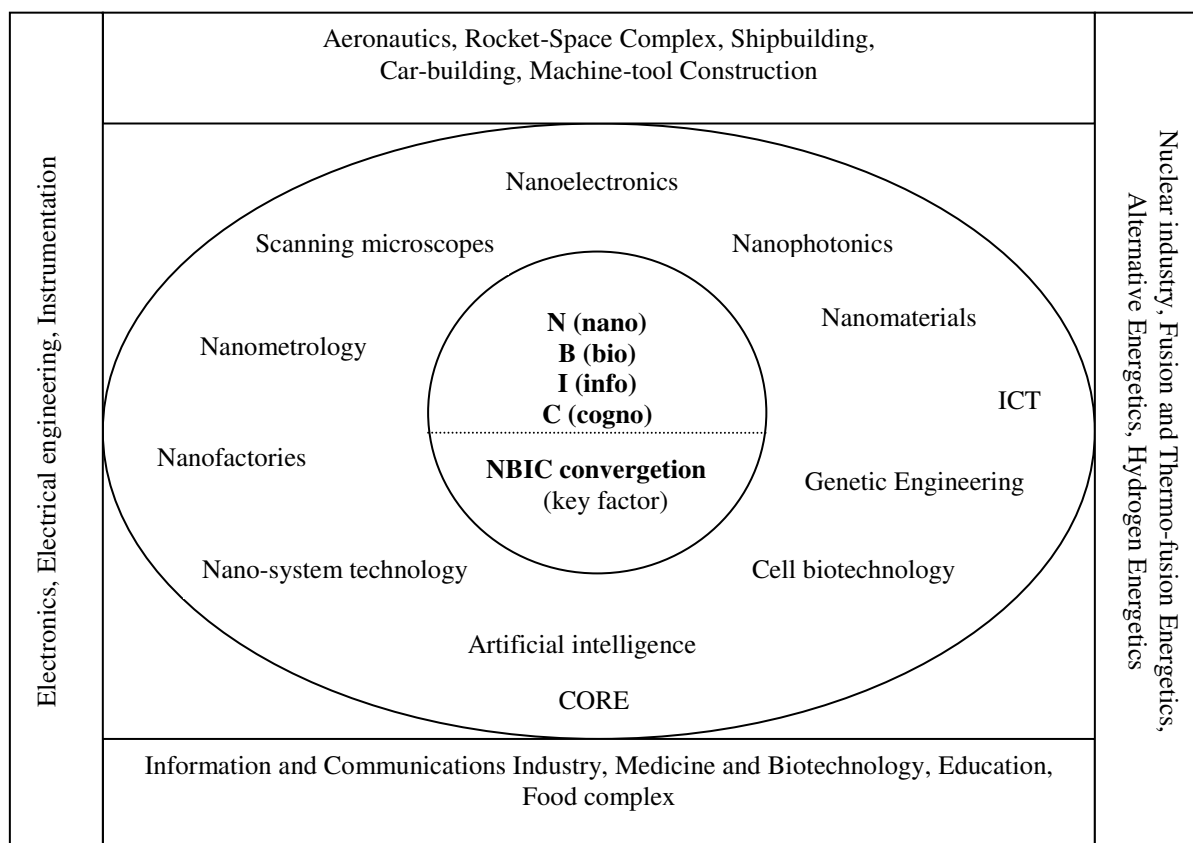
Most of the results obtained in the modern long waves theory confirms the fact that the nature of the 200-year socio-economic development in the world economy is correlated with the long waves' hypothesis [6, 7, 21]. Understanding of long waves as a change and dissemination of technical and economic paradigms was the most influential. Technological paradigm is defined as a dominant sphere of problems solving, usage of dominant procedures and methods, a set of principles derived from already achieved level of scientific knowledge, i.e. paradigm accompanied by the spread of basic technologies clusters.

Radical innovations in the middle of each new technological paradigm have a high potential of the market penetration. As J. Schumpeter showed their implementation provides an entrepreneurs' additional profit. This profit stimulates massive capital investments in new technologies that over time bring the growing mass of additional profit. It is capitalized again in the favor of new high-performance facilities expansion. At the same time there is the implementation of various innovations, as well as economies of scale and increase economic efficiency. Thus, the establishment of a new technological paradigm is a spread of new productions along with the increase of their efficiency during the next long-wave expansion.

If the duration of the fifth, as well as other cycles will be approximately 50 years, then the maturity stage of technologies that form it still ahead. At the same time, in the fifth cycle (as in the previous ones) the contours of the new sixth order are beginning to form.

The first global informational crisis took place in 2001-2002. It was at this time the technology's development of the first generation of the sixth technological order began. The authors proposed a structure of the sixth technological order (*Figure 2*), which clearly highlights the key factors, radical (basic) technologies of order core and bearing industries.

*Table 1* reflects periodization and main characteristics of major waves of innovative development according to M. Kondratiev, J. Schumpeter, K. Freeman and S. Glaz'ev [4, 6-7, 12-13, 21, 25-26] and characterizes a number of point of experts' view [5, 8-9, 11, 14-16, 23-24, 27-32] and the author's view to the perspectives of the socio-economic development for 2030-2080 [18-19].



**Figure 2: The structure of the sixth technological order**

Source: created by authors

World leading experts believe that a core's key factor will become the convergence of NBIC-technologies (Figure 2).

The core of the technological order will be formed by nanomaterials, nanoelectronics, nanophotonics, scanning nanotechnology, nanometrology, nanofactories, nano-system technology, genetic engineering, cell biotechnology, ICT and artificial intelligence. The leading sectors will become aeronautics and space-rocket complex; electronics, electrical engineering and instrumentation; information and communications industry; education; nuclear industry; fusion and thermo-fusion energetics; alternative and hydrogen energetics; shipbuilding, car-building and machine-tool construction; chemical and metallurgical complex; food complex.

## DISCUSSION AND CONCLUSIONS

The influence of technological innovations on the society economic development manifests itself in the fact that they provide periodic innovative renovation of goods and services productions, as well as the material base of society. As part of the fifth order (as in previous ones), the contours of the new sixth order start to develop that will be a core's key factor of the NBIC-technologies convergence. The core of the sixth technological order will be formed by nanomaterials, nano electronics, nanophotonics, scanning nanotechnology, nano-system technology, nanometrology, nanofactories, genetic engineering, cell biotechnology, ICT and artificial intelligence. The convergence of NBIC-industries will solve effectively and at a qualitatively new level the global problems of humanity.

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Table 1

## Periodization of the major waves of innovative development

Time frame	Wavelength / cycles		Status of Science and Education	Infrastructure		Universal resource
	Leading countries	Cycle characteristics		Transport and communications	Energy	
First 1780-1840	Belgium, UK, France	Industrial Revolution, factory production of textiles	Learning in the workplace, universities, and scientific communities	Channels and dirt roads	Water power	Cotton
Second 1840-1890	France, Belgium, UK, USA, Germany	Cycle of steam and railways	Mass primary education, first technical colleges, engineers	Railroads, telegraph	Stream energy	Coal, iron
Third 1890-1940	France, USA, UK, Germany	Cycle electricity and steel	First scientific laboratories in corporations, technical standards	Railroads, telephone	Electricity	Steel
Fourth 1940-1980	USA, Europe, Japan	Cycle cars and synthetic materials	Rapid growth in corporations and public sector, mass access to higher education	Motorway, airlines, radio and television	Oil	Oil, plastics
Fifth 1990-2030 (forecast)	USA, Japan, EU, Southeast Asia	Information and communications (computer) revolution (I)	Global scientific researches, i.e. network, lifelong education and vocational training	Informational Networks, Internet	Gas / oil, nuclear energy	Microelectronics, semiconductors
Sixth 2030-2080 (forecast)*	USA, Japan, EU, China, Southeast Asia, Russia, India, Brazil	Nanotechnology (N) and biotechnology (B) revolution and rapid development of the cognitive science (C)	NBIC-technologies convergence, global services market, network research and innovation systems	Integrated information systems and telecommunications, mobile internet, broadband access	Hydrogen and thermonuclear energy	Nano-electromechanical systems, bioprocessor, devices with direct access to the neurons*

Source: created by authors

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## THE DEMOGRAPHIC POLICY OF LATVIA

**Victor Morohin**, Doctor in Economics, Associate Professor,  
*Baltic Psychology and Management University College, Latvia*

**Aleksandr Rubanovskis**, Doctor in Economics, Associate Professor,  
*Baltic Psychology and Management University College, Latvia*

**Alexander Telepna**, Master in Economics,  
*"Exsobalt" Ltd., Latvia*

**Abstract:** *In the article the results of the research on the reproductive system of human resources in Latvia are presented. The current state of quantitative and qualitative indicators of human resources is determined. The object of the research is a range of material, informational, legislative and administrative measures, considered for the development of human resources of the country. Suggestions to improve human resource management and demographic policy are defined.*

**Keywords:** *demography, demographic policy, national economy, management*

### INTRODUCTION

After independence restoration Latvian population began to be reduced. If 2 687 000 people lived in Latvia in 1991, after 20 years the number of inhabitants was only 2 047 700 people in 2011 (according to Central statistical management of Latvia, 2012). It is explained by means of numerous socio-economic and political problems. It is possible to assume that the main reason of Latvia's human resources' reproduction and development system's unsatisfactory functioning is a lack of an effective management system along with a lack of financial resources (Dovlatbekova, Eteris, Zelmenis, 2008). Therefore, it is important to study interrelations and interdependence of all demographic policy' system elements, instead of separate ministries and department activities' research.

The goal of our research is to explore the Latvian demographic policy and related issues. The objectives of our research are: 1) to evaluate the demographic policy (hereinafter the population policy) and its regulations; 2) to define the objectives of the population policy, the necessary infrastructure capacity and its key resources; 3) to explore opportunities of exerting influence on the key elements of the population policy; 4) to provide recommendations for improving the national mechanism supporting the major subjects of demography. The object of our research is material, informational, legislative and administrative measures, accepted for preservation and increasing the quantitative and qualitative indicators of reproduction and development of human resources in Latvia.

### MATERIALS AND METHODS

The authors have grounded own research with primary sources such as: 1) scientific papers; 2) current Latvian legislative law; 3) documents developed by Cabinet of Ministers in Latvia and various ministries; 4) Latvian journal of economics "Business un Baltija" (in Russian). Following scientific methods of research are used: 1) comparative statistical analysis; 2) sociological researches and 3) systemic analysis.

### RESULTS

**Main tendencies:** Demography is the future of each nation. The demographic policy represents a complex of tasks on decisions-making which influence the state of population, its territorial placement, living standards and the scales of economic activity. Among the main tendencies, which are observing in demographic development worldwide at the end of the XX and beginning of the XXI centuries it is possible to allocate: 1) A rapid population growth: In the XX century the world's population has increased from 1,6 billion up to more than 6,3

billion people. The main increase was in the second half of century; 2) Heterogeneous population growth in major economic groups of countries. Population of North America, Europe, ex-socialistic and developed countries increased slower than world average indicators. At the same time in developing countries, including Africa, Latin America and Asia, the population grew at high rates, i.e. more than 2% a year. Such growth of world's population (2% a year and above) is a *demographic explosion* or *demographic revolution*.

The territory of modern Latvia throughout all the history was a point of impact of a set of external political, cultural and economic interests. As a result, the population and ethnic structure of this territory also were formed by external influences. In 1914 the population reached 2,6 million people, however during battle operations in the region a lot of inhabitants, especially in cities, left Latvia as refugees. As a result, the population of Latvia was reduced to 1,55 million. Only by 1935 the number of inhabitants increased almost to 2 million (according to Central Statistical Management of Latvia, 2011).

The restoration of Latvia's independence in 1991 did not change a tendency to preserve the extremely low level of birth rates and active emigration, which has replaced immigration movements of the population of the Soviet period, and many times strengthened the process of natural decline in population. At the expense of a natural increase, the number of inhabitants of Latvia increased only in the middle of the 1970s years, and then it grew in basic at the expense of migratory inflow, which compensated falling of natural increase. The population mid-annual growth rates of Latvia in 60<sup>th</sup> years were 1,3%; in 70<sup>th</sup> 0,7%; in 80<sup>th</sup> 0,6%; in 90<sup>th</sup> 0,1%. Simple reproduction of population is carried out, when each woman during life has not less than two children. The factor of total birth rate (number of children born by average woman during life) for simple reproduction, taking into account possible early death, should be not less than 2,1. In Latvia it has sharply decreased since 1990 and by 1996 reached an extremely low value of 1,17.

Official data of CSM are reflecting long migration (including constant changes) but they don't count residents of Latvia, who are working abroad already for many years. Same thing showed the poll, which has been carried out by M. Hazan within this research, which results argue, that 9% of all inhabitants at the age from 18 till 65 years soon have a plan to leave the country, which in sum makes about 120 000 people. In turn, another 17% of respondents (about 220 000 people) allow such possibility (M. Hazan, 2011).

The assessment of migratory processes proposed by the economist of Bank of Latvia (Krasnopjetrovs, 2011) were, in spite of the fact that during the period from 2000 to 2010 expert estimates the number of inhabitants, who have left Latvia at comparable to calculations of Hazan (177,6 thousand people). Krasnopyorov is more optimistic concerning on further migratory processes. According to his calculations, the number left and arrived through Riga's airport and Passenger seaport in 2011 essentially decreased and returned on level of 2009. Thus, indicator of migration of 2011, judging by passenger traffic, can reach about 30 thousand people, that is much lower, than in 2009 and 2010 (47 and 43 thousand people respectively). Leaning on these facts, it is possible to assume, that in 2012-2014 the country will lose about 30 thousand people, that is 1,5-2 times less, than followed by professor Hazan's calculations. Thus, both researchers meet one opinion: in the last decade Latvia in a result of emigration lost much more people, than it is reflected by official statistics of CSM. The tendency of the last time specifies that in 2011 emigration essentially decreased, the number of Latvian residents, who have come back home increased at the same time (Business and Baltic, No. 11 (4263), 1/19/2012). The system of formation and development of human resources, or demographic policy, undoubtedly, is the vital activity for any state. Hardly there will be other area of policy which so directly infringes on interests of each inhabitant of the country, primary biological bases of existence of person and society, their wellbeing and security. In the legislation of the Latvian republic still there is no accurate designation of the term "demographic policy", therefore, there is also no accurate plan of action on realization a policy of formation and development of human resources of the state. Recently, on April 12, 2011, the Government of LR adopted the Charter of Council for demographic affairs at the Prime Minister of Latvia, which will be shown more detailed below.

Declared purposes of demographic policy (LR, MR regulations Nr. 293, 2011) are the improvement of living conditions and work of the country citizens, contribution to their employment, ensuring necessary social protection, and redistribution of state social protection income of the most vulnerable segments of country population, implementation of social dialogue and prevention of discrimination in any of its manifestations. These purposes should be coordinated with important spheres of social policy such as employment, regulation of income, education and health care, vocational training, housing construction, services sector development, social security of disabled people, elderly and invalid. The system should be adaptive for observance of interests of its elements in process of change of circumstances of the external and internal environment, and then the system is more developed; especially it has floppy structures of response to inquiries of stakeholders (Minzberg, 2002).

**The system of demographic policy:** The system of demographic policy is a part of the socio-economic system of the state, is carried out at the expense of the state resources and formed as a result of interaction of systems of more high level entering into the system of Latvia. It is possible to carry the Parliamentary commissions, the Government, Ministry of Health, the Ministry of Economics, the Ministry of Foreign Affairs, the Ministry of Finance, the Welfare Ministry and also the committees subordinated to them to such systems and agencies. Possibly to assume that the main reason of unsatisfactory functioning of system of reproduction and development of human resources of Latvia, along with a lack of financial, material and human resources is a lack of accurately designated purpose and the balanced structure of management of demographic policy of the Latvian Republic (O'Connor, Makdermott, 1997).

The system of demographic policy of the state has no development strategy. During research dispersion of the purposes and efforts on their achievement among a large quantity of elements making system, individual for each of them (Prigozhin, 2007) was diagnosed. So, "Long-term strategy of development of Latvia till 2030" sees a main goal of development of human resources of Latvia in "creation of attractive vital space for people and nature, which favors to developments in all territory of the country and strengthens growth of Latvia and all region of the Baltic Sea", and influence of state mechanisms influence limits of fiscal tool use and general phrases: "... define, realize and popularize communication between payment of taxes and system of grants, and also more active participation of people on labor market and in career growth". Another operating institute, the Ministry of Foreign Affairs of Latvia, sees the task in the field of demographic development of the country as follows: "The demography and questions of family policy (birth rate increase, a solution of the problem of aging of the population etc.) are within the competence of each independent state. The main task of Latvia in the sphere of demography consists in achievement of a positive indicator of an increasing level of the population. Considering the whole a negative demographic situation in EU countries and its influence on the development of Europe as a whole, need to solve these questions at EU level. The strategic policy of Latvia in this area is that EU funds would be used as much as possible to solve the demographic issues of Latvia" (LR Foreign Affairs Ministry).

The council on demographic affairs at the Prime Minister, today the most representative body, which is engaged in regulation of demographic processes, also allocates for itself generally supervising and advisory powers. The council estimates and coordinates an implementation of a national demographic policy, and also informs mass media concerning demographic policy (LR, MR regulations Nr. 293, 2011). Thereby, the government recognizes that continuous underlining despite of solution importance for country demographic problem in 20 years after independence restoration structure of implementation was not created by a state of actions of demographic development, and purposes of this policy were not formulated, a structure of management and achievement of objectives was not created. As a result, absence of a structured system of functioning and management of demographic policy of Latvia becomes quite explainable, any system is created for achieving a specific goal, realizable in temporary prospect and checked by existing mechanisms of the account, lack of the purpose of functioning turns system into a set of the elements poorly connected with each other which task is only ensuring continuation of their own functioning.

Our research showed that the existing crisis of demographic policy system is, first of all a management crisis of Latvia (Deming, 2011). Now, the state participation in formation and development of human resources of Latvia has no systemic character. Governing bodies and the executions which have not been united by need of achieving a common goal and the uniform mechanism of interaction and control cannot carry out effective demographic policy and provide development of human resources of the state.

It is necessary to use the systemic approach to solve these problems for Latvia and to change all procedures or elements of the system by understanding its functioning. Actual measures are offered and steps are accepted only by superficial impact on a situation without understanding the fundamental mechanisms functions because received results do not influence the situation. The solution of demographic problems demands a complex approach. In case the purpose is a fundamental change of situation, it is not enough to be focused on separate items, or even extremely important elements, losing sight of other system components (e.g. to achieve birth rate increase without construction of new kindergartens, planning of timely payment grants, guarantees for parents not to leave their child, etc).

### DISCUSSION AND CONCLUSIONS

Latvia does not have a systematized population policy management, its elements are not optimized, objectives and ways to realize them are not precisely defined, the potential impact on human resources and key elements of the system are not properly estimated, state support mechanism of population policy subjects has not been fully developed.

It is possible to formulate a number of offers to improve HR-management and demographic policy: 1) To systematize structure of management of demographic policy of Latvia and to reduce number of managing directors to a minimum with the purpose to avoid multilevel information transfer; 2) To designate concrete, measured and realized purposes, and it also means of their achievement, i.g. to define concrete quantity of necessary gardens for which the concrete quantity will be mastered in concrete temporary prospect with concrete sanctions for objectives default; 3) To provide continuous improvement of managing system by HR-development; 4) To intensify the impact force on separate, most significant elements of the system (e.g. taxes); 5) To develop state mechanism supporting young families with children and to accelerate consideration of the question of mortgage support at birth of newborns.

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# FINANCIAL INDICATORS OF THE SUSTAINABLE DEVELOPMENT IN SMALL COMPANIES

**Natalia Morozko**, Doctor of Economics, Professor,  
**Valentina Didenko**, PhD in Economics, Senior Lecturer,

*Financial University under the Government of Russian Federation,  
Moscow, Russian Federation*

**Abstract:** *Criteria for the classification for the small enterprises according to the economic content of the company's activity are described and differentiated in our article. On the basis of a systemic approach the main purposes of a small companies and financial indicators to achieve these goals have been formulated, i.e. maximizing the return on capital; minimizing financial risks; minimizing costs to raise capital; providing the level of sustainable growth and increasing in economic added value. The calculation methods of financial indicators are described and illustrated in our article in the activity of a hypothetical company. These methods are formulated on the basis of the sustainable development conditions for a small business.*

**Keywords:** *criteria, small companies, systemic approach, financial indicators, sustainable development.*

## INTRODUCTION

Stability of small companies which are characterized by different organizational forms; it provides a current and long term focus of development. Unsustainable development implies the probability of bankruptcy that causes going into survival mode of small business.

Currently, the definition of small businesses in different institutional structures is interpreted in different ways. In our opinion, the main criterion of the classification is a differentiated performance. The value of assets (less 500 mln RUB) is an inclusive criterion for the small business for asset-intensive economic activities (e.g. production, construction, transport etc.); the annual turnover (less 300 mln RUB) is an inclusive criterion for the small business for material-intensive economic activities (e.g. wholesale, retail etc.) and the number of employees (less 50 persons) is an inclusive criterion for the small business oriented to the labor-intensive economic activities (e.g. scientific and technical sphere and other innovative forms) [3, p. 5]. Yet a concrete identification has not entered into scientific circulation and managing approaches by criterion of “economic content of small business” are differentiated; they differ by conditions of economic development and functioning of small business in the various spheres of economic activity. In our opinion, small companies are the risky independent commercial companies, which enable to disclose the individual abilities of entrepreneurs with a high degree of responsibility [3, p. 55].

## MATERIALS AND METHODS

The methods of analysis and synthesis are used for the creation of the logic scheme for the assessment of small business effectiveness. Empirical methods were used for the hypothetical formulization. Analytical methods were used to describe a formulas for the calculation the main financial criteria of a small business activity. On the basis of a systemic approach the main purposes of a small companies and financial indicators to achieve these goals have been formulated, i.e. maximizing the return on capital; minimizing financial risks; minimizing costs to raise capital; providing the level of sustainable growth and increasing in economic added value.

## CONDITIONS FOR SUSTAINABLE DEVELOPMENT OF SMALL COMPANIES

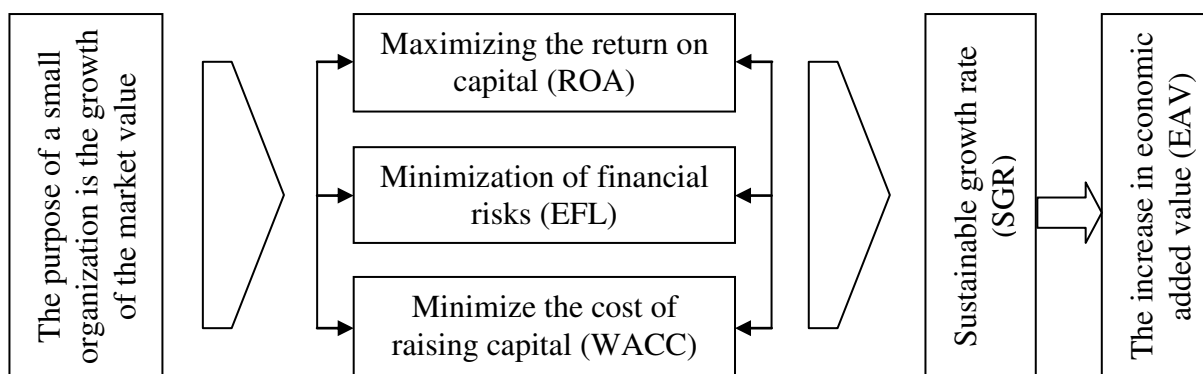
Competitive advantages of the small business are based on the financial factors that contribute to optimal perspectives its development and operation. Indicators of financial stability have to enable the identification of their set, parameters that have the greatest impact



on the financial position and help to achieve goals. To ensure the sustainable development of small companies it is necessary to use the financial guidelines that are crucial for the mechanism of ensuring the stability of the small companies.

The main purpose of the small businesses' activity is to ensure their market value's increasing and well-being of their owners. Consideration of the small business as a system with the specified parameters, it is proposed to use a minimum of indicators that reflect the conditions for achieving the main goal. In our opinion, financial indicators describing rational approach to the sustainable development of small companies have to reflect: 1) maximizing return on capital, i.e. estimate of the effective use of capital that characterizes the return on total assets (*ROA*); 2) minimizing financial risks by using credit; this indicator can be tracked on the basis of calculation of the effect of financial leverage (*EFL*); 3) efficiency of debt capital on the basis of minimizing the cost of its attraction; such an indicator reflects the weighted average cost of capital (*WACC*), which allows to estimate the costs to attract all types of capital; 4) level of attainable growth, i.e. the ability of a small company to agree upon marketing, operational and financial requirements, which can be estimated using the model *SGR* (Sustainable Growth Rate).

The proposed financial indicators allow monitoring the market value's increasing of small company, which is reflected in the indicator of the effectiveness of using the capital and within a framework of return and risk in the economic added value (*EAV*). Increasing the economic added value indicates maximal capital return, minimizing risks and costs of using the capital and sustainable growth of small companies (*Figure 1*).



**Figure 1: The system of financial indicators for the sustainable development of small companies**

Source: created by authors

#### **METHOD OF DETERMINING THE FINANCIAL INDICATORS OF SUSTAINABLE DEVELOPMENT IN SMALL COMPANIES**

Let us consider the methodology for calculating each of above-mentioned financial indicators. The effect of financial leverage shows the change in company's own capital by loans. The positive effect of financial leverage (*EFL*) indicates excess the return on total capital of the company over the cost of debt capital and to increase the financial stability of a small company; it is calculated by means formula (1), where *ROA* is the economic profitability; *i* is the interest for the using loans; *t* is the income tax; *D* is the debt capital and *E* is the equity.

$$EFL = (ROA - i) (1 - t) D/E \quad (1)$$

Financial leverage is an indicator of financial stability. It influences the change in the company's income and equity. Increasing the value of financial leverage ratio indicates increasing risk of investment.

To ensure the company's sustainability it is necessary that the high financial risk doesn't influence the production risk. To fulfill this condition the productive small business (manufacturing) should be financed mainly by a limited own equity with raising debt capital.

Resource small companies (wholesale and retail) mostly develop with using both own equity and external financing (bank or commercial loan). These conditions can be determined from the differential financial leverage: 1) asset-intensive and labor-intensive small companies may be guided by the relation  $ROA \leq i$ ; 2) resource-small companies should follow the relation  $ROA > i$ . A key financial indicator of the asset use is the return on assets (ROA). The value of this parameter must be justified [6, p. 163].

Let us consider the calculation of the effect of financial leverage in a hypothetical small company "ABC" (Table 1).

Table 1

Calculation of the effect of financial leverage  
in a hypothetical small company "ABC" (thousand RUB)

Indicators	Years		
	Previous year	Current year	Planned year
1. Equity	621	2836	4090
2. Debt	137	227	485
3. Cost of debts	14	22	48
4. Net profit	130	595	777
5. Income before taxes	141	613	815
6. Return on investment, %	19	20	18
7. Profits, derived from the use of debt	25	45	87
8. Change in return on equity through the use of debt	2,2	0,9	1,2
9. Return on equity through the use of debt	21	21	19
10. The calculation of return on equity (test)	21	21	19
11. The effect of financial leverage	2,2	0,9	1,2

Source: authors' hypothetical calculations

According to the Table 1, a hypothetical company "ABC" had a value the leverage effect throughout the study period more than zero, indicating the positive impact of financial leverage to the return on equity.

To estimate of the debt funds it is necessary to use the index of the weighted average cost of capital (WACC) that allows defining the costs associated with the involvement of different capital types.

Calculating the weighted average cost of capital should focus on the profitability of the company's assets to limit the attraction of funds from various sources. In the development of the financial policy of small companies it is necessary to consider such condition as  $ROA \geq WACC$ . The weighted average cost of capital (WACC) is calculated by formula (2), where  $E$  is the equity;  $D$  is debt capital;  $V$  is the market value of the small company;  $re$  is the cost of equity;  $rd$  is the interest for the use of debts;  $t$  is the income tax rate.

$$WACC = E / V re + D / V rd (1 - t) \quad (2)$$

Continuing the WACC-analysis of the hypothetical company "ABC", it is possible to establish the rationality of investment funds in studied small companies. On the basis of this analysis, it will be possible to establish the investment attractiveness of the company [6, p. 164]. The results of the WACC-analysis are needed in choosing the leverage as a source of funding for a small business (Table 2).

In our example, a small company "ABC" could increase the effectiveness of management policy and spending loans from the point of maximal effect of their use.

Sustainable growth, which can be achieved without transforming financial performance in the current period, should correspond with the capabilities of small companies and their environment.

Table 2

## Calculation of WACC in a hypothetical small company "ABC"

Indicators to calculate WACC	Years		
	Previous year	Current year	Planned year
1. Equity (thousand RUB)	621	2836	4090
2. The share of equity in the capital structure	0,82	0,92	0,89
3. Cost of equity, %	21	21	19
4. Debt (thousand RUB)	137	227	485
5. Debt ratio in the capital structure	0,18	0,08	0,11
6. The cost of debt capital, %	10,5	9,7	9,9
7. Net profit	130	595	777
8. WACC	18,7	19,9	17,8

Source: authors' hypothetical calculations

The model of sustainable growth is the indicator that allows verifying such compliance and promotes the development of more effective marketing, production and financial decision making. Growth management requires balancing a company's objectives in sales, effectiveness of common activity and financial resources. In this case the problem is to determine the required level of sales growth, real situation of small business and financial market. In this context modeling of the sustainable growth is an important tool in the financial management of the company. It should be noted that the growth of equity is balanced when it is proportional to the increasing in sales. The sustainable growth rate (*SGR*) is calculated by means of formula (3), where *r* is the reinvestment rate of profit; *NP/S* is the ratio of net profit margin (i.e. net income/sales); *A/S* is the ratio of the capital intensity (average value of assets/sales); *D/Eq* is the ratio of debt to equity. Result of *SGR* calculation in a hypothetical small company "ABC" is shown in the Table 3.

$$\frac{r (NP/S) (1+D/Eq)}{(A/S) - [r (NP/S) (1+D/Eq)]} \quad (3)$$

Table 3

## Calculation of the sustainable growth rate in a hypothetical small company "ABC"

Indicators for the calculation of the sustainable growth rate (SGR)	Planned year
1. Equity (thousand RUB)	4090
2. Debt (thousand RUB)	485
3. Sales (thousand RUB)	12270
4. Share of retained earnings	0,7
5. Financial leverage	0,12
6. Net profit	777
7. Return on sales	0,06
8. The ratio of capital intensity	0,35
9. Sustainable growth rate (SGR)	15,5

Source: authors' hypothetical calculations

In a model of sustainable growth the status of various financial and economic activities' items is considered: manufacturing (capital intensity), finance (structure of funding sources) and organization's position on the product market (return on sales). The main goal of a small company's operation is to increase of its market value that reflected in the index of the economic added value (*EAV*). In turn, indicator *EAV* reflects the property interest of owners and managers, where *NOPAT* is Net Operating Profit after tax; *WACC* is the weighted average cost of capital; *IC* is the invested capital. It is calculated by means of formula (4):

$$EVA = NOPAT - WACC \times IC \quad (4)$$

Economic added value (*EAV*) is a measure of economic profit that is used to determine the company's value. When  $ROA > WACC$  it means, a small company was able to earn the extra income during the study period, i.e. there is a positive dynamics. If the current target of a small company is to increase *EAV*, it can be done in such ways:

- 1) a small company should invest in the activity, where the profitability is higher than the weighted average cost of capital;
- 2) a small company can increase operational efficiency and improve its profitability;
- 3) a small company can extract capital from unprofitable projects and invest it in profitable projects.

A positive value ( $EAV > 0$ ) evidences about the welfare of the owners, i.e. capital provides a rate of return on invested capital, while a negative value ( $EVA < 0$ ) proves the situation of the ineffective management. It should be noted that the index *EAV* reflects the quality of management decisions in the long term; an indicator can be used for the financial analysis; it allows assessing the company's value, including the risk factors [6, p. 166].

*EAV* is a tool to measure the actual profitability of the company and its manage from the perspective of the owners. At the same time, it is a tool that shows how it is possible to affect the company's profitability (*Table 4*).

Table 4  
Calculation of the economic added value (*EAV*) in a hypothetical small company "ABC"

Indicators for the calculation of the economic added value ( <i>EAV</i> )	Years		
	Previous year	Current year	Planned year
1. Equity (thousand RUB)	621	2836	4090
2. Debt (thousand RUB)	137	227	485
3. Capital invested in the company	758	3063	4575
4. Net profit	130	595	777
5. WACC	18,7	19,9	17,8
6. <i>EAV</i>	-12	-18	-37

*Source: authors' hypothetical calculations*

A negative value ( $EVA < 0$ ) reflects ineffective management of a hypothetical small company "ABC".

It should be noted that the increase in the share of loans in the financing of small business should become an integral part of the improving process the structure of their capital.

## DISCUSSION AND CONCLUSIONS

Economic added value is a criterion for evaluating the performance of a small company.

Unlike a number of indicators used for the successful performance assessment (*EBIT*, *NOPAT*, *ROIC*) *EAV* factors reflect the company's value: actual and alternative (implicit) costs.

The weighted average cost of capital (*WACC*) should be calculated in the justification of the financial decisions making for sustainable development of small companies to determine the required rate of return on invested capital in the organization's activities (*ROA*) and to establish a minimum level of net return on invested capital, not to reduce the welfare of their owners and the company's market value (*SGR*).

Thus, proposed system of financial indicators allows estimating sustainable development of small companies.

Value based management (*VBM*) is a way to protect small business from the takeover threat as well as it is a basis for the sustainable development of small business in the current economic reality.

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## RISKS OF MARKETING RESEARCHES AT THE STAGE OF IPR CREATION

**Iryna Netreba**, PhD in Economics, Assistant,  
**Alona Vikulova**, PhD-Student,

*Department of Management Innovation and Investment Activity  
Taras Shevchenko National University of Kyiv, Ukraine*

**Abstract:** *The need for innovative marketing activities in the current conditions of globalization is specified in our article. The views of famous scientists in the field of innovative management and innovative marketing for the marketing mix implementation are considered and analyzed here. In this research the authors describe and classify the main risks arising from the marketing researches' conduct according to the peculiarities of intellectual property rights creation. Authors determine basic techniques and principles for the effective marketing researches' conducting. It is revealed, that the research of market needs during the process of ideas application and their analyzing are very responsible stage which includes the studying of market needs and customers' needs in products, services and technologies.*

**Keywords:** *marketing research, risks, competitiveness, intellectual property rights (IPR), market needs*

### INTRODUCTION

Nowadays the object of intellectual property making, which will have competitive advantages in the domestic and in the global market, requires great inventive efforts and comprehensive marketing researches. In turn, such marketing researches require a number of searches and the formation of further conclusions for the future creation and commercialization of intellectual property rights (IPR). The successful introduction into commercial circulation the research and development (R&D) involves theoretical generalization and systematization of risks that arise when conducting marketing research for a successful future commercialization of IPR.

### MATERIALS AND METHODS

In our article a general scientific methods have been used, such as analysis and synthesis, generalization method, historical and logical methods, induction and deduction, as well as scientific techniques and methods, including statistical, informational, structural and functional analysis, Delphi method.

### RESULTS

In the middle of the XX century Philip Kotler [3] and Peter F. Drucker [1] have emphasized the need to develop and implement innovations and marketing mix directed to the commercialization of IPR.

Geoffrey Moore noted that "...for the successful commercialization of innovations it is fundamentally important to focus on the market needs and demands. Analytical marketing research helps to survive on the market and to achieve recognition of new or never-before-seen products or services" [2]. Many scientists have researched the necessity of innovative marketing, e.g. I. Ansoff, H. Chukhray, E. Redzyuk, P. Tsybulov, D. Ripka, N. Goncharov, A. Starostina, S. Firsova, I. Ilyashenko and others.

The overview of these research shows that most experts consider marketing innovation simplistic, as it is a complex of marketing methods concerning introduction into the market a final innovative product and/or service or innovative methods and tools for the purpose of competitive marketing strategy development. In our opinion this diffused opinion is wrong, because an initial investigation of market requirements and needs for a new goods and technologies is very important. The inobservance of these principles causes unmeasured loss of time and financial resources as well as the loss of intellectual potential.

To create and to commercialize a new IPR it is necessary to conduct marketing researches, aimed at finding opportunities to reduce market ambiguity and risks of innovative goods production. B. Tokarev [6] notes that innovative markets in opposite to traditional, are a modified forms of interaction among participants and they consist of specific relations between them. There are the top players in R&D; their results are new technologies, materials, tools, integrated products that are implemented into production. During the marketing research in order to further effective commercialization of IPR it is important to systematize main risks arising from the current activities. There are three groups of mistakes made often during marketing research.

*I. Mistakes in the projecting of researches:*

1. Both sampled population and forms of sampling are inadequate to the identification.
2. Determining the required selection criteria.
3. Professionals and innovators from different fields are not involved in the marketing researches' conducting. If only marketers are involved in the marketing researches' conducting, then results of the marketing research will be false.
4. Questionnaires' designing. If obscure and controversial questions are included into the questionnaire then received information is imprecise.

*II. Mistakes in data collection:*

1. The mistake in choice of respondents. Marketing researches must concentrate the target audience involved into the innovation environment.
2. Editorial mistakes in the questionnaire when interviewing. Use of own interpretation of questions by the interviewer that is different from the compiler's interpretation adversely affects the results.
3. Influencing the opinion. To get the desired reply from the respondent the interviewer often imposes the opinion. In this case we have incorrect findings.
4. Denying the interview. Marketing specialists notice that people who refused of the interview differ from those who agreed. It affects to the problem discovering.
5. Failure from an objective answer.

*III. Mistakes input data and its interpretation.*

1. Incorrect informational coding. Through incorrect coding of the information in specialized statistical programs, a high probability of data loss in open questions exists.
2. Data entry mistakes. Through incorrect data entry by a responsible person, a high probability exists to distort data.
3. Misinterpretation of data. When using sophisticated statistical methods of analysis, the risk of improper processes increases.

Thus, multi-objective marketing research causes the above-mentioned mistakes that can result in loss of financial and time resources, as well as the wrong target segment and subsequent false research. Hence, it is advisable to define the principles underlying the organization of marketing researches in the IPR construction: 1) Scientific principle assumes description, explanation and prediction of phenomena on the scientific methods' basis. 2) Principle of new tasks, which is focused on the optimal management decisions making in R&D, production and commercialization of IPR, including environmental changes. 3) Principle of openness and adaptation supposes the ability to make adjustments in the marketing research process (with preservation of key system regulations) according to changes in the legal rules governing the industry's functioning, where the future IPR is created or governing the market, where IPR will be sold. 4) Principle of consistency and unity is based on the systemic approach to marketing research; it makes possible to look at market situation as an object for research with a large range of internal and external causation that actualizes conditions for the development of IPR. An important aspect is to ensure the integrity and logical sequence of researches' phases and to determine the structure and hierarchy of intermediate elements and derived indicators. 5) Principle of complexity assumes the coverage of various aspects and patterns of market development in their connection and interdependence. 6) Principle of efficiency and perspectives supposes that market research precedes all marketing operations, accompanies them and completes them, combining short and long term forecasts. 7) Principle of effectiveness suggests that the ratio

between the cost and the results of the marketing research depends on their conducting form. It should be noted that at different stages of marketing research specialists use a large number of statistical methods, research operations and math economic modeling. Widespread statistical methods are: 1) analysis of time series variation; 2) method of peer review and 3) multifactorial statistical modelling. Also, the main marketing methods include methods for policy analysis and strategic decision making used in strategic management, including matrices Boston Consulting Group, Shell/DPM, General Electric/McKinsey, SPACE- and PIMS-analysis and other methods of strategic analysis of the company's internal environment and product analysis [4, p. 446]. In order to solve different marketing tasks actual is the use of various methods, including sociological, psychological, quality control and so on. Thus, marketing researches have interdisciplinary nature and require numerous methods of analysis use. In our view, indicator that reflects risks includes: 1) average number of mistakes committed by a specialist engaged in the collection, processing, generalization and systematization of primary and secondary marketing information and 2) total loss amount due to mistakes in calculations of professionals who engaged collection, processing, generalization and systematization of primary and secondary marketing information. This indicator ( $Z_{SUM}$ ) we propose to calculate by formula (1), where  $P$  is the number of specialists involved in the process of collecting, processing, generalization and systematization of primary and secondary marketing information;  $Z_{lp}$  is the magnitude of potential losses due to mistakes (per one person responsible for the collection, processing, generalization and systematization of primary and secondary marketing information;  $M$  is the number of mistakes of a specialist who is responsible for the collection, processing, generalization and systematization of primary and secondary marketing information.

$$Z_{SUM} = P \times Z_{lp} \times M \quad (1)$$

The obtained values for these parameters should be considered as potential losses. The obtained results are relevant to the economic efficiency indicators of marketing research that reflects the relations between the costs, risks and benefits of the enterprise due to IPR market and thus creates the base for correlation of net profit. It enables to make multidimensional cost analysis of the market research and to determine sources of tangible and intangible effects.

## DISCUSSION AND CONCLUSIONS

To obtain an objective assessment of the risk influence degree to the results of marketing researches, it is advisable to define the stage where information from the external environment is accompanied by the highest possible probability of risk. For the effective risk management in conducting marketing research, it is necessary to identify these risks by means of their quantitative or qualitative evaluation [5, pp. 320-322]. For our future researches it would be appropriate to assess financial risks, as long as the complexity of the obtaining information from the external environment leads to an increase in the duration of marketing researches.

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## DEPOSITORS AND FACTORS OF CHOICE

**Victor Nevezhin**, PhD in Engineering, Professor,  
**Victoria Kashlina, Tatiana Lizunova**

*Financial University under the Government of the Russian Federation  
Moscow, Russian Federation*

**Abstract:** *Certain features of credit cycles as well as the complex influence on the investors and depositors preparing to finance and invest are described in our article. The object of our research is a depositor with its propensities and behavioral peculiarities that is the basic factor of credit transactions. The authors try to solve some questions on the influencing factors the depositor's choice of the bank and its attractiveness. The depositors' features have been characterized. Influence of panics to the deposit activity of bank has been considered, the relations between some of most important factors have been set.*

**Keywords:** *credit cycle, trade cycle, banking sector, panics, deposits*

### INTRODUCTION

The crisis in the financial and economic sphere has led to destabilization of the world economy; it has allowed possible to reveal numerous gaps in the existing theoretical approaches to solve crisis problems and numerous contradictions of global economic processes realized in the practice. In the run-up to the crisis events the modern credit and financial theories have upheld a theorists' position on the impossibility of the inherent disposition to the formation of shock phenomena in the credit and banking sphere, as long as the credit institutions activity is based on the aspiration to avoid the redundant risk pressure and is immune to the speculative tendencies in the conduct of market participants. Disunity of theoretical approaches, variety of analytical methods as well as narrow-mindedness of prevailing opinions belonging to the credit sector in the economic processes impede the formation of correct mechanisms and the choice of needed instruments for changes' revelation in the deposits and credit movement. The lack of such representations system has negative consequences. One of these consequences is a complexity in the determination and early changes fixation in the development of deposits as well as in the development of the appropriate regulatory mechanisms. In spite of the fact that development of categories and their cycle are sustainable; their study wasn't the subject of comprehensive scientific research. It determines the actuality of our scientific researches on the above-mentioned problem.

The modern crisis as a proof of untenability of the modern credit and financial theory has favored a revival of interest to the dynamics of cost of commercial banks' loans and it has got the name of credit cycle. Deposits are the reverse side of the credit motion because they determine approximately 30% of banking passives, i.e. those banking means, which are intended for realization of purposes and tasks to increase of banking capital.

In this paper the authors have made the focus on the consideration of these parts of a credit cycle that exerts a profound influence on the circulation rate the deposits of individuals. Well-known, that the behavior of a group of people, who wish to open a deposit, is a basic factor in the realization of credit transaction. Also in this paper the authors discovered the main motives that individuals and legal entities are guided by when placing a deposit. Understanding of depositors' motivational vector and the psychology of their behavior will be able to prevent stress situations in the banking sector and will be able to improve the mutual understanding between economic entities.

### MATERIALS AND METHODS

The *object* of our research is a depositor with its propensities and behavioral peculiarities that is the basic factor of credit transactions.

Scientific informational base of our study is the scientific papers/works of N. Brovkina [1], D. Burakov [2], M. Semenova [4], A. Vishnevskii [5], S. Dolgova [6] and others. Review of banking sector of the Russian Federation has been used as an analytical base [3] for the conclusion making.

Methods analysis and synthesis have been used in developing the factors, which influence the depositors' behavior at the banking market.

## RESULTS

The depositor is a contracting partner of bank deposit who has paid money to perform its commitments to a contract (this definition of a credit market participant is given in the economic dictionary). If to reject formalities, a depositor is an ordinary person who decided to deposit money in a bank by certain circumstances. The experts affirm that the modern society has a low level of financial literacy. These words are proved by the current programs which are conducted by the Ministry of Finance and the Bank of Russia among the population. The questions are: 1) who is today the average bank client? Which factors influence the choice of bank? Which factors of the external changes the average client does react on? What attracts of the depositor? If we want to answer these questions, first of all, it is necessary to pick out the depositor's motives. In our opinion, they are: 1) keeping and control of available money; 2) increasing the income; 3) protection (e.g. against robbers or frauds); 4) protection against external factors (e.g. inflation). Following this logic, it is possible to assert that in contrast to an investor, the depositor looks for stability and protection of money in its availability. As well as investors, depositors are sensitive market participants, who are exposed to panics caused by external factors. To understand the depositors' behavior it is necessary to consider them through the categories of "mass psychology", which studies the behavioral peculiarities of a large group of people who have views identity and the solidarity in feelings.

The features of some individuals have been observed, which they didn't have before joining to the psychological community. The first reason is when there is the individual anonymity thereby the irresponsibility of the mass, the feeling of personal responsibility, which controls a person in everyday life disappears at all. The second reason is "an infectious state" that displays special characteristics of mass as well as sets the vector of their manifestation. "An infectious state" is inexplicable. Under the possessed crowd each action and feeling becomes infectious as much as possible. Such considerable degrees influence that the person sacrifices its egoistic interest in favor of general interest. This feature is opposite to its nature; a person is able to do it only being a part of mass. The third most important reason causes special characteristics connecting the individuals. These characteristics are opposite to those which the individual has in the isolation, i.e. the person being in the bosom of active mass during some time turns out into the condition of "fascination" (like under the hypnotist's influence). In this case, the personality is absolutely lost; the will and ability to the differentiation are absent, all feelings and thoughts are oriented to the society's instincts. Thus, we can apply exactly this version of the modern events: banking panics, exchanges collapse, currency instability, etc.

One of the most noticeable kinds of crowd behavior is the panics which is an emotional state that appears as a result of the informational deficiency in any scary or incomprehensible situation or, on the contrary, as a result of informational abundance and reveals itself in the impulsive actions. Economics is exposed to the panics. Many times we observed collapses of financial giants which happened because of the consumers' and investors' distrust. Nowadays, in the Russian Federation it is possible to observe such phenomenon. It happens in the banking sector, which goes through the crisis of society's trust. It was reaction on the preceded unbalanced policy of the Central Bank of the Russian Federation denying licenses a number of banks. Political events in the first half 2014 have also forced population to go to the pessimistic mood. We mean the stability's impairment of external relations between the Russian Federation and West Europe and the imposition of EU sanctions, which have fettered the national economy and the banking sector.

It is necessary to mention that to bring people under panic state, stimulus should be rather intensive, long-term or regular. It should attract concentrated attention and provoke reaction of the unconscious fear. When the necessity of rapid interpretation of the phenomenon requires immediate actions, the sense of acuteness often prevents the realization of logical understanding of what happens around and this causes fear. Then it is necessary to consider main irritants, which influence the depositors' reaction.

The economic growth contributes the increasing of production in the national economy; it is a base for the development of different economic fields and it influences on the disposition of population to make frequent money transactions. A direct relation is obvious.

Mostly the income level of the population is cash resources/wage received by population as a result of their main activity. This index reflects the level of economic growth and considered as the total and average amount of income received by society. A direct relation is obvious.

The level of interest rate is defined as a profitability of the loans. It is a factor of the banking sector. It influences the behavior of people, who decide to open a deposit for the purpose to earn. A direct relation is obvious.

Inflation is defined as a devaluation of money, decreasing their buying power. It influences the behavior of people to deposit available resources for the avoidance of loss their real value. A direct relation is obvious.

The level of crime influences the wealth of society and thus, the decision making to open the deposit. A direct relation is obvious.

The level of banking products' diversity shows a present variety of banking product at the banking market for different population groups. A direct relation is obvious.

Concentration the bank's advertising is defined by intensity of advertising actions conducted in a populated area. The more often people see an advertising of the bank, the more they trust in the advertised image of the stable and successful bank. A direct relation is obvious.

Financial literacy of the population is a sufficient level of knowledge, competencies and skills in the financial sphere, which allow seeing a market situation in the nearest perspective and make reasonable decisions. Everyone knows that the elder generation has had its own experience on the transient stages to the market system. It causes their distrust to commercial banks supposing hoarding and forming the effect of "extreme economy". A direct relation is obvious.

Fear, distrust, market failures and financial collapses are conditions for the panics. In the moments of panics that, which seems to be the truth, becomes a lie; the faith is destroyed.

The basic economic and market propositions are prejudiced.

The trust of population to the financial institutions is one of the required qualities for a stable functioning of the economy of any country.

To change a situation there is necessity to develop a number of special steps and a well-balanced system.

Government and regulators, banking system and educational institutions have to work constantly with the society explaining all possible risks and nuances of the use of the different banking products. Only in this case it is possible to destroy wrong stereotypes, which prevent the normal development of Russian banking system and the economy in common.

## **DISCUSSION AND CONCLUSIONS**

If in spite of low rates of the economic growth, big banks develop and only small banks leave the market that doesn't cost the collapse, the depositors' trust will return and will rise. The stable insurance scheme can also raise the population's trust to banks. It is important to raise the level of current financial literacy of the population. It minimizes risks not using the prohibitive measures. At the same time it is necessary to remember that responsibility for the decision making lies on a depositor and it doesn't depend on the existing control system of financial markets. The more a depositor is financially educated, the fewer mistakes he/she will make.

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# OBSTACLES FOR THE SOCIAL AUDIT DEVELOPMENT IN BULGARIA

**Miroslava Peicheva**, PhD in Economics, Associate Professor,

*University of National and World Economy, Sofia, Bulgaria*

**Abstract:** *This article is devoted to the analysis of obstacles for the social audit development in Bulgaria. The analysis includes three main phases: historical roots of social audit in Bulgaria, current situation and indication of the obstacles for the social audit development in Bulgaria. The results of the performed analysis reflect: 1) underdevelopment of the theory and practice of social audit in Bulgaria; 2) absence of legal regulation for the development of the profession and practical competencies of the "social auditor"; 3) lack of synthesized information relating to the companies where the social audit has been performed (companies which are entitled to certify social auditors, to create conditions for obtaining the license as a social auditor, etc.). Author made accent to the scant preparation of social auditors in current conditions in Bulgaria.*

**Keywords:** *social audit, certifying organizations, obstacles to the social audit, risks*

## INTRODUCTION

The object of our research is to indicate the problems in the development of social audit in Bulgaria through retrospective and diagnostic analysis of the theory and practice of social audit and international investigations on this topic.

Our research includes three main tasks: firstly, to perform a retrospective analysis of the theory and practice of social audit in Bulgaria; secondly, to perform diagnostic analysis of the theory and practice of social audit in Bulgaria; thirdly, to indicate the problems in the theory and practice of social audit in Bulgaria.

The stages of our research include: 1) research of scientific achievements in the field of social auditing internationally; 2) study the international practice of social audit; 3) retrospective analysis and study of modern theory and practice of social audit in Bulgaria; 4) problems' indication facing the social audit development in Bulgaria.

Our research is based on three hypotheses. The first hypothesis is that one of the main problems facing the development of social audit in Bulgaria is the underdeveloped theory and practice of social audit. The second hypothesis is that a main problem of the social audit development is the lack of legal regulation for certification of social auditors. The third hypothesis assumes that there is a lack of transparency concerning the procedure of social auditors' certification. There is no clarity on the certification conditions that restrains those who are willing to develop in this profession.

## MATERIALS AND METHODS

Scientific methods of analysis and synthesis have been used in our research. To formulate conclusions and to test them, above-mentioned hypotheses were analyzed: 1) world theory and practice of social auditing (e.g. USA, Russian, Italian and Indian practice is analyzed to conduct social audit; publications of the Centre for Effective Governance; scientific publications of P. Griseri, N. Seppala, O. Ezezika, F. Thomas, J. Lavery, A. Daar, P. Singer, P. Candau, A. Couret, J. Igalens, V. Meshkov and other authors); 2) national theory and practice of social audit (publications of the Bulgarian Economic and Social Council; analysis of Trade Unions initiatives; analysis of the Balkan Institute for Labor and Social Policy initiatives; studying the curricula of higher education institutions, analysis of certified companies with the implementation of social standards); 3) analysis of the current regulations of the social auditor' profession at the national level; 4) activities of private companies, which offer certification of social auditors in Bulgaria (telephone interview, private interview with the trainees for social auditors, official information of the certifying organizations).

## RESULTS

The analysis of the world theory and practice of social audit allows us to highlight two important facts.

1. The problems of social auditing are subject of scientific research for more than 30 years. During this period definitions of social audit have been formed. Initially, social audit has been defined as "an assessment of the importance of the human factor" (J. Humble, 1975). Subsequently the understanding of the social audit is generally divided into two groups. One group of authors (mostly from Russia and some Indian authors) adhere the understanding that the social audit is a "tool of the social partnership" and involves all stakeholders, i.e. employers, trade unions, state and local authorities, non-governmental organizations, etc. Another group of authors (mostly from the U.S.A.) considers the social audit is an independent evaluation activity, which aims to establish the conformity in the statement made by the organization to comply with social standards.

2. The practice of social auditing shows the constantly growing up number of certified companies in this field, but many companies are certified according to SA 8000 in Italy. The reason is the financial support by the Italian Government (Mincheva, 2012). 1315 companies from EU, Asia and Latin America were certified according to SA 8000 in 2007 (Georgieva, M., 2007).

The analysis of the national theory and practice of social auditing allows us to highlight three important facts.

1. The analysis of both public and scientific theory shows that in Bulgaria the topic of social audit is quite new. Yet there is no common understanding of the social audit nature. Some of the arguments for this assertion are: "There are two types of social audit. The first type of audit is imposed by the Government under its responsibility for overall development. This social audit in Bulgaria is carried out by the Ministry of Labor and Social Policy in the form of supervision on the new jobs and the social security payments from the entrepreneurs. The second type of audit is done internally within the company, as a control by the entrepreneur on the implementation of the social programs developed by the company" (Marinova, 2013). According to another definition, "social audit is just a "snapshot" of a certain situation; it is done once a year during 1-3 days (Bulgarian Economic and Social Council, 2010). In other definitions it is argued that "social audit is focused on the staff, its management at the enterprise and organizational behavior" (Social Europe, 2007) and "social audit is an approach for a thorough investigation of the enterprises' management in terms of internal and external social impacts" (Social Europe, 2007). The analysis shows misrepresentation of the social audit nature.

2. The analysis shows an underdeveloped practice in social audit. Only two Bulgarian companies were certified according to SA 8000 in 2007 (Georgieva, M., 2007). By 2012, their number has reached 10 (mainly in the construction sector). Information on audits made by a second party or by owners' organizations is absent due to the lack of an special integrated information system.

3. There are 51 higher education institutions in Bulgaria. Three of them have the specialty "Social Audit". It proves that this field is underdeveloped.

The analysis of the national regulation on the profession "social auditor" has allowed concluding that at the moment there is no justified legislation in this sphere in Bulgaria. The analysis of private companies which offer certification of social auditors in Bulgaria shows that the official permission (by International Certification Organization IRCA) for training of social auditors' only one certification organization has received. Today this organization still doesn't conduct necessary training. The interviews by telephone showed that this organization correctly ideates the training opportunities for the social auditors' development, but despite of the granted authorization, trainings for social auditors are still not organized. Other certified organization claims to hold trainings for social auditors, but these courses are useful primarily for internal quality auditors. It should be noted, trained persons didn't receive qualification of social auditors still. There is third well-known certified organization which holds courses for leading auditors in social responsibility systems, but this organization doesn't want to share details with the trainees regarding the certification conditions for social auditors. For instance,

organization doesn't disclose the information on the necessary experience, on the minimal number of trainings where trainees have participated at their own costs and so on. Another important but undisclosed information is that in case of certification of person as a social auditor the trainee cannot work independently outside the certified organization. These features lead to the need for further research to solve the above-mentioned problems.

## **DISCUSSION AND CONCLUSIONS**

The analysis confirms three hypotheses: 1) in Bulgaria the topic of social audit is quite new and the theory and practice of social audit are not developed; 2) in Bulgaria there is no legal regulation for the social auditors' certification; 3) in Bulgaria there are certified companies for social auditors, but some of them prefer to invest primarily in the certification of their own auditors, while others don't provide correct information on the certification process.

Confirmed hypotheses classify three groups of obstacles in the social audit development in Bulgaria: 1) underdeveloped scientific theory of social auditing is an obstacle for the practical development in this area. Misunderstanding of social audit is reason for its improper application; 2) absence of legal regulation of the professions "social auditor" is an obstacle to their qualified training. Consequences are a high risk of incompetent specialists training and poor implementation of social audits in practice. Derivatives of this risk are associated with the loss of public confidence; 3) incorrectly presented conditions by some of the certified bodies for social auditors' certification are an obstacle for the profession's development. The lack of transparency in the certification procedures of social auditors creates conditions for abuses. It is explained by limited trainings, i.e. 3-5 days of trainings for social auditors are a small step in the educational process, where a trainee must fulfill to be independent agent. One more obstacle is the binding to the certifying organization. It limits the competition and creates a monopoly of the profession "social auditor".

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# IMPROVEMENT OF THE MODEL FOR DETERMINATION OF THE OPTIMAL TAX RATE

**Zoriana Pryimak, PhD-Student,**

*Department of Analytical Economy and International Economics  
Ivan Franko National University of Lviv, Ukraine*

**Abstract:** *The economic-mathematical model of the maximum tax revenues determination is considered in our article. This model is a modification of already well-known models about dependence of revenues from taxation on an average national tax rate. It is proved by author's research the only one maximum point of the modeled curve' existence. Furthermore, special conditions are stipulated which define how this model could be used in the practice to find the optimal tax rate for the certain country. It is possible to use the developed model only in case when the available statistical data denote that empirical points of a tax rate were placed on either side of Laffer's point.*

**Keywords:** *economic-mathematical model, taxes, optimal tax rate, Laffer curve*

## INTRODUCTION

The governmental institutions have been created in each country with the aim to provide normal functioning of country's economy and society in general. Financial assurance of these institutions is carried out by collecting various government and local taxes. The government can pursue two opposite goals while collecting these taxes. The first of them consists in stimulation of enterprises' production activity in case of an economic crisis and downturn existence. And the second one is fullness of the state budget revenues, i.e. maximizing receipts to the consolidated state budget for the solution of the required tasks.

Government can use qualitative and quantitative methods of improvement of state regulation system to achieve the second goal. The qualitative method of tax optimization consists in improvement of the tax law of the country. It involves changes of the taxes' withdrawal mechanism and does not include methods of the macroeconomic analysis.

The quantitative solution method of the considered problem is aimed at determining the most rational tax rates within the operating tax system. It does not involve a fundamental change of the operating fiscal mechanism and is focused only on a certain adjustment of quantitative fiscal parameters.

The idea of the tax burden existence wherein the government tax revenues would be maximal belongs to A. Laffer. He believed that a parabola with a maximum point describes dependence of the amount of fiscal charges on a tax rate. Many scientists have supported this idea. Thus, some of them directed their researches on theoretical derivation of Laffer parabolic relation and creation of the corresponding models of production and fiscal processes [3-4]. And others were engaged in solving the problem of macroeconomic estimation of Laffer's points (inflection points on a fiscal curve), in particular, development of necessary computing algorithms which can be used to determine these points for the certain countries [1-2].

Some researchers considered additional factors of influence on fiscal processes of national economy in their models. For example, in the work offered by authors [7] models regarding determination of an optimal tax rate consider the influence of shadow economy factor on these processes.

This article considers a bit different mathematical model for determining the maximum tax revenues that is a modification of already known models about dependence of tax revenues on an average taxes rate in national economy. Furthermore, it is proved the existence of the only one maximum point of the modeled curve and stipulated under which the conditions this model could be used in practice to find the optimal tax rate for specified country.



## MATERIALS AND METHODS

It is well known that the value of any scientific research depends on the methods being used during this process. The usage of mathematical methods and models as well as modern information technologies increases quality of the conducted researches and conclusions become more reliable [5-6]. This paper represents the usage of the following methods in the research process: logical analysis, economic-mathematical modeling and differential calculus. By dint of the logical analysis, the conclusion regarding type of the dependence of amount of fiscal charges on a tax rate has been made. The economic-mathematical modeling theory has been used in the creation process of the appropriate model. Methods of differential calculus have given the chance to prove existence of the only one maximum point of the modeled curve. This grants the right to use the offered model on an equal basis with others to determine optimal tax rate in the specified country.

## RESULTS

The main idea of the dependency mechanism between amount of fiscal charges and a tax rate follows from the following logical conclusions. No taxes would be collected at a zero tax rate. The amount of fiscal charges increases with the tax rate growth. Along with this, the growth will be observed in the number of the businessmen dissatisfied with the corresponding tax rate. This situation will force them to close their business or to switch to shadow economy. As a result, there would come a time when the increase in the tax rate would not compensate reduction of taxation base that will lead to reduction of the budget revenues. I.e. functional dependency between fiscal charges and an average tax rate increases to some point at first, and then decreases so that it is possible to simulate with the following parabola [7], where  $F(x)$  is tax revenue;  $x$  is tax rate;  $\lambda$ ,  $\alpha$ ,  $\beta$  are coefficients determining the type of curve. The economic sense of  $\alpha$  coefficient is a coefficient of a tax progression which is legislatively put in the system of taxation;  $\beta$  is coefficient of economic sensitivity to the change of a tax rate.

$$F(x) = \lambda \cdot x^\alpha \cdot (1 - x)^\beta \quad (1)$$

Some researchers use other types of concave functions for modeling of the studied dependence. The author of work [2] has offered to use production-institutional functions where the main peculiarity is that GDP and taxes depend on work, the capital and tax burden, to implement the fiscal climate simulation study. Unlike formula (1), we offer other dependence between tax revenues and tax rate (2), where unknown coefficient  $\gamma \geq 1$  should be defined. In our opinion, such form of the studied relation in comparison with function (1) is more general and more realistic.

$$F(x) = \lambda \cdot x^\alpha \cdot (1 - x^\gamma)^\beta \quad (2)$$

We will show that there is such unique value of argument  $x = x_0 \in (0, 1)$ , where the function (2) reaches a maximum for any  $\alpha > 0$ ,  $\beta > 0$ ,  $\gamma \geq 1$ . To do this we will use the necessary and sufficient conditions to determine the maximum of the function  $F(x)$  namely that the first derivative of this function in a maximum point should be equal to zero and with transition of a this point should change the sign from plus to minus. Since (3) is:

$$F'(x) = \lambda \cdot \alpha \cdot x^{\alpha-1} \cdot (1 - x^\gamma)^\beta + \lambda \cdot x^\alpha \cdot \beta \cdot (1 - x^\gamma)^{\beta-1} \cdot (-\gamma \cdot x^{\gamma-1}) \quad (3)$$

we will get the equation (4) to determine the point suspicious on an extremum of function  $F(x)$ .

$$\lambda \cdot x^{\alpha-1} \cdot (1 - x^\gamma)^{\beta-1} (\alpha \cdot (1 - x^\gamma) - \beta \cdot \gamma \cdot x^\gamma) = 0 \quad (4)$$

and if  $0 < x < 1$ , we will get (5):

$$\alpha \cdot (1 - x^\gamma) - \beta \cdot \gamma \cdot x^\gamma = 0 \quad (5)$$

This equation let us find the following argument (6):

$$x^\gamma = \frac{\alpha}{\alpha + \beta \cdot \gamma} \quad (6)$$

Consequently, the point below is suspicious on an extremum of function (7)  $F(x)$ :

$$x = x_0 = \left( \frac{\alpha}{\alpha + \beta \cdot \gamma} \right)^{\frac{1}{\gamma}} \quad (7)$$

It is obvious that if  $\alpha > 0$ ,  $\beta > 0$ ,  $\gamma \geq 1$ , the found point  $x_0 \in (0, 1)$ .

Now we will prove that the point  $x = x_0$  is the maximum point of the function  $F(x)$ . For this purpose we investigate how the sign of a derivative  $F'(x)$  changes in case of transition through a point  $x_0$ .

Since the following expression is realized when  $0 < x < 1$ , we get (8):

$$\lambda \cdot x^{\alpha-1} \cdot (1 - x^\gamma)^{\beta-1} > 0 \quad (8)$$

It is enough to check how the sign of the expression below changes in case of transition through a point  $x = x_0$  to proof the previously mentioned statement (9):

$$\alpha \cdot (1 - x^\gamma) - \beta \cdot \gamma \cdot x^\gamma \quad (9)$$

Since (10) is:

$$x^\gamma = \frac{\alpha - 1}{\alpha + \beta \cdot \gamma} < \frac{\alpha}{\alpha + \beta \cdot \gamma} \quad (10)$$

after simple transformations we will get (11):

$$\begin{aligned} \alpha \cdot (1 - x^\gamma) - \beta \cdot \gamma \cdot x^\gamma &= \alpha - (\alpha + \beta \cdot \gamma) \cdot x^\gamma = \\ &= \alpha - (\alpha + \beta \cdot \gamma) \frac{\alpha - 1}{\alpha + \beta \cdot \gamma} = \alpha - (\alpha - 1) = 1 > 0 \end{aligned} \quad (11)$$

Therefore, function increases to the left of a point  $x = x_0$ .

Since (12) is:

$$x^\gamma = \frac{\alpha + 1}{\alpha + \beta \cdot \gamma} > \frac{\alpha}{\alpha + \beta \cdot \gamma} \quad (12)$$

we will get (13):

$$\begin{aligned} \alpha \cdot (1 - x^\gamma) - \beta \cdot \gamma \cdot x^\gamma &= \alpha - (\alpha + \beta \cdot \gamma) \cdot x^\gamma = \\ &= \alpha - (\alpha + \beta \cdot \gamma) \frac{\alpha + 1}{\alpha + \beta \cdot \gamma} = \alpha - (\alpha + 1) = -1 < 0 \end{aligned} \quad (13)$$

Consequently, function decreases to the right of the point  $x = x_0$ . I.e. derivative  $F'(x)$  at the point  $x = x_0$  changes its sign from plus to minus. That is why this point  $x = x_0$  is a maximum point of the function  $F(x)$ . The usage of the considered model to determine an optimal tax rate has the restrictions. In order that the theoretical curve (2) would precisely approximate an empirical

Laffer curve some conditions are need to be met. Besides enough long statistical series of primary data to determine the unknown coefficients of the model unambiguously, it is necessary that empirical points of a tax rate were placed on the biggest range of definition and were surely grouped on either side of Laffer's point [2]. In case the primary data would be concentrated only on the one side of Laffer's point, there would be a problem of information insufficiency. In this situation, it is possible to construct a set of the corresponding theoretical models, each of which will determine their point of Laffer. I.e. with the transition from one theoretical function to another, the condition of invariance of Laffer's points would be violated.

## DISCUSSION AND CONCLUSIONS

Thus, the offered economic-mathematical model regarding dependence of amount of fiscal charges on an average tax rate could be used on an equal basis with other similar models to determine an optimal tax rate in the specify country. It is possible to use the developed model only in that case when the available statistical data denote that empirical points of a tax rate were placed on either side of Laffer's point.

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# SPECIFICATIONS OF HUMAN POTENTIAL USAGE AT THE OIL AND GAS ENTERPRISES IN UKRAINE

**Yevgen Revtyuk**, PhD in Economics, Post Doctoral,  
**Iryna Bodnaruk**, PhD-Student,

*Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine*

**Abstract:** *Authors of the article introduce the assumption regarding influence of enterprises' microclimate on the usage of employees' human potential. The evaluation methods of enterprises' microclimate have been proposed. Based on the examples of oil and gas enterprises, the investigation of microclimate has been conducted through employees' questionnaire. Characteristics of enterprise's microclimate influence the employees' human potential regarding age, working experience and salary level have been lightened in our article. Regularity of salary payment is the most significant factor for respondents. Therefore the majorities of employees consider their positions as a possibility to survive and satisfy needs as well as do not be unemployed. Conclusions regarding HR management efficiency in the system of human capital have been drawn up.*

**Keywords:** *human potential, human capital, evaluation, microclimate*

## INTRODUCTION

Economic entities development depends on the realization its potential abilities, since a person with his inherent intellectual ability is succeed in the knowledge-driven economy and is crucially placed in performance efficiency. Thus, it is the reason why its concrete potential and its effective usage lead to a desired result.

## MATERIALS AND METHODS

In the thesis of many post-Soviet scientists the definition "human potential" was used quite frequent, meaning an employees' ability to create an added cost. Thus, investigating human potential three main approaches can be outlined: 1) resource (stressing on the human potential as a composition of human abilities and skills) [1, 7]; 2) target (defining a human potential usage as the human ability to use its knowledge and skills in a socio-economic activity) [3, 8]; functioning (considering a human potential as a set of interrelated and complementary possibilities to create the added cost [9]. According to investigated researches on human potential we suggest consideration of this category as "a set of psycho-physiological abilities of an individual or a group of people that can create productive forces under special circumstances which are aimed to create material or non-material benefits and human capital accumulation" [4, p. 419].

When starting research we made an assumption that the best answer to the question on the human potential efficiency' usage can be received from an employee. It is incredible difficult to evaluate a fictive component of a human potential [5, p. 149] using traditional external methods of evaluation. It should be noted that a common universal method that is able to solve set of above-mentioned tasks is still absent. The studies [2, 6] represent results on human potential usage at the oil and gas state enterprises in Ukraine. We have made a hypothesis that management of such enterprises is ruled by means of administrative bureaucratic managing model that directly influences human potential usage. That is why we have conducted the research at the private oil and gas enterprises. To receive detailed information as the object of research we have chosen separate self-governing departments but not at the strategic level (petrol stations and gas supply and gas infrastructure development enterprises).

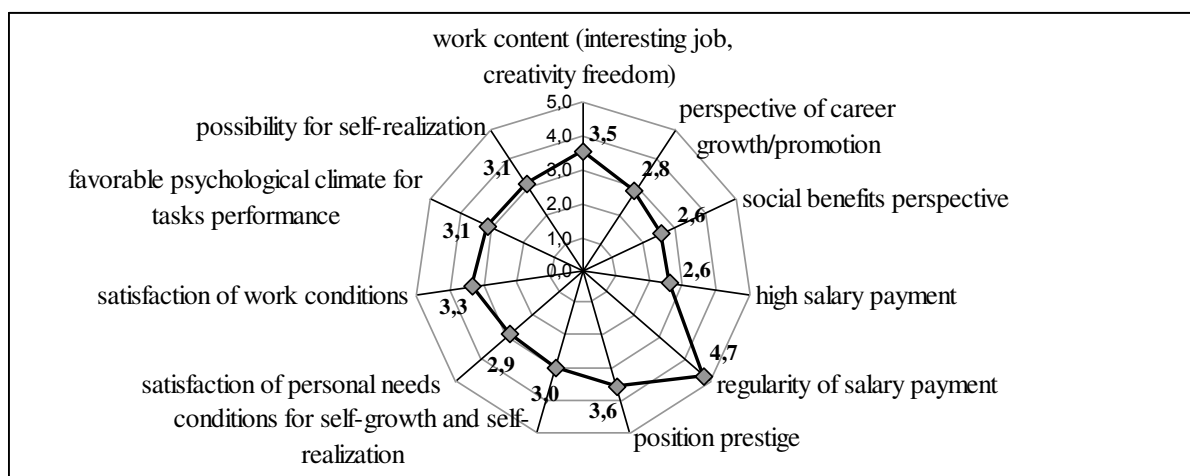
With the aim of conducting the study we have developed a questionnaire where all respondents marked their personal data (i.e. age, sex, work experience, etc.) as well as have answered three blocks of questions: 1) evaluation of the usage on enterprise own and colleagues'

skills; 2) evaluation of the enterprise's microclimate; 3) ranking of the importance of own needs. Voluntary anonymous questionnaire has involved employees of oil and gas enterprises of various levels, different age and work experience. To understanding better the human potential, our research covered the enterprise's microclimate evaluation committed by different categories of employees as well as it presents some practical recommendations regarding its improvement.

## RESULTS

Presented research doesn't guarantee precision data, though it allows evaluating a microclimate on an enterprise that inevitably plays an important part in human potential usage. Among questioned employees are: a) 82% of workers, 14% middle management, 5% high management; b) 5% of employees have a secondary educational level, 9% technical education, 11% undergraduate education, 70% complete high education and 5% of employees have with academic degree; c) 50% of employees are male and 50% female; d) 30% of employees are aged under 25, 48% from 25 to 35, 14% from 35 to 45, 7% from 45 to 55 and 2% over 55; e) 66% of employees have work experience at the analyzed enterprise under 5 years, 16% from 5 to 10 years, 14% from 10 to 15 years, 5% from 15 to 20 years.

Evaluating specifications of enterprise's microclimate according to the five-grade scale, respondents have put the highest mark to the regular salary' payment (4.7 points), prestige of position takes the second place (3.6 points) and labor content takes the third place (3.5 points). Respondents gave 3.0 and 3.1 points correspondingly to the self-education and self-growth conditions that prove unfavorable usage of human potential at the analyzed enterprises (*Figure 1*).

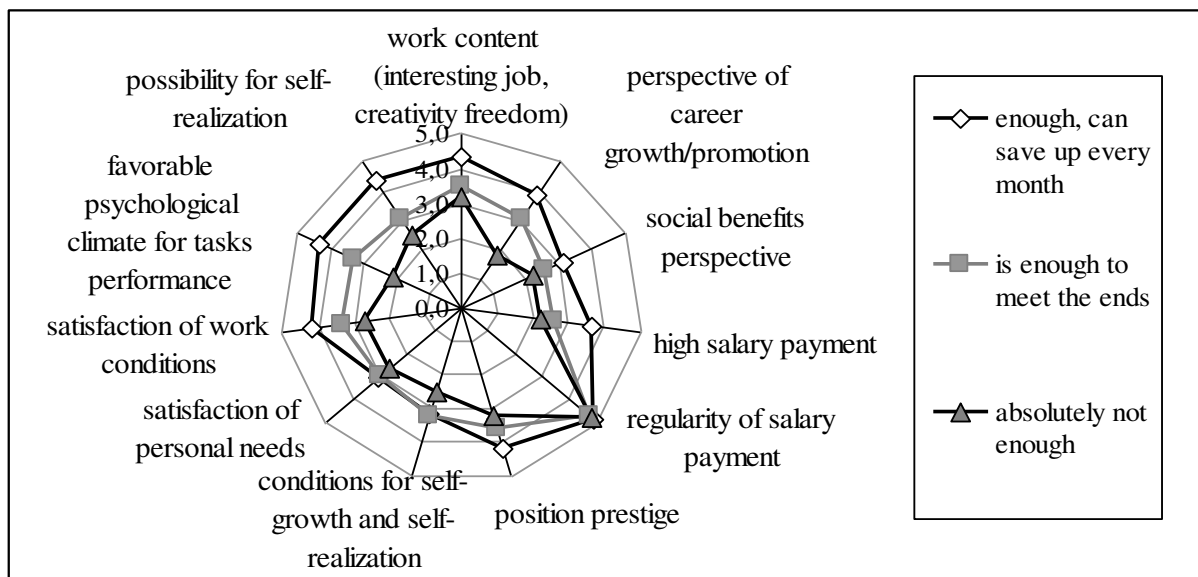


**Figure 1: Evaluation results of Oil and Gas enterprises' microclimate**

Source: own authors research

We can conclude that the main motive for employees to stay the occupied position is regularity of salary payment. The prominent is the fact that majority of the respondents consider the salary payment as a law. It brings to the thought that HR department successfully reacts at external changes in economic growth reduction that causes unemployment rising, hiding reasons under expenses reduction motives. Thus, level of salaries is reduced. Although many researches show that such actions allow confronting external challenges in the conditions of economy's slumping.

Alongside, demand growth at the labor market leads to a rapid outflow of enterprises' human capital. It makes crucial to foresee and develop preventative measures concerning qualified staff and to predict labor market changes for HR department. To understand better processes that evoke employees to use their potential at the enterprise, we have analyzed the behavior motives related to age, working experience and financial state. In this case respondents evaluated their income according to the scale "absolutely not enough", "is enough to meet the ends", "enough, can save up every month". The diagram of evaluation results of employees' income is shown in *Figure 2*.



**Figure 2: Evaluation results of enterprises' microclimate by the salary level**

*Source: own authors research*

Characteristics of revealed tendencies are: 1) Group "is not enough" (23% of respondents are employees have a higher education and up to 5 year working experience) demonstrates the lowest score of all analyzed factors (2.7 points). The motive that makes an employee keep its position is regularity of salary payments (4.8 points), job prestige (3.2 points) and labor content (3.2 points). The perspective of future career turned out to be the least motivation (1.8 points); 2) Group "is enough to meet the ends" ( 61% of respondents are aged between 25 to 35 with working experience over 5 years) demonstrates the average score of enterprise's microclimate (within 3.0-3.6 points), regularity of salary payments (4.7 points), quality of salary payment (2.5 points) and perspectives of social benefits (2.6 points); 3) Group "enough, can save up every month" (16% of respondents are aged up to 25, live with their parents, have incomplete higher education and working experience up to 5 years) demonstrates the average score 3.9 points. Employees of this group are quite motivated by career perspectives, possibility of self-realization, work conditions, professional prestige and psychological microclimate. It should be noted that this group has put the highest score to the level of salary payments in comparison to others. From the other side a low level of self-satisfaction and evaluation of self-growth conditions become a reason for a staff outflow.

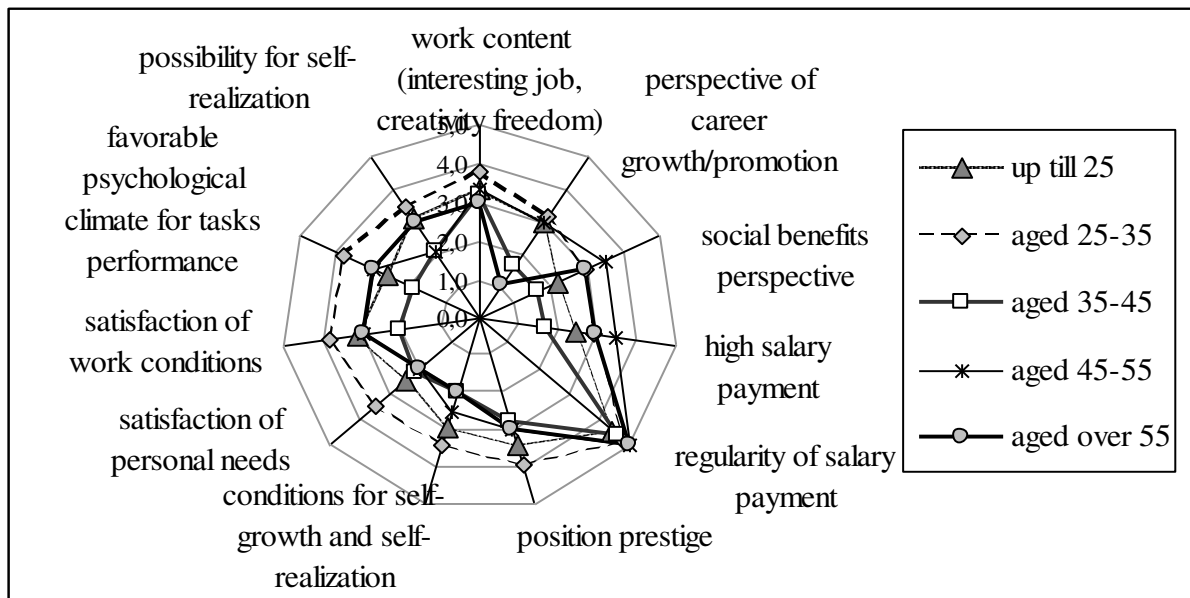
Results of the questionnaire have outlined 5 age groups of respondents (*Figure 3*). As we can see, employees aged from 35 to 45 in majority of cases are not satisfied with the enterprise's microclimate, not including the regularity of salary payments and work content. It shows that they are potential "escapees" under conditions of labor market changes. The most devoted group is employees aged 25-35 that is explained by motivation to receive experience and practical knowledge for future career growth at the enterprise as well as it is caused by HR-policy to employ quite cheap staff.

In order to evaluate potential losses of human capital we have analyzed the influence of enterprises' microclimate on its employees regardless their working experience (*Figure 4*).

Our research has revealed that the most of "disappointed" employees became to the group with 15-20 years working experience (respondents have marked only more than 2 points for the prestige, work content and regularity of salary payment). This fact proves that the owners of human capital don't find an equal share on a labor market. This HR-strategy is aimed to preserve a human capital of its employees as an additional competitive advantage.

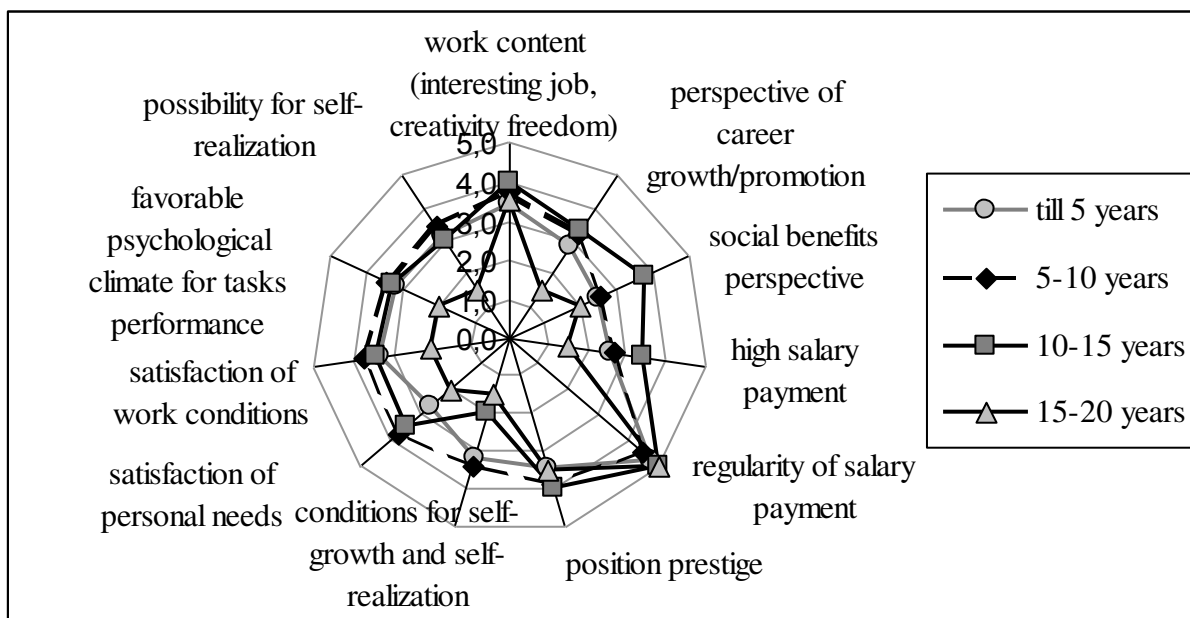
We offer to consider other tendencies. The regularity of salary payments has received the highest score regardless the age of respondent, whilst respondents with working experience from 10 up to 15 years have also put high scores for such characteristics as labor

content, professional prestige and social benefits. However conditions for self-growth and self-realization turned out to be worst. Satisfaction of needs is highest among respondents with 5-10 years working experience and the lowest among respondents with 15-20 years working experience. Possibility for self-realization and favorable microclimate were estimated more or less equally by all respondents (3 points) excluding respondents who have 15-20 years working experience.



**Figure 3: Evaluation results of enterprises' microclimate by age groups**

Source: own authors research



**Figure 4: Evaluation results of enterprises' microclimate by working experience**

Source: own authors research

## DISCUSSION AND CONCLUSIONS

Based on our research we conclude that regularity of salary payment is the most significant factor for respondents. Therefore the majority of employees consider their positions as a possibility to survive and satisfy needs as well as do not be unemployed. Upon such conditions enterprises successfully implement their open staff policy that is dictated by

the unemployment and survival instincts while crisis. The recovery of the economy may lead to a significant outflow of qualified staff as long as internal factors indirectly affect its use. A clear connection is observed between the property status of employees and their assessment of internal company's factors, which suggests that material motivation is the key factor to enhance the human potential usage. Enterprises' staff policy mainly is focused on young employees. Therewith human capital carriers aged 35 are potential "escapees" in case of labor market changes. This tendency is proved by employees' ranking regardless the age and working experience. The lack of conditions for the development and training including the low self potential and wage potential is a reason of the outflow of the most experienced staff.

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# STRUCTURAL FEATURES OF RUSSIAN NATIONAL ECONOMY TRANSFORMATION

Nina Riffa, PhD in Economics, Associate Professor,

*Volgski Institute of Economics, Pedagogy and Law, Russian Federation*

**Abstract:** *This article describes Russia's inclusion in the process of globalization, which is also the emergence of a new, additional resource in its economic and social development. Geo-economics in Russia has a number of important competitive advantages of both modern types, traditional and new. Also the authors show ways and suggestions, how Russia in a modern global world can use its resources to find its place in economy not only because of its export of raw materials, but also in modern innovation in new technologies.*

**Keywords:** *transformation, national economy, structural changes, efficient functioning, traditional advantages*

## INTRODUCTION

Progressive globalization as a qualitatively new stage in the internationalization of economic life and has become one of the characteristics of the processes in the world economy development. Integration and cooperation of production, formation of the international labor division, foreign trade and international economic relations as a whole led to the growing influence of international economic relations on the national economies of different countries, on their participation in a unified world economy and interdependence of national economies, qualitative and efficient functioning of which is impossible without taking into account external factors. As an inseparable part of the world community and the organic part of the same unified economic space Russian society and the domestic economy is gradually integrating into the worldwide processes of globalization.

## MATERIALS AND METHODS

Among the traditional advantages can be mentioned: agriculture which has a huge potential; extractive industry based on the rich natural resources; railway transport connecting not only the remote areas of the country with each other, but also Europe and Asia; and the relative cheapness of labor. There are scientific, technical and creative potential, intelligence, scientific and educational schools, as well as new partnership connections with the West among the new competitive advantages [1].

Nevertheless Russia, of course, is behind the world's leading economies due to its financial and banking system, slow development of specific mechanisms for a fair competition and constructive partnership, slow development of a solid legislative base and legal framework for the development of business (especially small business), incompletely formed package of legislative instruments for the protection of property rights and entrepreneurship, low level of development of the civilized market and lack of its high-quality, extensive infrastructure, incompletely formed optimal and rational structure of the economy. This fact is the reason for the cautious and temporizing attitude on the part of developed foreign countries. As pointed out by the researchers, foreign capital is still mostly delayed from large-scale direct investment in the Russian economy, despite a high rate of return and the level of capitalization of our enterprises [2].

Scientific and technological progress has not yet become a significant mechanism for strengthening the process of economic growth. We can also agree with the researchers that the domestic innovation system is not functioning yet and does not meet the requirements of the market. Russian science has weak innovation orientation. Furthermore, there are no priorities for the economic restructuring, which the domestic economy currently requires and which should be based on the innovative technologies in the context of globalization. In conditions

of global economic challenges, the Russian economy is especially interested in modernization, economic structure and technological improvement.

## **RESULTS**

The structure of the national economy is a complex socio-economic system. Its parts have quantitative proportions in relation to each other, they are closely related to each other and ensure the integrity of the system, and nevertheless are in a hierarchical dependence. Presenting a set of system elements, complex multidimensional stable connections and relationships between the economy of sectors, regions, corporations and enterprises, between reproductive, financial, technological, investment, innovation and other processes, the structure of the economy ensures integrity, consistency of the economic mechanism and preservation of its key features and functions under the influence of various external factors and internal conditions. The need for structural transformation of the economy has an objective basis and is usually determined by the specific factors which are: the economic situation in the world, the possibilities of a modern technology revolution, the growing scarcity of natural resources, the dynamics of the opportunities and needs of a modern society etc.

The need for active structural changes in the domestic economy is an apparent axiom nowadays. In particular, The Concept of socio-economic development of Russia until 2020 emphasizes as a spirit of time and current economic paradigm the radical change of not only the growth factors, but above all the change of the mechanism of economic development, a transition to the innovative, socially-oriented development path that can lead the economy to a high competitive position in the global world economy and ensure its effective and quality functioning.

In recent years, economic and socio-political realities of Russia are controversial. It is also clear that the economy of the country has entered the modern world crisis with unresolved structural problems inherited from the previous years and multiplied by the modern market reforms. Certainly existing for a long period of time structural deformations due to the priority development of the fuel and raw material industries, fuel and raw material orientation of Russian exports, underdevelopment and lack of competitiveness of a high-tech complex have led to the national economy dependence on a specific and limited number of global markets, the prices of raw materials and fuel. The influence of external factors, such as growing imports of equipment, technologies and products in recent years, strengthening of international financial flows, unacceptable lag in resource and energy efficiency issues and innovation sphere in conditions of increasing global challenges has also led to the fact that Russia has been unable to provide a qualitative growth by using internal innovation reserves, including innovative technologies, and innovative resources, innovative investment, intellectual property and other resources.

In modern conditions structural rebuilding of the domestic economy should achieve the following main strategic goals:

- 1) Implementation of a comprehensive modernization of the national economy for technical and technological alignment of economic space for the full completion of the industrialization process of the country and activation of innovative breakthroughs;

- 2) Complete market transformation of the national economy and building of a capitalist economy, absorbing the experience of countries that have managed to make it socially oriented.

Raw-material orientation is one of the most complex structural problems of the domestic economy. Structural transformation of the economy and modernization of sectors and spheres of the national economy implies, in the first place, increasing of the innovative activity of enterprises in all the economic sectors (private, corporate and public), increasing the share of high-tech services and high-tech products in a total output, building of the national innovation system, providing a legal framework and infrastructure base for innovative breakthrough, the main priorities of which are the energy efficiency and conservation, development of modern nuclear, aerospace, medical, strategic information technology. There

is a need to reorient the national economy to develop and support the spheres, related to the growth of the intellectual capital of a society and the individual: education, socio-cultural infrastructure etc. In conditions of the gradual transition to innovative development of the national economy the top priority sectors are the most knowledge-based industries related to the production of high-tech products for the promising world markets such as the most part of the heavy engineering industry (aircraft construction, propulsion engineering and shipbuilding); nuclear, rocket and space industry; chemical, microbiological, medicine, pharmaceutical industry; production of modern weapons, information and communication technologies and electronics.

Prospects for socio-economic development of Russia are connected with the search for optimal ways of entering the world economic community. Since the Russian economy is interested in cooperation with economically successful countries and economic groupings, there is a need to respond adequately to the global economic challenges, to adapt to new conditions and requirements to complete structural reforms to modernize and create a production that corresponds to the world standards. It should become an equal economic partner in the global economic dialogue on the level of development of productive forces, economic power, the pace of technological development, on the functioning of an effective innovation system etc.; it should take advantage of the chances offered by the internationalization of economic life, find its rightful place in the future of the global space of the global economy.

## **DISCUSSION AND CONCLUSIONS**

In the context of the globalization processes readiness of Russian society to international competition will ultimately determine the possibility of preserving and strengthening the economic sovereignty and power of Russia. This requires a strong and healthy national economy using the whole arsenal of economic policy, coordination of all the branches of government, the effective interaction between business and the state, aimed at ensuring an adequate place of the Russian national economy in the world.

The aim of the structural change: the formation of a strong national economic organism with qualitatively new properties, which acts not only as the "raw materials appendage" in a global world economy, but instead is a self-sufficient and strong economic partner who gives decent "answers" to the global economic "challenges" of our time.

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# THE ROLE OF HUMAN CAPITAL IN ECONOMIC INCLUSIVE GROWTH

Ushangi Samadashvili, PhD in Economics, Associate Professor,

*Ivane Javakhishvili Tbilisi State University, Georgia*

**Abstract:** *The paper describes the current poor state of the economy of Georgia, which is justified in the circumstances outlined in this speech, and the necessity of realizing the objective of inclusive economic growth, as well as the role of human capital. It is emphasized that inclusive economic growth implies, on the one hand, involvement of the general population in the economic wealth and growth process, and on the other hand the economic growth brought by the use of the good of all citizen, including growth, employment and income generation to feel the goodness of people, and not by the state. Argumentative, that inclusive growth is one of the main conditions for the development of human capital. That's why Georgia should invest in developing human capital and personal competitive people without competitive firms, while firms in the competitive category are on in international competitive state. The author proposed a classification of reproduction of human capital.*

**Keywords:** *human capital, Inclusive economic growth, competitive*

## INTRODUCTION

Foregoing labor goals are to characterize Georgia's disadvantageous condition in economics, substantiate the inclusive economical growth's of objective needs and silhouette human capital's role in its realization.

**What is the condition of Georgian economic security by general indicators?** Real GDP on each soul in a well-appointed country must contain minimum 5000-12000 US dollars. But in Georgia the index is equal to 3596 US dollars. That's why it is only on the 115 place worldwide. The unemployment should be 5-6%, but in Georgia it's 16%. Investments Share in GDP should be 25%, but it is only 5-10%. It means Georgian economic is in a user type. There is a Georgian idiom: "The one who prefers today's egg to tomorrow's hen, tomorrow will eat less egg and less hen". Living wage in Georgia is 37%. Foreign trading helps economy to grow only when import and export are balanced. But in Georgia the import exceeds export by 3.5 times. Usually in the market basket native production must prevail, but in Georgia imported production holds 75% of the market basket, which means the native market is more keen on import exceeding export. Georgia has more employed citizens abroad (750-800 thousand) than in Georgia itself with 600 000 ("Weeks Palette", April, 16, 2014). That's why compatriots from abroad send millions of dollars to Georgia (U. Samadashvili, Business Bases, Tbilisi; "Universal", 2013, p. 430). Therefore Georgians demand and deliveries biggest part come from abroad. This means that there is neither user nor producer, just mediation and trading of products. All this expresses Georgian economic am Orphism.

## RESULTS

From worldwide practices we know that the only way out of this situation and to rise populations prosperity is fast economical growth. That's why the government of Georgia pays attention to inclusive economic growth, but what does inclusive economic growth mean? Inclusive economic growth on the one hand means to include the population in the economic wealth growth process, and on the other hand to include them into growth of profit. The people should feel increasing employment and raise of income without government's social help (N. Khaduri, Georgian economics main problems, "Ekopallette", 24.02.2014). This kind of method approach doesn't give good effects on people. It makes them passive and holds economic development.

**What made Georgian government to choose the inclusive economic growth?** In spite of the fact that economic grew over the last 10 years, the increased wealth gathered among a narrow group of people. That's why the government wasn't able to decrease poverty and reflects economical growth on population's general prosperity. This deepened the gap between rich and poor, which was one of the main reasons of social rejection and apathy (I. Gharibashvili, "Our strength is our intellectual resource", World, 2014, p. 134).

In the long-term, a steady and inclusive growth of economic policy goals are to decrease poverty and to achieve population's general and differential prosperity, to give them the chance and opportunity gaining income by helping socially at least to the poor layer of population. Herein, in times of "steady development" nowadays generations' needs must be satisfied by not harming future generation needs and not engender their possibility of resource exhaust and environment degradation.

Long-term steady and inclusive growth doesn't need instability's stability (which takes place recently), nor simply steadiness, but constant stability. Without forecasted stability thoughts about investments, moreover long-term foreign investments and their positive effects are excluded. Though the investments in economics are like fuel for a car. A car can't move without fuel, so economics without investments.

From the experience of developed countries, the guarantee of steady and predicted stability of the middle-class is about 50-60% of the population. Nowadays the middle-class in Georgia is about 25%. Middle-class is some kind of "buffer", which abuts (marks off) the countered sides, rich and poor, and doesn't give them the ability to collide. The thinner the "buffer" is, the higher the danger of collision. Because when society consists only of a big part of poor and less rich, there is a bigger chance of countered sides to collide, a danger of revolution and correspondingly danger of country's political instability. Herby, if the society consisted of only rich and poor classes the thought about effective, innovative economics, democratic and impartial, free elections is exceeded. (U. Samadashvili, "Business and innovative economics, Middle-class formation source in Georgia", International scientific-research conference, May, 24-25, 2013, Kutaisi). Unfortunately, in the strategy of "Georgia 2020" the need of middle-class formation isn't considered, which is in our point of view an essential aspect.

According to the strategy of "Georgia 2020", one of the main braking factors of economic growth is weakly developed human capital.

In fact, the government and the individuals try in every possible way to conserve resources for education and science and don't consider the fact, that the expenses of cheap and low-qualified education are bigger than expensive but high quality education. Moreover, we often brag that Georgia with its cheap labor force is attractive for investors. But we forgot that cheap labor power means low qualification, low income and low income means low standard of life and poverty.

It must be accented that low qualified workers and innovations in advanced technology are incompatible, which naturally inhibits progress and construction of economics established on education.

This fast is confirmed by the researchers of post Soviet Union territories, conclusive in the article of Russian publication "Vlast", where it is stated that Moldova spends the most money on education in percentage of its GDP index. Moldova increased this index from 6.8% in 2004 to 10.9% in 2012.

According to the educational field, Ukraine is on the second place, but Georgia is on third from the bottom with 2.9% and Georgia outruns only Armenia and Azerbaijan by 0.1% (Weeks Palette, April, 16, 2014).

If Georgia really wants to reach long-term, steady and inclusive growth of national economics, which means universal and differential prosperity, it needs to invest into weakly developed human capital, invests into education on the long-term guarantees economic growth also in physical capital (new installations, buildings, roads, etc.).

For example, in well-appointed countries investments into education and science increases the GDP level by 40%, and after 5-7 years these investments will reach full effectiveness and exceeds oil and gas production indexes (Magazine "Commentary", 2003, No. 1, p. 40).

Nowadays, to settle modern economy Georgia need people with modern economical knowledge, many years of experience, inner renovation abilities, knowledge of world languages, techniques and technologies and tolerable human characteristics. Without competitive people its unimaginable to have competitive firms, and without competitive firms there won't be a competitive country.

We think that the manufacture, educational reproduction can be realized by reduced, simple and extended reproduction (it's about mastering the stored progressive theoretical-practical and experienced knowledge by mankind in our own specialty).

In reduced knowledge reproduction, workers don't fully posses in their profession having progressive, experience knowledge, which means personal non-competitiveness. This kind of employee usually can't find a job similar to their specialty and stays unemployed.

In simple knowledge reproduction, workers fully posses in their profession stored progressive, experience knowledge, keeping their business contract, positive image and work place. In this situation we have personal competitiveness.

In extended knowledge reproduction, workers not only posses in their specialty stored progressive, experienced knowledge, but they do bits in knowledge development. In addition, those workers posses' inner renovating abilities, knowledge of world languages, tolerable human characteristics, business contracts and positive images. In this case, we have workers with a personal competitive advantage. This kind of personal competitive advantageous employee doesn't search for a job, but jobs searches them. This type of a characteristic Georgian employee will be competitive not only in Georgia, but all over the world.

Educated and personally competitive people, except the above mentioned, have a lot of positive effects, which have influence on other people's economical state. For example:

1. The more people are educated and experts, the higher is their productivity, the more they do for national economy development and, accordingly they get more income (e.g. in the USA higher educated person receives 3 million dollars income up to the age of 65, a person without this education only receives 1.5 million (P. Samuelson, V. Nordhouse. Economics text-book. Tbilisi, 2005, p. 133).

2. Education and high income means high standard of life. Better future is precondition of generation's growth.

3. Educated and profitable people to satisfy their rich and various intellectual values, pay service fees by themselves in order to develop their finances and intellectual wealth's in fields like: culture, science, sports, etc., which assist the market to become more cultural.

4. Educated people choose better parties in elections which means better support in future and development (L. Khalcerovich, "Government in transitional period", 2002, p. 118).

5. Educated, economically and socially active people are the main subject and creator of knowledge to establish an effective, economical and democratic civil society, which we are trying to build. Without there won't be a future or acceptance in an united Europe.

Unfortunately, today in Georgia one of the fierce problems is "brain drain", that is immigration of educated people to economically developed countries, where higher standard of life awaits them. Human capital has a lot of negative external effects; "brain drain" leaves people who stay in the country in poverty.

We think that a decrease of qualified cadres in Georgia isn't a way to a better future. That's why, to overcome this, we think that the problem must be governments' main task on the long-term.

**In order to develop human capital in Georgia it needs:** Development of labor power orientated on labor market needs, which means educational; professional occupations; improvement of labor market informational system reinforcement; social welfare, which means public assistance; improvement and integration of disabled people in economic

processes; as well as a qualitative and accessible health care maintenance (Georgian social-economical development strategy). In the end, we Georgians are poetic, lovers of singing, dancing and feast, but it's really important to realize that it is the 21<sup>st</sup> century: the new economics age; the knowledge age and the information age.

## DISCUSSION AND CONCLUSIONS

1. **Why is the 21 century the age of new economics?** In this time period economic resources, particularly in non-reproductive resources (oil, gas, coal, etc.) are limited. By worlds energetic council's statement there are 43 year stocks of gas and oil worldwide. (See "New Merchant", 2007, No. 2, p. 16). At this rate real GDPs steadiness growth can't continue by the use of more production space, labor and capital, but a more effective use of existing resources, which is called innovative economics. Subjects of innovative economics are: scientists, inventors and businessmen. The scientists' function is to improve the universal scientific knowledge, the results are discovery. The inventors' function is to transform discovery into new consumer values which result in invention. The businessmen' function is to transform inventions into goods and inventions utilization, so called result innovation. As in economics, it is the science of searching ways that help using existed limited resources effectively.

2. **Why is the 21 century the age of knowledge?** In modern economics knowledge is decisive and not the natural resources, labor or capital. Modern industry and its factors and products are science-intensive, knowledge-intensive and not labor-intensive and capital-intensive. A good example is the Japanese industry, where processes of manufacturing continue without involving a lot of people.

3. **Why is the 21 century the age of information?** Modern economics effective function, manufacturing and personal factors by effective organizations, which greatly depend on right management decisions. Right management decisions need operative and reliable information. In ancient times for spreading information were used horse couriers, pigeons and other kinds of messaging which needed a very long time to reach. In modern society communication spread the information worldwide during seconds.

In the USA and generally in Western Countries one reason of higher education is a highly developed economy. But this connection between economy and education is not one-sided, but mutual. A high and good education is essential for economical development and high income and vice versa. A high income means having a high education system. For a less developed country as Georgia it is undoubtedly one main task for the nearest future.

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# **BUSINESS ENVIRONMENTAL RESPONSIBILITY WITHIN THE SYSTEM OF ECONOMIC AND SOCIAL CATEGORIES**

**Valentina Shapoval**, Doctor of Economics, Associate Professor,  
**Mariia Berezhna**, PhD-Student,

*Department of Business Economy,  
National Mining University, Dnepropetrovsk, Ukraine*

**Abstract:** *Contemporary conceptual approaches to the definition of businesses' environmental responsibility place within the system of social and economic categories are investigated in this article. Domestic and international experience in this field has been analyzed. A comprehensive definition of social and environmental responsibility is suggested. The main trends in implementation of a coherent environmental policy of the enterprise have been reviewed. Ways to improve them have been suggested.*

**Keywords:** *greening, conceptual approach, management, equation, socio-ecological environmental impact, use of natural resources*

## **INTRODUCTION**

In the context of growing environmental problems in the 21<sup>st</sup> century the use of natural resources by world business are facing an important challenge of detecting a balance between the development of their economic activity and the minimization of environmental problems. The notion of businesses' social and environmental responsibility was initially interpreted as a deepening of the well-known environmental economics principle "the polluter pays" and its subsequent development to the level of their demand. At the same time experts introduced an interpretation of the sustainability principle within "the triangle of sustainable development". According to this approach, contemporary businesses face a task of practical unification of three interrelated objectives: economic efficiency, environmental responsibility and social activity. Nowadays, all high-developed countries recognize the need for theoretical justification and implementation of practical steps in creating the businesses' environmental policy that would provide care for nature conservation, environmental quality, efficient use of existing and potential natural resources, maintenance of the ecological balance in the nature and provision for continued existence of the man.

## **MATERIALS AND METHODS**

The problems of social and environmental responsibility are researched in domestic and foreign literature. Along with the fixed interpretation of businesses social responsibility wherein environmental initiatives are included as a mandatory part, this question is studied with a focus on proper environmental initiatives [1; pp. 38-39]. The scientific papers where the essence of environmental component' development in business-activity is well presented in Ukraine. These problems were researched by N. Asambaeva, L. Goriacheva, V. Zubakina, N. Karpenko, D. Manukyan, K. Olejnik, Yu. Savina, B. Sydorchuk, P. Sorokoletov, A. Subetto, N. Tikhomirov, M. Furutyan. The general theoretical model of business-activities' greening is considered in scientific papers of G. Shkiperova, G. Melentyev [2], V. Zlokazov [3] and others. However a comprehensive approach to the definition of this concept is not developed.

## **RESULTS**

As articulated in the framework of economic welfare theory created by Arthur Cecil Pigou regarding to environmental externalities, responsible business imperative acquires another sense today [4, p. 58]. We mean a wide set of external, positive and negative effects of business-activities that need to be taken into account in the course of economic decisions-making. The composition of these effects must include not only purely environmental externalities but also



social ones. It depends on external business-effects influencing on the human capital of the modern society and the living standards. We propose to understand social responsibility as the business strategy regarding to the integration of social and environmental imperatives into the process of decision-making, into the systems of values and culture as well as implementation of this objectives. Historically, approaches to sustainable development and responsibility have been developed in several areas of economics thought: neoclassical, illiberal, institutional, neo-institutional and evolutionary economics. The main approaches are:

- traditional approach to responsibility (M. Friedman): business bears only economic and legal responsibility;
- neo-institutional ethical approach (M. Dimmock, P. Drucker): business has an ethical obligations concerning to specific groups of interested parties (stakeholders);
- socio-ethical approach (K. Lewin, E. Schein, H. Mintzberg): managers and employees are responsible for the balanced business adherence. Method was developed in the framework of the approach to create the perspectives for the social and sustainable business (S. Shaltegger, K. Segerson, R. Barr, J. Peterson, T. Dyullik): in this sense responsibility removes the conflict of takeholders' interests and promotes sustainable development of the society.

The issues of social and environmental responsibility in the scientific literature have been analyzed within the scope of various approaches [5]. The legitimacy of independent reporting and analysis of businesses environmental and social responsibility is determined by both the practical existence of various mechanisms for their implementation (environmental taxes (A. Pigou) and the market negotiations (R. Coase). Other approach regarding environmental responsibility has been developed in corresponding literature; it refers to conscious and motivated business participation along with internalization of external negative effects of its activity in a variety of measures that prevent environmental damage and poor environmental management as well as in the production of public environmental benefits. Several approaches that define the business environmental responsibility and its objectives have been formed in the world (*Table 1*).

Table 1

Modern Conceptual Approaches to the Definition of Environmental Responsibility

Conceptual Approach	Definition	Main Features
American model	Corporate environmental responsibility: a component of the overall business strategy and corporate development, which takes into account the environment that goes beyond creating profit and statutory social standards. The level of corporate responsibility for the environment and the appropriate corporate actions are determined by the management of the corporation.	- leading role of the business community; - slight role of governmental regulation; - juridical support for local communities.
European model	Business ecological responsibility: a concept of the company concerning the environmental interests of society with a focus on compliance with regulatory requirements and on compliance of the actions with the relevant environmental issues in the operations area.	- regulatory compliance; - implementation basis: legal responsibility; - high level of media interest.
Domestic model	Environmental business responsibility: standards based on the moral positions concerning to the environment and thus to the future generations life. This responsibility includes environmental protection, optimal use of natural resources and environmental safety of production and consumption processes.	- focus on the state and the shareholders; - low level of reporting; - low level of vested interest.

It is necessary to mark two important points. Firstly, the social and environmental responsibility involves not many payments for the environmental damage caused business activities. It includes the support for socially significant environmental initiatives (healthcare measures, cultural heritage preservation, support of protected areas, protection of endangered animals and plants etc.). Secondly, the implementation of social and environmental responsibility is linked to the approval of an ethics that is adequate to the problems of such businesses,

which is intended to supplement the formal legal rules and requirements set forth in the approved laws, standards, regulations etc., moral and ethical standards and principles, thereby reinforcing the effect of formal institutions.

On the other hand, an important role in the formation of the "green" growth model of the enterprises is explained by institutional conditions that are represented by certain social institutions. As L. Mochalova noted, "a well-designed control system can determine the rights and create the incentives that stimulate the transition to a 'green' economy as well as remove the barriers to green investment" [6, p. 60]. Among the factors that generate favorable institutional environments, one can distinguish the development of property relations, the tax law and the human development degree. Efficient functioning of the institutional structure has a positive impact on the greening economy' process since it reduces the amount of transaction costs. One of the important prerequisites for the greening economy' process formation and its development is the maturity and the stability of the institutional environment. Nowadays a number of conceptual approaches as well as a number of mechanisms and tools for their implementation have been formed. The list of these approaches, which is presented below, reflects the evolution of content and tools for implementation of environmental responsibility:

- transformation of external negative environmental effects that are caused business activities into internal costs on the basis of the tax of A. Pigou and derivative tools (including the payments for negative environmental effects as it takes place in Russian Federation);

- methods and tools for environmentally sustainable social and economic development, which allow extending the timeframe of business responsibility due to social and environmental obligations to future generations and stakeholders;

- internalization of external environmental costs into internal costs of businesses through direct market negotiations between the "victims" of environmental pollution and "culprits" according to the theory of R. Coase;

- legal methods of environmental responsibility implementation, which includes 2 areas: 1) insurance of environmental business responsibility (mandatory and voluntary); 2) implementation of responsibility by imposing civil and criminal punishments in court proceedings;

- business participation in the process of purchase and sale of quotas for greenhouse gas emissions under the emerging interstate mechanisms of resolution of global environmental issues;

- voluntary environmental agreements and partnerships (business – government; business – business). It is a flexible tool for the business exit beyond the legally fixed standards of environmental safety and environmental management as well as a focus on solving cross-sectors' resource and environmental issues (recycling of old machinery, railway cars, airplanes etc.) [7; 8; pp. 94-124]. Along with the conceptual approaches' development the basis of the evolution of implementation forms of environmental responsibility also includes the changes in the nature of environmental issues and practical approaches. This transition is characterized by a change in the management style as well as by governmental openness, business activities and establishment of partnerships [8, pp. 146-152]. Thus, mandatory requirement for social and environmental responsibility implementation is the transition from the state with the rigid administrative control to the state that integrates negotiation mechanisms into its activities [9].

Analysis above-mentioned approaches allow focusing on a triple dividend with a view to ensuring positive social effects. In conditions of investment activation including the anthropogenic pressure increasing on the environment, the method of direct negotiations between investors and local population on the issue of damage compensation caused to the environment receives more possibilities for application. Development of the economic and legal approaches, including the environmental insurance, contributes to the solution of issue on compensation for emergency environmental pollution damages. The interstate mechanism of purchase and sales of quotas for greenhouse gases expands the geographical boundaries of social and environmental responsibility and promotes global environmental issues solutions on the basis of market incentives.

An important type of voluntary environmental agreements that reduce the administrative burden on the business are the international standards for environmental management and

auditing (ISO 14000 and EMAS (Eco-Management and Audit Scheme))), which are provided by enterprises voluntarily. The features of these standards include further expansion of ideas about the content of social and environmental business responsibility. This is due to consistent integration of the concept of an ecological product life cycle (EPLC) into the ISO 14000 standard and beforehand into its second version, adopted in 2004.

It makes necessary monitoring of the social and environmental effects caused by the production processes, namely from the manufacture of raw materials and components, their transportation, processing and manufacturing the final product, its promotion and sales etc. to the consumption stage and safe disposal of time-expired products.

## DISCUSSION AND CONCLUSIONS

Social and environmental business responsibility is linked to the ethical standards of the business community which complete the system of environmental standards and requirements. Various environmental mechanisms and tools for implementation of environmental responsibility in one or another way apply in Ukraine, although in terms of coverage (in particular, environmental insurance), they can be seen with a considerable lag in comparison with the best international practices. It is explained by inadequate institutional environment for environmentally responsible and competitive businesses.

Perceptions of social and environmental business responsibility in economics are being developed. The environmental responsibility is an informed and motivated participation of the business in actions that prevent environmental damage; they must provide social and environmental benefits, including healthcare activities, improvement the quality of environment and sustainable use of natural resources. It should be based on environmentally and socially responsible entrepreneurship, which leads to free economic activity aimed at achieving aims with the requirements of environmental safety and sustainable use of natural resources enshrined in law as well as in ethical standards of the society.

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# PRODUCTION AND CONSUMPTION OF BASIC AGRICULTURAL PRODUCTS IN UKRAINE AS A BASIS FOR FOOD FUND FORMATION

Nadiia Stezhko, PhD in Economics, Associate Professor,

*Department of International Economics,  
Kirovograd National Technical University, Ukraine*

**Abstract:** *This paper researches the regularities of change in levels of production of basic kinds of agricultural products. Forecast estimations are presented. Comparison of the efficiency of basic agricultural products production in Ukraine, the United States and Hungary is suggested. Consumption funds of basic food products and standards of their consumption in Ukraine are studied. The level of self-sufficiency of basic food types in Ukraine is determined. On the basis of the conducted study the forecast of production of basic products for providing nutrition standards is suggested.*

**Keywords:** *food provision, food production, food consumption, nutrition standards, food security*

## INTRODUCTION

Sufficient food provision of the country is of strategic importance as it determines not only food security, but national security as well. For Ukrainians the problem of food security has a particular meaning, which is connected with the events of their life in the twentieth century when they experienced several revolutions, wars, famine in the 30s and 40s, queues for food in the 80s, radioactive contamination of large areas of the country due to Chernobyl disaster, the lack of adequate nutrition among the most part of the population because of poverty in the 90s.

The need for ensuring food security in Ukraine requires maintaining an appropriate level of the self-sufficiency of food, which presupposes the use of state support of domestic agricultural producers and control measures of imported products in order to protect domestic producers from foreign competition. Reliability of ensuring food security lies both in proper self-sufficiency of food and in funds for their import in proper amount under the conditions of minimum potential vulnerability of food security of population in case of complications with food imports (lack of currency, increase of prices, embargoes, etc.).

Issues of food security came into the view of the national economic science not long ago. The factor of emergence and permanent increase of attention to these problems is transformational crisis of Ukrainian economy, which covered all fields and became a significant obstacle to sustainable development of economy and society. Therefore, the problem of determining the level of food security, ensuring development of agro-industrial complex (AIC) can be considered as one of the most important national priorities that requires more attention of scientists, systematization and conceptualization of this concept as a scientific category. The fundamental works of scientists in this field, such as V. Berehovy, V. Vlasov, Ya. Zhalilo, Yu. Luzan, I. Mytsenko, V. Rusan, P. Sabluk, O. Sobkevych, A. Yurchenko [1-6], formed the main ways of the estimation and methodology of the calculation of influence of various factors shaping food security of the country on agriculture development, but the problem of management of the development of agriculture and AIC economics on forecast levels of food security has not been fully studied yet. Therefore, the purpose of this study is, on the basis of modern economic analysis, to use the most precise, accurate and low-cost methods of forecasting certain indicators of economic development of AIC for increasing the efficiency of management of development of AIC economics.

The object of the present study is the methodology of estimation and analysis of influence of some factors on the possibilities of ensuring food security of Ukraine.

The aim of our study is to conduct the research of processes and methods of prediction of certain parameters and defining the nature of the influence of the factors of AIC economic development, depending on the length of the forecast period in conditions of indistinct or insufficient information and sharply changed demand ranges for stabilization of food security of the country, the choice of the list of indicators and criteria.

## MATERIALS AND METHODS

General methodological basis of the research is fundamental propositions of modern economic theory, works of leading Ukrainian and foreign scientists on the issues of food security, regulatory acts in economic, environmental and recreational activity in Ukraine and other countries.

Informational basis of the research involves the works of Ukrainian and foreign experts devoted to economic activity in the agro-industrial sector, statistical reports of State Statistics Service, various ministries and departments, author's own researches. To achieve the research aim the present study applies: the principle of scientific objectivity; methods of analysis, synthesis, with the wide use of comparative and problem analysis; methods of mathematical statistics, forecasting.

## RESULTS

The analysis of regularities of change in production levels of basic agricultural products (*Table 1*) indicates rather diverse trends prevailing in 1995-2012. For example, grain and grain legumes production during this period increased by 36.3% or by 12.3 million tons, which means that annual growth was about 1.84% or 0.72 million tons.

Table 1

Production dynamics of basic agricultural products in Ukraine  
and their productivity in 1995-2012 [7]

Years	Population, million persons	The area of arable land, million. hectares	Grain and grain legumes productivity	Agricultural production index (2004-2006) 100%	Grains and legumes production, million tons	Sugar beet, million tons	Sugar beet productivity	Potato production, million tons	Potato productivity	Vegetables and gourds production, million tons	Vegetables and gourds productivity	Vineland area, million hectares	Productivity
1990	51.9	33.6	35.1	156.2	51	44.3	275.7	16.7	116.8	7.5	133.5	3.7	45.4
1995	51.5	33.3	24.3	101.6	33.9	29.7	204.7	14.7	36.2	6.4	110.3	2.4	30.4
2000	49.2	32.6	19.4	83.4	24.5	13.2	176.7	19.8	121.6	6.2	102.8	2	41.2
2005	47.1	32.5	26	99.2	38	15.5	248.2	19.5	128.4	7.6	147.9	2.1	61.6
2009	46.1	32.5	29.8	109.3	46	10.1	314.9	19.7	139.3	9	166.8	2.1	69.6
2010	45.9	32.5	26.9	107.6	39.3	13.7	279.5	18.7	132.5	8.9	161.4	2.2	74.1
2011	45.7	32.5	37	129.1	56.7	18.7	363.3	24.2	168	10.6	180.3	2.4	82.7
2012	45.5		31.2		46.2	18.4	411.1	23.2	161	10	182.7	2	89.9

It should also be noted that grain crops yield during this period was quite low, and in 2012 did not even reach the level of 1990. With retaining defined tendencies, ie with retaining arable area and productivity, according to forecast estimations production capacity can reach 58.8 million tons in 2015 and 71.5 million tons in 2018 (*Table 2*).

For the last 17 years sugar beet production has decreased by 38.05%, or by 11.3 million tons, herewith it should be mentioned that since 2009 the tendency of increase in production levels has been formed, which resulted in rather optimistic forecast estimations. For example, according to calculations on the basis of relevant trend models, sugar beet production can reach 27.3 million tons in 2015, and 33.8 million tons in 2018. Potatoes production for the last 15 years has a quite clear positive trend, specifically, average annual growth rates comprise 104.1%, and for the entire period production levels nearly doubled.

Table 2

## Forecast estimations of the production of basic agricultural products, million tons

Year	Forecast production levels				
	Grains and legumes	Sugar beet	Potatoes	Vegetables and gourds	Fruits, berries and grapes
2012(fact)	46.2	18.4	23.2	10	2
Forecast					
2015	58.8	23.7	27.3	11.2	2.27
2018	71.5	33.8	31.3	13.47	2.5

According to the forecast estimations, with retaining defined conditions till 2015 production levels can be 27.3 million tons, and reach 31.3 million tons in 2018. At the same time, changes in production levels of vegetables and gourds, with the general tendency to grow, have significantly lower intensity as average annual growth rate was only 2.6%, which means that annually for 1995-2012 absolute increase was at 0.212 million tons of potatoes. Forecast estimations of future production levels of vegetables and gourds make up 11.2 million tons in 2015, and 13.5 million tons in 2018.

At the same time fruits and berries production for 1995-2012 decreased annually by 1.1%, and for the whole period the decrease was 17 % or 0.40 million tons. According to forecast estimations, a slight increase in production of these crops can be expected, but even under these conditions they can reach the levels of 1995 only by 2017-2018.

With the exception of poultry industry development there is a rather negative trend of decrease of both livestock number and production in certain branches of livestock sector. The highest intensity of decrease was in cattle number as annual decrease for the last 17 years averaged 0.77 million heads or 7.7 %. The number of pigs annually decreased by 0.337 million heads, or on average by 4 %, the number of sheep and goats decreased by 0.139 million heads or about 5 % on average every year from 1995 to 2012. The dynamics of changes in livestock production levels for the period concerned was rather diverse in tendencies (*Table 3*).

Table 3

## Production of basic livestock products in Ukraine in 1995-2012 [7]

Year	Livestock, million heads				Production		
	Cattle	Pigs	Sheep and goats	Poultry	Meat, mln. tons	Milk, mln. tons	Eggs, mln. pieces
1995	17.6	13.1	4.1	149.7	2.3	17.3	13926
2000	9.4	7.7	1.9	123.7	1.7	12.7	8808.6
2005	6.5	7.1	1.6	162	1.6	13.7	13046
2009	4.8	7.6	1.8	191.4	1.9	11.6	15907.5
2010	4.5	8	1.7	203.8	2.1	11.2	17052.3
2011	4.5	7.96	1.73	202.1	2.143	11.1	18689.8
2012	4.4	7.37	1.74	207.3	2.21	11.4	19110.5
Average annual growth rate (decrease), in %	92.3	96.07	95.08	101.9	99.8	97.6	101.9
The average absolute growth (decrease)	-0.77	-0.337	-0.139	3.39	-0.0053	-0.347	305

Approximately the same rate was registered in decrease of milk production levels, comprising on average 2.4%, which indicates a rather low productivity of cows. At the same time, the fall in meat production has a much lower rate than in the total livestock number that is 0.2% per year, which indicates the improvement of pigs' productivity. Only poultry in the country developed rather rapidly as for the last 17 years both poultry number and eggs production increased by more than 37 %, ie the corresponding rates increased annually by 1.9%.

According to forecast estimations, with retaining tendencies (*Table 4*) prevailing in Ukraine for the last 17 years, cattle number can decrease significantly. By 2018 this reduction will be nearly 0.8 million heads compared to 2012, which will be accompanied by decrease in

milk production. For example, this production level can reach 11.09 million tons in 2015, and 10.81 million tons in 2018, which is 0.6 million tons less than in 2012. Pigs' number can remain near 2012 levels, but only under conditions of productivity growth, meat production can reach 3.121 million tons in 2018, which is 0.911 million tons more than in 2012. Sheep and goats number will decrease in the future and can reach, for example in 2018, the number of 1.645 million heads, which is 0.095 million heads less than the level of 2012. Only the development of poultry industry will preserve a positive trend: poultry number, according to forecast estimations, can reach 286.7 million heads in 2012, and eggs production will increase to 30.4485 billion pieces, which is almost 60 % more than in 2012.

Table 4

Forecast estimations of production of basic livestock products

Year	Livestock, million. heads				Production		
	Cattle	Pigs	Sheep and goats	Poultry	Meat, million tons	Milk, million tons	Eggs, million pieces
2012(fact)	4.4	7.37	1.74	207.3	2.21	11.4	19110.5
Forecast for 2015	4.23	7.76	1.676	241.8	2.494	11.09	23718.1
2018	3.6	7.63	1.645	286.7	3.121	10.81	30448.5

Changes in production level today must be primarily caused by productivity growth among basic types of agricultural products. At the same time, among the majority of these types their rates in Ukraine are much lower than in some countries of the world (*Table 5*). For comparison 2 countries were chosen: the U.S. as one of the highly developed countries and Hungary as a traditional agricultural country in Europe from the former socialist camp.

Table 5

Comparison of production productivity of basic agricultural products in 2011 [7]

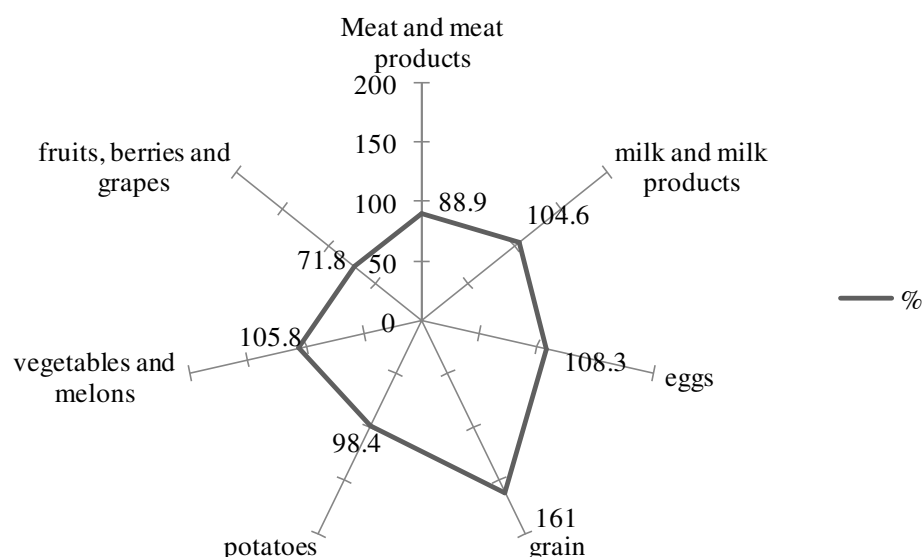
Country	Yields, dt/ha					Milk yield from 1 cow, kg per year
	Grains and legumes	Sugar beet	Potatoes	Vegetables and gourds	Fruits, berries and grapes	
Ukraine	37	363.6	168	180.3	82.7	4174
the USA	67.5	532.7	421.7	322.2	293.2	9678
Hungary	50.8	570.7	285.7	195.3	62.8	5542

As the presented rates show, in comparison with the United States in all basic types of agricultural production productivity in Ukraine is lower by a huge ratio, a significant under run from Hungary rates can also be stated with the exception of fruits, berries and grapes yield. Taking into account presented correlations, providing the growth of level of agricultural production as the main factor of ensuring food security is connected mainly with productivity growth, ie via the intensification of agriculture development in the country. Food security is caused not only by production levels of basic types of agricultural products but also by consumption of the basic food products and relative consumption balances.

Consumption funds are defined with the balance method and include the amount of food products, use of the population for personal consumption in any form. They consist of the production in the report year, imported products, and also products of the previous years in the form of consumed assets.

Today the level of self-sufficiency with the basic types of food, which is described by the ratio of production to domestic use in Ukraine, is characterized as follows (*Figure 1*).

*Figure 1* show that in the country the possibility of providing meat and meat products as well as fruits, berries and grapes is connected mainly with import. For example, for meat it is 17.1% to consumption fund, and for fruit and berries it is almost a half, ie 48.1%. Considering defined major correlations the prospects of providing the population with basic food products can be estimated, taking into account both averaged consumption standards and consumption levels in industrialized countries.



**Figure 1: Level of self-sufficiency with basic types of food in 2012**

*Source: created by author*

The first stage aims at development of forecast estimations of consumption funds of basic food products on the basis of the tendencies of their change prevailing in 2000-2012 (Table 6). Among almost all presented food products actual and forecast estimations of average consumption (per 1 person) are much lower than nutrition standards, but at the same time, its calorific value for the past seven years (2005-2012) is 2920-2990 kcal, which is almost 200 kcal more than its standard value of 2790 kcal. Proper production and import levels for ensuring given consumption standards or their correspondence to the level in industrialized countries require development of target (or standard) forecasting. Considering the future population size of the country, estimated to reach 45.0 million people in 2015 and 44.4 million people in 2018, consumption fund of meat and meat products shall be as follows: 3500 thousand tons for providing consumption standards in 2015, in which case according to balance correlation for 2012, 615.6 thousand tons can comprise import and 3210.5 thousand tons can be of domestic production; for providing consumption at the level of industrialized countries consumption fund should be 4320 thousand tons with necessary import of 738.7 thousand tons and production of 3852.6 thousand tons. At the same time, according to the results of the research forecasting (Table 4) meat production levels in 2015 may be at 2494 thousand tons, which makes up only 69.3% of the need for providing nutrition standards. The deficit of production levels can be compensated in two ways: either by increasing import or by improving sector productivity and increasing meat and meat products production in the country. Similar calculations for basic types of food were done for 2015 and 2018 (Table 7).

The value of additional production need for 2018 is determined primarily by decrease in total population size of the country. To provide possibility of meat and meat products consumption at levels of industrialized countries production levels, e.g. for 2015, should be 1.73 times more than forecast estimation for 2015, which is nowadays impossible to reach without tripled levels of import. Significant deficit can emerge under conditions of providing nutrition standards with milk and milk products: it comprises almost 35.7% of the possible production in 2015, and 36.5% respectively in 2018. However, special attention should be paid to the significant difference between milk consumption in our country and industrialized countries, where consumption level is almost the same as in Ukraine in 2012: it is 113 kg lower than the standard, which is the result of different nutrition culture and level. As the above calculations suggest, among all basic food products, with retaining farm management conditions currently prevailing in agricultural production, there hardly is a possibility to provide average nutrition standards. In 2015 the deficit of domestic production almost in all food groups will be more than 30-40%, and for fruits, berries and grapes the figure will be over 70%.



Table 6

## Consumption funds of basic food products and their consumption standards

Year	Meat and meat products		Milk and milk products		Eggs		Grains, legumes		Potatoes		Vegetables and gourds		Fruits, berries, grapes		Sugar		Oil		Fish and fish products	
	thousand tons	kg per person	thousand tons	kg per person	thousand pieces	pieces per person	thousand tons	kg per person	thousand tons	kg per person	thousand tons	kg per person	thousand tons	kg per person	thousand tons	kg per person	thousand tons	litres per person	thousand tons	kg per person
2012 (fact)	2478	54.4	9797	214.9	810	307		109.4	6394	140.2	7452	163.4	2432	53.3	1713	37.6	591	13.0	620.1	13.6
Forecast for																				
2015	2935.9	65.2	7138.3	156.9	982.5	383	4990	90.2	7330	162.9	11343.1	252.1	3519	78.2	1431.5	31.8	325	7.2	499	11.1
2018	3111.8	70.1	5745.7	129.4	1044.8	407.8	4061.3	82.6	8050.2	181.3	13518.4	304.5	4074.4	91.8	1264.7	28.5	134	3.0	450.8	10.2
Consumption standards (average)		80		330		260	3665.5	277		260		301		175		26	13			21
Consumption in industrialized countries		96		217				158						63		32		22		

Table 7

## Forecast production levels of basic products for providing nutrition standards

Forecast estimations	Meat		Milk		Grains and legumes		Potatoes		Vegetables and gourds		Fruits, berries and grapes	
	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018
Production, thousand tons	2494.0	3121.0	11090	10810	58800	71500	27300	31300	13470	2270	2500	
Production need for providing:												
- consumption standards	3600	3552	17245.3	17015.6	86589	85434.8	42543.5	41976.3	19394.4	7981.3	7874.9	
- relevant consumption in industrialized countries	4320	4262	11340.1	11188.9	49390.3	48731.8	-	-	-	2873.3	2835.0	
Additional need (+, -) for providing nutrition standards, thousand tons	-1106	-431	-6155.3	-6205.6	-27789.0	-13934.8	-15243.5	-10676.3	-5924	-5711.3	-5374.9	
Relative estimation of additional need, %	-30.7	-12.1	-35.7	-36.5	-32.1	-16.3	-35.83	-25.4	-30.5	-71.6	-68.25	

It should be noted, that an integral part of the national security of Ukraine and an important factor of its independence is food security. However, taking into consideration global trends in the world food markets and economic crisis, food availability exacerbated this problem even further. As a result, there was a decrease in purchasing power of most part of Ukrainian population and relative increase in food expenditures in household budgets. In addition, in Ukraine technological mechanism of land use, protection from soils erosion and other kinds of soil degradation has been greatly destroyed. That is why, land relations reformation and agricultural enterprises restructuring require new methods of overcoming the environmental stress in agriculture and termination of degradation processes.

Thus, the main problem that must be solved in order to provide food security is wide implementation of low-cost and competitive technologies for increasing agricultural production. Such measures enable to reduce the impact of both internal and external factors of security. The main focus area on the first stage should be carrying out the agrarian reform and providing a simple reproduction, and on the second stage it is the formation of economic background for the expanded reproduction of products for domestic and export needs.

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## BRAND OF COUNTRY LIKE EFFECTIVE WAY TO OVERCOME TOTAL UKRAINIAN CRISIS

**Galina Studinska**, PhD in Economics,

*Director of Research Training Centre "Princeps", Kiev, Ukraine*

**Abstract:** *The article is devoted to the construction, development and promotion of national brand in Ukraine complex economic, social and political conditions. The positive experience of building national brands on the international space proves the possibility, necessity and effectiveness outcome branding state. Citing research by scientists' world famous model offers its own brand of country based Ukrainian benefits (talented, educated, enterprising people, rich natural resources and favourable geographical location, old and new national values and cultural traditions). The author considers the timely need to build a national brand of the state as an effective mechanism that contributes to the economic recovery. During the study, the author concludes that building brand Ukraine will defend national independence, rebuild mighty power through fundamental structural changes in the economy, in all spheres of life.*

**Keywords:** *Ukrainian crisis, effective ways, innovation, brand*

### INTRODUCTION

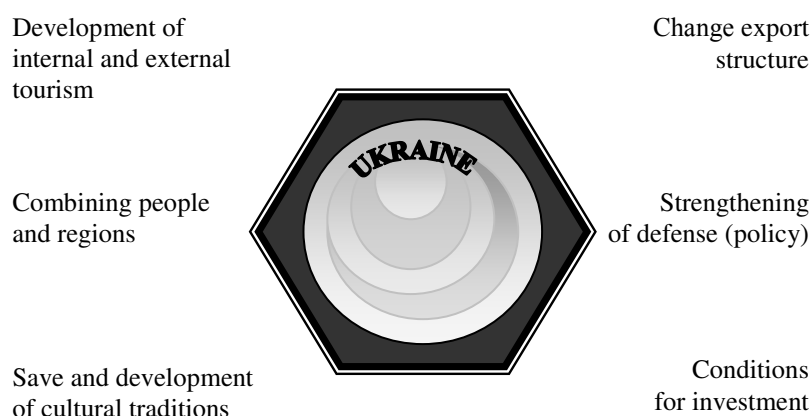
The solution of complex situation always requires a different approach, choosing large-scale integrated tools of the implementation of government measures that can reproduce and guide the rapid development of the country in the right direction, strengthen and consolidate national unity, to turn Ukraine into a prosperous European nation. Evolution branding territorial formations in the world proves its historical capacity and efficiency.

### MATERIALS AND METHODS

The study used research famous scientists: S. Anholt, D. Aaker, K. Keller, D. Traut, J.-N. Kapferer, H. Dan, L. De Chernatony, D. D'Alessandro, F. Devid, T. Ged, Y. Elvuda, L. Chernatoni and other who helped the author to formulate own vision simulation brand in modern terms, using the methods and principles of historical dynamics of general communication and brand development. 2014 was for Ukrainian society true test of strength. Corruption, which penetrated the entire power structure, lawlessness in the judicial and legal systems, the critical economic polarization reached the point of incontinence. Creating a positive image of the country's government agencies to build special organizations as examples, this can serve like Presence Switzerland or Instytut Marki Polskiej in Poland.

In Ireland, the government created the Industrial Development Agency, which deals with promotion of economic development and attracting investment under the slogan "We are young Europeans!" (Olympys, Intel, AOL, European office Google). US officials considers the actual task of promoting the country as a brand, and supporting the state of branding, which was recognized as the most effective tool to improve the international image of the United States. For developed countries, such as Germany and the UK, USA branding issue is not so much the creation of the brand, but in its support and protection as a valuable asset and a key element to preserve their competitive advantage. Studies show that countries with strong brands are able to effectively build economic value and export their own products; attract investment, tourists and talents; change attitudes and build their competitive advantage. For example, France and Iran to position itself as a country with strong gross domestic product, Japan is a high-tech brand, France is a brand of high fashion and exquisite taste, Switzerland is "safe", Austria is country music. Positioning of Ukraine shall be determined on the basis of its incredible features (talented, educated, enterprising people, rich natural resources and favorable geographical location, old and new national values and cultural traditions).

The first attempts to systematize the marketing programs for the regions emerged in the West in the second half of the 20s century as a result of acceleration of globalization, interrupted by two world wars and the economic crisis. Globalization gave new economic development opportunities regions. In 1993 came the first publication by F. Kotler, D. Haydera, I. Reynu "Marketing areas: attracting investment, industry and tourism to cities, states and countries" [1], which clearly substantiated the use of marketing as a mechanism for comprehensive promotion areas. In 2002, one of the world's leading experts in the field of branding S. Anholt first time, as a term used the phrase "branding places" and became a major developer of integrated, diversified approach to branding, as opposed to focusing on any one aspect (mostly tourism). He believed that provided support for the development of export product brands and consistency of government support to the national development strategy may affect the long-term prospects of the country. "National Strategy for Development of brand determines the most realistic and competitive strategic vision of the country and ensures that this vision is supported, reinforced at every interaction between the country and the rest of the world" wrote scientist [2 p. 23-24]. S. Anholt paid attention that advertising of the area, not backed by real actions of improving the investment climate, tourism infrastructure, standard of living is not branding but advertising area. Branding gives a great opportunity if we use historical predictors of territory to focus on territorial identity, which the researcher presented in the form of hexagon showing the six elements of the modern brand territory: tourism, export brands, politics, business and investment, culture, people. Define the process of branding Ukraine, given current problems using hexagon S.Anholt (*Figure 1*).



**Figure 1: Determination of Ukraine through branding hexagon Simon Anholt**

*Source: created by author according to [2]*

For Ukraine international, including inbound tourism has the potential to become a powerful industry, a significant and stable source of revenue, tool development related industries and entire regions create new jobs and improve the country's image. There is all the necessary conditions for an active development of tourism in Ukraine: good geographical location, favorable climate, abundant natural and recreational resources, a variety of landscapes. Acute split views of people on the social development of the country in the West and East Ukraine will overcome through the creation and active promotion of a common information field state, regional exchange of students, the development of counter-cultural and tourist flows, conducting interregional and national events.

Export Development in Ukraine should take into account the urgent need for its structural changes: from raw materials to equipment and technology. The energy independence of our country is great importance conditions for provide economic growth and political stability in making national decisions without external pressure. Implementation of these conditions will reduce investment risks and create the necessary investment climate in the country. We must refer to the experience of countries where there was effective economic growth, of course, given the mistakes along the way.

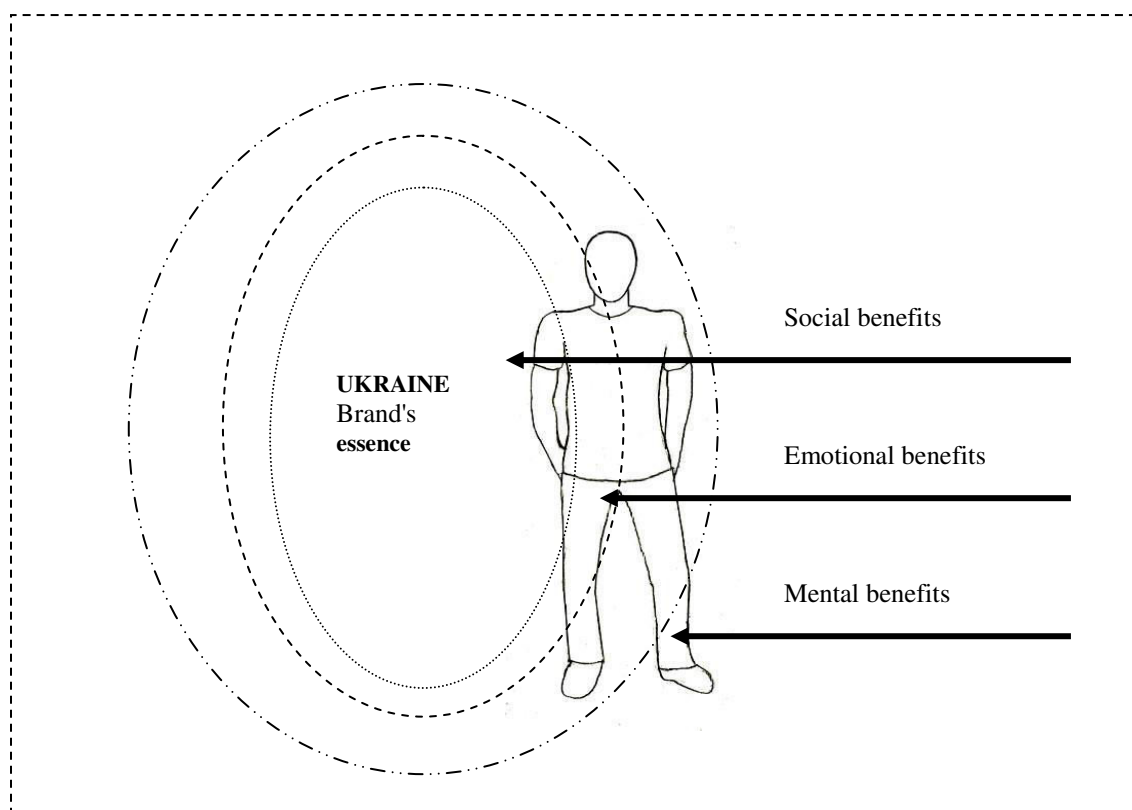
Poland has received the first investment only because of cheap labor and large market size of the country (similar conditions today in Ukraine). But the country's image is not moved for investment resources, making your investment flows in the high technology from Korea and Japan were sent to the Czech Republic, Slovakia and Hungary through properly coordinated international information policy of these states. Thus, create the desired image of Ukraine will help her in the near future to attract the necessary investment. Effective reform of Georgia should be an example implementation of the necessary social, administrative, political and structural change Ukraine.

Globalization and chaos all international economic processes and development of national economies stimulates search their effective existence changes the role of financial institutions in global economic development, exacerbating competition for resources: capital, energy, labor, knowledge, technology. Information, science, education, intelligence, as a source of economic development, is determining the success of the competition.

Ukrainian economy that is highly dependent on foreign markets, it is necessary to defend national independence, rebuild mighty power through fundamental structural changes in the economy, all walks of life to find their own path to economic security, social balance and political confidence that so perfectly fit into the format of building national brand Ukraine.

Branding the state and its development, promotion of international territory, is the mechanism that integrates the solution of all problems under one "roof". Brand Ukraine is a real chance to turn the historic power of our state. "Brand is something similar to people. They are born, live and begin to make a career. Some of them live longer than others, some may even seem immortal. But eventually all brands grow old, wither and die. And most important, they can build relations with real people, cause certain feelings and create in them the ideas"[3, p. 271].

In today's world, the brand is part of people's lives, as individuals. It is important to perceive him as a person and rebuild the relevant communication that will ensure an effective existence of the brand and its long life. Accordingly, this opinion is actually a vision model modern brand "Human Brand" [4, p. 81], represented as a man, which is surrounded by an energy field, i.e. aura (Figure 2).



**Figure 2: Model "Human Brand"**

*Source: created by author*

Due to the strong emotional, spiritual and mental components of Ukrainian traditions, branding based on the model "Human Brand" will be strong, stable and most effective brand of Ukraine. Brand of the state reveals great potential, if properly take into account the historical background and identify the vector that will provide the necessary direction of movement. For Ukraine the following prerequisites have become social problems:

1 The economic devastation, the lack of economic development, critical fiscal deficit, rising external debt, inflation and the collapse of the national currency;

2 The need to address serious social problems:

- Low level of subsistence minimum, average wages, pensions, delayed wages;
- Reduce skilled teaching staff of higher education institutions;
- Poor availability of modern medical equipment, medical reform failed, as a result the average age of life is lowest in Europe;

- Problems in the refund of deposits to depositors;
- Scams in the construction of investment funds from the public and the lack of public preventive measures to prevent such situations in the future;

- Exposure of the population due to poor defensive capacity of the country;

- Poor environmental situation (Chernobyl, Mariupol, Dnipropetrovsk);

3. Acute law offense of natural and legal persons, constant changes in legislation, including the Constitution, under the personal interests of economic and political elite, a large-scale corruption and banditry, terrorism and separatism;

4. The long political crisis aggravation regions, temporary loss of Crimea, the need for state anti-terrorist operation in the Donetsk and Lugansk regions;

5. The absence of a unified national strategy for the development of infrastructure and systems;

6. The need to improve national competitiveness for tourism attracted increasing domestic and foreign investment and amount of exports from the change in its qualitative structure;

7. Quick roll Ukraine in the world as a country that upholds democratic development, fighting against corruption, for the right of civilized progress and development for the integrity and unity of the country, national equality and dignity;

8. Necessity to fix radically the country's image in the international space through the creation of positive images (historical, economic, political, environmental, scientific, technical and spiritual) to increase its commercial success and transform the country into a powerful, prosperous, free, successful country.

## RESULTS

Today appeared favorable conditions to build Ukraine's brand:

- World record of the country (the world knows the geographical location of Ukraine, self-righteousness of the struggle for national interests, but in different ways interprets its causes, that does not stop a whole to support the overall solidarity with Ukraine), as most recently Ukraine was unfamiliar world society its associated with Russia or the Soviet Union;

- Wish of global community to provide all possible economic, including humanitarian, informational and diplomatic assistance;

- Willingness of the international community to bring an economic development to democratic and transparent manner (removal of the EU import duty in one-direction).

An integrated approach to develop commercial brands together, to create and promote a national country's brand, which has legislative support from the government, individuals and society, i.e.:

1. Reveals great opportunities for domestic economies through increased tourism and investment flows;

2. Provides the necessary conditions for its effective rapid development that will improve the living conditions of the population;

3. Guarantees of future socio-economic changes in our society and improves the quality of the environment.

## DISCUSSION AND CONCLUSION

Given the sharp important socio-economic conditions of Ukraine, it suffers from a military escalation from Russia; offer to discuss the necessity and urgency of building a national brand the state as an effective mechanism that contributes to the economic recovery.

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# SUSTAINABLE TOURISM AND THE NECESSARY INSTITUTIONAL FRAMEWORK

**Silviya Topleva**, PhD in Economics, Assistant Professor,

*University of Food Technologies, Plovdiv, Bulgaria*

**Abstract:** *Sustainable tourism presents a balance between economic efficiency, social welfare and ecological equilibrium in a given destination. The necessary institutional framework, including transparency, corporate social responsibility, adaptive management and marketing of conservation is based on the capability approach and social choice. Key importance to the sustainable tourism and the necessary institutional framework has the open argumentative public debate.*

**Keywords:** *sustainable tourism, capability approach, social choice, institutional framework*

## INTRODUCTION

High economic results are often achieved through the exploitation of natural and human resources. Powerful modern industrialization confirms the value of consumption to that of creation. Material abundance and infinite growth deepen social and economic inequalities, as instill a sense of inevitability of ecological disruption in the name of wealth and prosperity. On this background, tourism is seen as a sector with low harmful effects on the environment. The focus on macroeconomic benefits of tourism, such as income, employment and growth, takes to ignore the ecological and socio-cultural effects.

Deployment of mass tourism activity is accompanied both by high consumption of energy and water resources, increased greenhouse gas emissions, the generation of huge quantities of waste, and with gradual depersonalization of the social and cultural heritage in commercial destination. Mass tourism forms gradually plunder, making them, natural, cultural and historical resources. Adverse environmental effects of mass tourism activity provoke the emergence and development of alternative tourism, which is called to build a sustainable tourism industry. Sustainable tourism as a part of a paradigm of sustainable development expresses a balance between the achievement of economic efficiency and prosperity, social welfare, cultural diversity, and maintenance of ecological equilibrium in a given destination.

The *purpose of this article* is to outline the integrated institutional framework necessity to achieve sustainable tourism through the capability approach and methodology of social choice.

## MATERIALS AND METHODS

In opposite to the mass tourism, which aims material well-being, alternative tourism focuses on the integration of economic welfare of the local community to the conservation of the ecological balance. D. Weaver considers the difference between mass and alternative tourism as a change of emphasis from the prosperity of the tourism industry to that of the host community [8, p. 31]. In optics of this understanding, methodological basis for the development of alternative tourism are human capabilities.

Capability approach is associated with the paradigm of human development. Capabilities identify themselves with the skills of the person to transform the available resources in preferred result [7]. The approach focuses on the final goals and results as increased welfare and achieved development. These goals are identified as human capabilities for action. The capability is different of action. The difference is measured in terms of freedom, i.e. the choice and the actually used opportunity.

Capability approach is not oriented towards the study of human activity caused by the attitude of material goods to individual freedom. The approach focuses on the connotation of rights, freedom and well-being, which is its methodological advantage. It is aimed at the



integration of human well-being in physical, psychological, social and ecological aspect, which guarantees its applicability to the development of alternative forms of tourism. The focus of interest covers economic, environmental, social, political and cultural dimensions of human life. In the context of alternative and sustainable tourism, these are the economic, ecological and socio-cultural well-being of the indigenous people, and the completeness of the emotional experiences of tourists.

Freedom is seen as a projection of both social structure and institutional organization, and individual preferences for personal and community self-realization. Alternative tourism through the capability approach focuses on the indigenous people to be healthy, with preserved cultural identity, to live in a clean environment and participate effectively in the planning, management and control of tourism.

Capability approach is oriented mainly to the abolition of restrictions that impede the full and effective expression of personality. In this sense, it is aimed at the conscious and sustainable change of the tourism industry.

The nature, values and content of alternative tourism forms are embodied in the highest degree in the concept of sustainable tourism. Sustainable tourism development is provoked by the need to conserve the natural resources and capital without compromising economic prosperity. Sustainable tourism unites eco-efficiency of the supply of tourism products and the reasonableness in their consumption. It is positioned at the intersection of economic efficiency, social and culture development, conservation and maintenance of ecological equilibrium in a given destination. It combines the principles of effectiveness, rationality and environmental friendliness. "Sustainable tourism is neither an end in itself, nor a unique or isolated procedure, but rather an inter-dependent function of a wider and permanent socio-economic development process" [3, p. 214].

The achievement of sustainable tourism, as an integrated image of the socio-economic and natural welfare is determined by the institutional framework and suggests rethinking the relation of human, i.e. nature, which as a key place occupies material goods. For the moment, the development of alternative and sustainable tourism products and services depends more on marketing efforts, not by conscious consumer choice [4, p. 35]. The development of sustainable tourism is functional and methodological related to a reasonable social choice of the local community, business organizations and tourists in the dimension of means and goals in the name of ecological friendly economic and social well-being.

The social choice is a set of procedural principles for aggregating individual preferences into a collective decision. Rational objective of the individual is to maximize his welfare through consumption and access to resources. At the same time, rational choice arises from the values, commensurate with the circumstances and situation. The choice is determined by the values, social norms, goals and responsibilities of the individual and the maximization of their personal interests [7, pp. 229-230]. In light of this idea, the value of sustainable tourism may not be compatible with the self-interest of some stakeholders, but to contribute to integrated community welfare and to be consciously chosen.

The social choice overcomes the narrow limits of selfishness and focuses on community connectivity. Nevertheless, in the preferences of the individual dominates selfishness and that is always partial. Community interdependence and unity of economy and ecology in the paradigm of sustainable tourism integrate partial preferences and turn individual value systems in the judge of alternative institutional actions. Individual preferences and values embodied in the form of decision in the collective will determine the direction and nature of public and private action in the institutional framework necessary to the achievement of sustainable tourism.

The application of the methodology of social choice is associated with "the impossibility theorem" of Nobel laureate Kenneth Arrow. It includes five structural and substantive conditions with axiomatic character for making collective choices that are an emanation of civil democratic sovereignty [1]. Unfortunately, in the presence of three different social circumstances, the performance of conditions conflicting with others, which indicates the impossibility of a social choice as an expression of integrated identical factor function of welfare, which reflects

the shared notion of sustainable tourism. "The impossibility theorem" justifies the inevitability of dictatorship in attempts to take collective decisions.

Participation of all stakeholders in open argumentative public debate allows restoring the democratic way of making collective decision [2; 6]. In discussion format appears the public mind that contributes to consensus mitigating differences and achieving a balance between private benefit and social welfare in the efforts to achieve sustainable tourism industry. The public debate on the nature and directions of different management and consumer practices embodies the preference of community to establish a balance between selfishness, efficiency and justice in the name of conservation of ecological equilibrium and the development of sustainable tourism. The possibility of changing the values and standards of behavior through the participation in public discussion expresses the relevance of social choice to content of the institutional framework for achieving sustainable tourism. The implementation of appropriate management practices and consumer behavior is a matter of rationality and social choice. The achievement of sustainable tourism is not "a static target", but "a dynamic process of change" [5].

Capability approach and the discussion nature of social choice determine the content of the institutional framework necessary for the achievement of sustainable tourism.

## **RESULTS**

The establishment of sustainable tourism through the capability approach and the methodology of social choice is the result of the transformation of human behavior. The social choice of institutional framework, consistent with the development of human capabilities in the paradigm of sustainable tourism, relies on the transparency of the economic system, corporate social responsibility, adaptive management and marketing of conservation.

## **DISCUSSION AND CONCLUSIONS**

Sustainable tourism is a complex system, integrating economic, ecological and social well-being of a destination. Values transformation turns sustainable tourism in the intersection of selfish aspiration and community and natural interdependence.

The achievement of sustainable tourism through rational social choice in optics of capability approach depends on economic stability, predictability and security of the environment and corporate initiatives in the direction of ecological modernization. Improving market conditions as an institutional factor for the establishment of sustainable tourism includes restricting monopolies, subsidies and corruption by increasing transparency, accountability and credibility of the markets. This will improve the capacity of local communities for economic activity and entrepreneurship in the sustainable tourism industry. In institutional market conditions, supporting sustainability, companies should be responsible for their performance and ethical behavior towards the environment. The ethics in the tourism supply includes honesty and integrity in promoting products, equal distribution and justice in the use of natural, anthropogenic and human resources [4, p. 21]. Leading institutional factor here is the corporate social responsibility, which focuses on the recognition of the adverse effects of mass tourism activity and the introduction and promotion of eco-efficient practices that improve the quality of life of the indigenous people. If rational choice of business organization is in the direction of tourism sustainability, they should contribute at least through technological innovation and more efficient use of resources for integrated community welfare.

The necessary institutional framework for the achievement of sustainable tourism includes mechanisms for planning, programming, implementation and control of integrated policy. Adaptive management has a key importance. It expresses complex efforts to built sustainability and overcoming uncertainty by experimentation, monitoring, social learning and stakeholder participation [5]. The aim is not achieving the perfect equilibrium between economy and ecology, but continuous accumulation of knowledge and learning uncertainty and environmental imbalances. Adaptive management is aimed at the identification of the gap in knowledge of the impact of tourism products on ecosystems and biodiversity as a basis for social choice in the direction of change of values. Adaptive management represents the

intersection of the capability approach and social choice in the institutional framework necessary for the achievement of sustainable tourism. A major factor of this process is the argumentative open public debate on the issues of sustainability in tourism and the support for the establishment of partnership between different stakeholders. Discussion on good practices in sustainable tourism emphasizes the need for conscious development of marketing of conservation. It aims not just marketing positioning of alternative tourism products, but above all forming consciousness of tourists and cultivation of consumer behavior, protecting natural and cultural-historical wealth of a destination. Marketing of conservation focuses on the unity of the optimum satisfaction and completeness of the emotional experiences of tourists to the natural and cultural identity of the local community.

Necessary institutional framework for the development of sustainable tourism relies on the capability approach and social choice in the direction of value change in the perception of the means and goals in the tourism industry. Public debate, the striving of eco-efficiency and equilibrium and the corresponding institutional framework contribute to the values transformation of management practices and consumer behavior and expand the freedom of indigenous people for keeping their preferred eco friendly lifestyle as the basis of sustainable tourism.

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# THE DEVELOPMENT CONCEPT OF UKRAINIAN MACHINE-BUILDING ENTERPRISES

**Olena Trevogo**, Assistant,

*Department of Economics and Management  
National University "Lviv Polytechnika", Lviv, Ukraine*

**Annotation.** *Here is presented a concept of development management of Ukrainian machine-building enterprises that based on the notion of discrete states of enterprises. The concept involves a combination of functional and process approaches with in a process-structured management: allocation of specific management functions, the formation of appropriate influence methods, identification of key business processes, development of at least two basic scenarios and relevant decision-making.*

**Keywords:** *machine-building industry, discrete state of enterprise development, enterprise development, development management, process-structured management, functions*

## INTRODUCTION

The development of machine-building enterprise requires professional management to achieve goals and ensure the sustainability of results. Current state of Ukrainian mechanical engineering is poor and in the east of the country even critical. Thus, traditional approaches to the development management should be complemented by means of anti-crisis and build a new system of economic evaluation. The object of our study is the formulation of the development management concept of Ukrainian machine-building enterprises and the main tasks is to examine traditional approaches to management, the allocation of their weaknesses, identification of discrete states of enterprise and the formation of adaptive management technology. The first step of the research is the analysis of process and functional approaches to management in enterprise practice, the second is identifying opportunities for integrating these approaches into a unified concept of management development. The working hypothesis is that all existing management approaches can be adapted to present conditions of machine-building industry but none of them in pure does not improve the development management system. A lot of well-known specialists are practicing non-competitive management theories that are based on functional or process management. M. Meskon, M. Albert, F. Hedouri, A. Kuzmin, O. Melnyk and others give prerogative to functional management [7, 8, 11, 12]. Instead, other authors, e.g. V. Ponomarenko and M. Robson and argue that the process approach is the best tool management in the development process [13, 15]. R. Ackoff, I. Ansoff, P. Drucker, H. Mintzberg and Ukrainian scientists V. Glushkov, J. Lysenko, B. Miziuk emphasize on the universality and efficiency of system management in condition of uncertain environment [1, 2, 9, 10, 13].

## MATERIALS AND METHODS

During the study phenomenological and axiomatic scientific methods were used. Phenomenological method involves a technological process of machine-building enterprise divided on a number of consequent or parallel sub-processes. In the condition of development machine-building industry axiomatic method allows to create a number of basic axioms which become a base of company growth strategy (continuity of development, economic development effectiveness, inertia of the information environment, etc.). The information sources of the research were published current data of Ukrainian machine-building enterprises, scientific monographs and a poll of machine-building companies' executives.

## RESULTS

The practical significance of functional management is proved and remains currently important but it has some restrictions in managing enterprise development. Most experts

include planning, organizing, motivating and controlling to the list of common management functions. Function-oriented organization stands to over-centralization which leads to slower communications and speed of decision-making. If manager is primarily focused on the performance of certain functions he has to check all the technological level and procedure of controlled business division. This increases the management complexity and simultaneously reduces its effectiveness.

The process approach eliminates some disadvantages of function management but it encourages managers to more stringent management model, where the end result of a particular business process is the only competency measure. Under these conditions each structural unit of the enterprise ensures the implementation of specific business processes with other departments and has to communicate with them constantly and horizontally. This leads to a weakening of the vertical links, but *employees* can clearly take their place in the overall result of the business process that encourages them to develop their key skills.

Widespread system approach was established by L. von Bertalanffy and A. Bogdanov. Application of system research methods successfully used in various fields of science and technology and in management it allowed to combine the experience of different schools, diametrically opposite effects on production and staff. Engineering enterprise is a complex system the evolution of which formed steel subsystems with changing and developing communications.

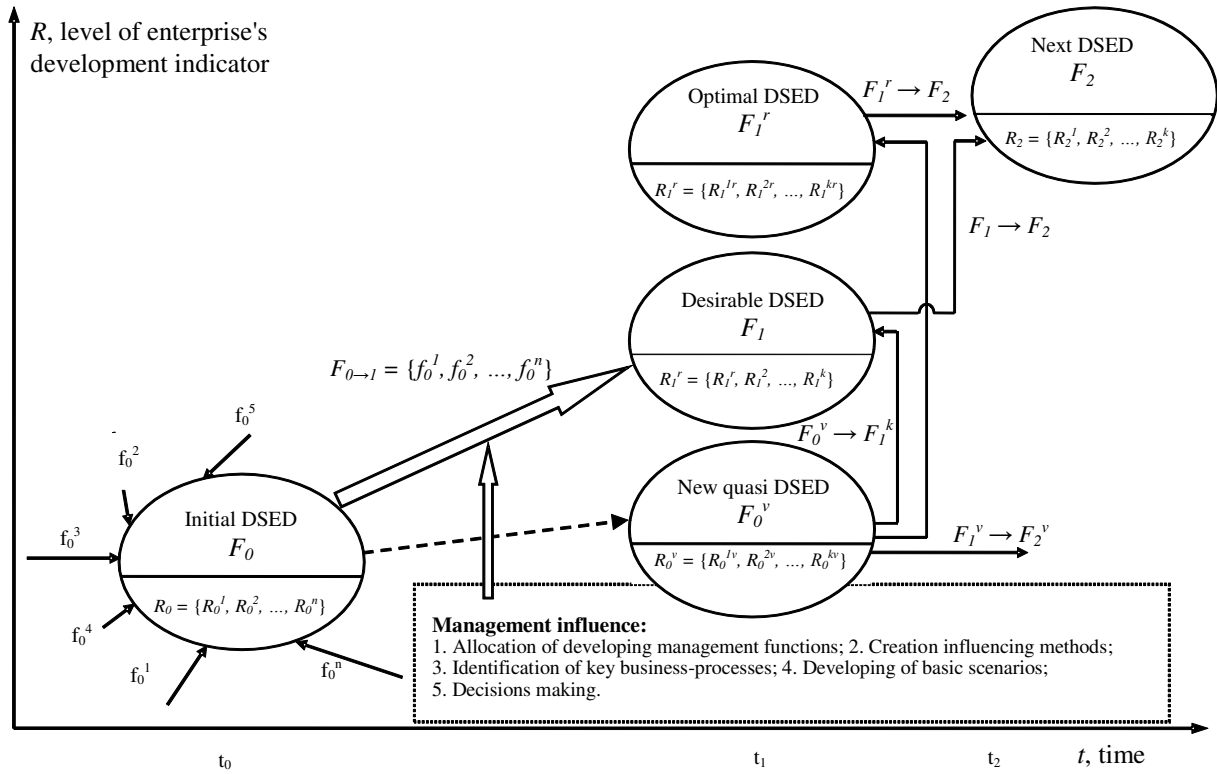
The feature of the situational approach in management development engineering companies is that the situation is treated as a set of specific characteristics (conditions) of the current state of the object, which defines priorities and impact strength of the administrative apparatus on controlled subsystem. The situational models by Blake-Mouton, Green, Vroom-Yettona, Mitchell House and Hersey-Blanchard have a different set of important characteristics of the situation but level of their universality is very low and the variability of possible scenarios is too high.

Recently developed process-structured management that integrated a separate achievements of previous approaches is highlighted in researches of A. Bosak, A. Zubkov, K. Kravchenko, O. Kuzmina, O. Melnyk, N. Petrishin and others [3, 4, 5, 6, 14]. This approach assumes that business process management dominates the organizational structure to some extent. However, after the definition of mission, strategy and objectives of the enterprise management technology involves defining the functions and business-processes, building of organizational structure, resource support and unique corporate culture.

Development management of machine-building enterprise must achieve a number of defined indicators in the future and thus respond to environmental changes (micro and macro level) and to changes in the enterprise priorities. At the initial time  $t_0$  the organization is in the current discrete of the enterprise development (DSED)  $F_0$ , which is described on the one hand, the components of the internal environment, and on the other hand, the impact of external environment factors  $f_0^1, f_0^2, \dots, f_0^n$  that have different orientation, strength and application point of relatively separate subsystems of the enterprises (*Figure 1*).

The final motion vector from the current DSED  $F_0$  to the desired DSED  $F_1$  is determined by a complex impact force  $F_{0 \rightarrow 1} = \{f_0^1, f_0^2, \dots, f_0^n\}$ , which "pushes" the company in a given direction. The management task is "delivery" of the enterprise to a given state  $F_1$  despite the external environment opposition and the inertia of the system internal components. Evaluate the efficiency of management influences during the enterprise development can be due to the system of key performance indicators and their values calibration in absolute determination and comparing them with the results of the nearest industry competitor. Thus, the initial DSED  $F_0$  is described by set of indicators  $R_0 = \{R_0^1, R_0^2, \dots, R_0^k\}$ , which includes the evaluation indicators of financial, economic, organizational, social, technological and innovative activities. The desired DSED  $F_1$  is determined in advance planned values of selected indicators  $R_1 = \{R_1^1, R_1^2, \dots, R_1^k\}$ , but used instruments of influence on controlled subsystem and the unpredictable effects of the external environment will inevitably lead to that achieved status will not be optimal "in fact" for the moment  $t_1$ . If the composition of

indicators remains relatively constant at this time it will be optimal calculated DSED  $F_1^r$  defined by set of indicators  $R_1^r = \{R_1^{1r}, R_1^{2r}, \dots, R_1^{kr}\}$ . At this point, the CEO has to decide whether to move to the state  $F_1^r$  or plan the development to the next desired state  $F_2$ .



DSED is Discrete state of the enterprise's development;  $F_1^j$  is Separate DSED in terms of time and optimal level;  $R_i^j = \{R_i^1, \dots, R_i^j\}$  sets of indicators value, which is characterizing specific DSED;  $f_1^j, \dots, f_1^n$  factors of external environment influence on the certain  $i$  DSED;  $F_{i \rightarrow i+1} = \{f_0^1, f_0^2, \dots, f_0^n\}$  is the complex influence power to the transition between DSED

**Figure 1: Developing management model of machine-building enterprise**

Source: created by author

There could be another situation that will require a fundamentally different development strategy where due to lack of resources or to reduce the risk level management decides to minimize active steps and support the inertial development of initial state  $F_0$  by expanding existing markets and response to current external environmental threats. Then the comprehensive influence power  $F_{0 \rightarrow 1} = \{f_0^1, f_0^2, \dots, f_0^n\}$ , will lead to a new quasi-discrete state of enterprise development  $F_0^v$  indicators of which  $R_0^v = \{R_0^{1v}, R_0^{2v}, \dots, R_0^{kv}\}$ , although may yield to desirable, however, reflect an intermediate less risky development scenario.

In this situation, the task of CEO is to choose among two basic alternatives: be satisfied with limited growth strategy or involve resources from outside sources, take a risk and do the next step to achieve DSED  $F_1$  or immediately  $F_1^r$ . However, achievement of these states will no longer take place at time  $t_1$  but much later that leads to the following dilemma: move to one of these states or reach a fundamentally new DSED  $F_2$  at the time  $t_2$ .

During the company's next level transition the control system must constantly monitor the relevant services and if necessary adjust the current actions and even change some intermediate objectives. Large enterprises can afford to create a group of specialists who will coordinate the work of management development and monitor appropriate technological, financial and economic procedures. Small and Medium engineering enterprises due to limited financial resources can use the services of management consulting agencies. Sometimes it is useful to educate the leading specialist of the company for their competence needed to manage development. The development management process of machine-building enterprise consists of 5 major steps that integrate the elements of functional and process approaches:

1. Allocation of enterprise's development management functions: development planning, organizing interaction between divisions in the development process, staffing, monitoring tasks according to intermediate values of given indicators and regulating deviations.

2. Creation of influence methods on controlled system due to technological, social, economic, psychological and administrative instruments. All methods are equally important, but priority will have those which are optimal according to the criteria of efficiency, timeliness and speed of responses at any given time.

3. Identification of key business-processes, their formal description and structural decomposition. Here is an opportunity to identify weaknesses in specific business-processes and reorganize them in the process of enterprise development.

4. Predicting basic scenarios of enterprise's development using the data of structure and the efficiency of key business processes, set of initial indicators and effectiveness of selected influence methods.

5. Decisions making according to selecting scenario of the company's development management and creating procedures of its implementation. It is about legal, technical and economic ensuring implementation of decisions and the ability to control, analysis and adjustment of certain actions in real time or in certain discrete key points.

Each of the described steps requires detailed work and the base line scenarios of the company should be at least two: optimistic and pessimistic, which define the range of possible changes expressed in the corresponding extreme values of selected key indicators.

## RESULTS

The general concept of management development of machine-building companies includes the following steps: identification of development stage of enterprise management system; diagnostics of actual organizational structure, the current economic activity and the innovation level of the enterprises development; formulation and implementation of complex activities of the enterprise development; identification of a new level of enterprise development in organizational, economic and innovative directions; coordination of the company's mission, strategy and goals with a new level of development.

Development management of machine-building enterprise can be based on different approaches to management-functional, process, system, situational or process-structured, but the most effective will be their combination.

The developing model of management in machine-building companies based on the concept of the discrete state of the enterprise development is the set of values of indicators obtained in the process of evaluation for organizational, economic, financial, technological, innovative and social directions.

## DISCUSSION AND CONCLUSIONS

Effective management of the machine-building enterprises development is one of the most difficult management problems, because internal environment variables are interdependent and highly dependent on unpredictable environmental effects. To predict the consequences of those influences and calculate the desired enterprise reactions it is appropriate to identify some discrete states of the machine-building enterprises and apply methods of simulation modeling and multiple simulations.

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## ENTERPRISE RISK CLASSIFICATION IN THE MODERN ECONOMIC CONDITIONS

**Sergei Tronin**, PhD in Economics, Associate Professor,

*Department of Financial Management,  
Financial University under the Government of the Russian Federation, Moscow*

**Abstract:** *Risks vary in time and place of occurrence, by a set of external and internal factors affecting their level, and therefore, by the method of analysis and the methods of their description. Risks affect the development of any system (e.g. the enterprise's development); they are interconnected and this complicates the decision-making process on the risk management. Therefore, it requires detailed analysis of specific risks as well as the causes and factors of their occurrence.*

**Keywords:** *business risks, financial risks, insurance risks, innovation risks*

### INTRODUCTION

There is no accurate system of risk classification in the economic literature, which is dedicated to the entrepreneurship' problems. There are many approaches to the risk classification, which are usually determined by the goals and objectives of the classification.

The most common and important elements that form the basis of risk classification are: 1) Time of occurrence; 2) The main factors of occurrence; 3) Type of registration; 4) Type of the consequences; 5) Area of occurrence; 6) Social affiliation [1].

Based on the occurrence's time, risks are divided into retrospective, current and prospective. The analysis of retrospective risks, their characteristics and methods of their reduction give the opportunity to forecast current and prospective risks more accurately.

Based on the occurrence's factors, risks are divided into political and economic (commercial). Political risks are risks caused by the changes in political situation affecting entrepreneurial activities (border closures, export prohibition, military operations within the country, etc.). Economic risks are risks caused by the adverse changes in the enterprise's economy or in the national economy. The most common types of economic risks, including particular risks, influence market conditions, unbalanced liquidity (impossibility to fulfill payment obligations in time), changes in management level, etc.

These risks types are interconnected and usually it's difficult to separate them.

Based on the registration type, risks are divided into external and internal. External risks are risks connected indirectly to the enterprise's activity or its contact audience (Contact audience is a social groups, legal entities and/or individuals that show potential and/or real interest in the activities of a particular company). Level of the external risks is affected by a large number of factors, i.e. political, economic, demographic, social, geographic, etc. Internal risks include risks arising from the enterprise's activity and its contact audience. Their level depends on the business activity of the company's management, choice of marketing strategy, policy and tactics and other factors, such as: production capabilities, technical equipment, specialization level, labor productivity level and safety level.

Based on the type of consequences, risks are divided as a pure and speculative.

Pure risks (sometimes they are called as simple or static) are characterized by losses for business. The reasons for the pure risks can be natural disasters, war, accidents, criminal acts, company's legal incapacity, etc. The speculative risks (sometimes they are called as dynamic or commercial) are characterized by both losses and extra profit for an entrepreneur in relation to the expected result. The reasons for the speculative risks can be changing market conditions, changes in foreign exchange rates, changes in tax laws, etc.

The largest classification group is based on the area of occurrence.

Special features of risks are connected with the entities who realize risky activities and with an area of application of these activities.

## **MATERIALS AND METHODS**

Usually such basic types of business activities are distinguished: 1) Manufacturing; 2) Commercial; 3) Financial; 4) Agency business; 5) Insurance.

According to the business activity risks are distinguished: 1) manufacturing risk, 2) commercial risk, 3) financial risk and 4) insurance risk.

The manufacturing risk is related to a company's failure to fulfill its liabilities and production plans of goods, services and other types of production activities as a result of the adverse impact of the environment, inadequate usage of innovative machinery and technology, fixed and working assets, raw materials and labor hours.

Commercial risk arises in a process of realization of produced or bought products and services by the entrepreneur. The reasons for emergence of the commercial risk are: decrease in sales volume due to the changing market conditions or other circumstances, increase in the procurement price of the goods, loss of goods during trade turnover, increase in distribution cost, etc.

Financial risk is related to the possibility of non-fulfilling by the firm its financial liabilities. The main reasons for emergence of the financial risk are: devaluation of the financial portfolio due to the changes in foreign exchange rates, payments failure, war, riot, natural disasters, etc.

Insurance risk is a risk of event occurrence ensured against conditions of insurance contract resulting in the insurer payment of insurance compensation (sum insured). Insurance risk results in losses caused by ineffective insurance activity both at the preceding stage the insurance contract and at the stages of reinsurance, forming of an insurance reserve, etc. The main reasons for emergence of the insurance risk are: incorrectly defined insurance tariffs, venturous methods of insurant, war, riot, natural disasters, etc.

According to D. Tukmanova, social risk is related to the earnings loss due to disablement (because of disease, old age, accident, etc.), lack of jobs or income. Author refers these risks to the pure risks (there is a chance of either loss or no loss, but no chance of gain). These risks arise from economic entities, i.e. individuals [2]. But this point of view reflects the essence of social risk in terms of individuals insurance while its content is considerably wider.

Topical for Russian economy questions form the new criteria for the classification of simple risk. Thus, M. Lepeshkina [3] gives a definition of investment risk as the possibility that the real income will differ from the expected one. The overall risk is a sum of all the risks associated with the implementation of any project. Further on author suggests the following classification of the overall risks of investment projects on the basis various attributes: a) based on time (short-term, related to the investment financing and influencing the liquidity position of the company; long-term, related to the choice of direction of investment and the end result of investment); b) based on the degree of impact on the company's financial situation (acceptable, posing a threat of profit loss; critical, meaning loss of expected revenue; catastrophic, meaning loss of all the property and the company's bankruptcy); c) based on the source of origin and possibility of elimination. Non-systematic (diversifiable) it is a part of the overall risk that can be eliminated through the diversification. Systematic (non-diversifiable) arises out of external events and affects the market (war, inflation, economic downturn, high interest rate). In our opinion, above-mentioned classification could form the basis of the risk classification in the innovation sphere.

## **RESULTS**

The need for innovativeness of the Russian economy is determined by the time and opportunity to compete on the world markets [4]. The risk reduction in the company's activity is also related to the management, implementation and replication of the technological and organizational innovations aimed at the effectiveness increasing. Creative management is close with innovative, but it differs in consideration of the object (intellectual product) by its structure. As G. Berezhnov notes, "in this case creative management refers to the process of creating a new system of knowledge and skills" [5].

Any innovation is a risk; managing this risk is an innovative management. Its effectiveness is determined by creativity of reacting aimed for the unusual solutions. We should notice, "creative organization" category is based on a corporative management principles according to which the creative potential management of its employees is made on the basis of accumulative preferential voting according to the weekly results each of its departments (firms). In this kind of inner market creative decision-making is valued at a special currency "Creon". The main risk of network organization' efficiency (including virtual network) due to the full utilization of its resources for the benefit of the holding is overcome with monthly cyclic rotation of Board of Directors members in functional blocks. Finally, it is necessary highlight the organizational activity in the form of creative director's duties, widely represented in conventional companies such as advertising agencies. Its main duty is to manage and participate in a strategy-making process for all the brands served by the agency, from the idea to its realization. Creative development is the subject of a qualitative research, which is based on the understanding, explanation and interpretation of the decision-making and focused on generating hypotheses and productive ideas.

Statement of the problem goes back to T. Veblen, who believed it was not so much question of "how objects will stabilize in the statistical state", but "how they will infinitely grow and change". Therefore he considered the most important studying task is the conditions of human creativity. The modern theory of the creative development began to develop since the middle 90s of XX century (I. Nonaka). In the middle of this theory is not the knowledge, but the organizational knowledge creation; process by which the new knowledge is created (new goods, services and methods) inside the organization and a framework for innovation is provided. The theory of organizational knowledge creation (creativity) comes from the fact that management, including risk management, will be based on knowledge, creativity and originality.

## DISCUSSION AND CONCLUSIONS

Thus, creative management doesn't reflect fully the principle of creativity in different systems and management tools. This principle is presented in a concept of innovative management, which is aimed at improving efficiency and reducing the risk of the organizational activities through the introduction both new technologies and new ideas. In this context, the main objective of the management is to control the initiation, generation and application of these creative ideas in the company and their implementation into the market.

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# MANIFESTATIONS AND PRINCIPLES OF THE SHADOW ECONOMY AND ITS IMPACT ON THE LATVIAN ECONOMY

**Zhanna Tsaurkubule**, Doctor in Engineering, Associate Professor,  
**Aleksandr Rubanovskis**, Doctor in Economics, Associate Professor,

*Baltic Psychology and Management University College, Latvia*

**Abstract:** *This article researches the development and defines the essence of the shadow economy, given its definition; revealed the main reasons for its occurrence; revealed its structure, defined the factors that promote its development; evaluated the system of measures to combat the shadow economy and revealed how works the control over it.*

**Keywords:** *shadow economy, shadow economy manifestations, shadow economy impact, economic development*

## INTRODUCTION

The shadow economy has an impact on economic phenomena and processes: formation and distribution of income, trade, investment and economic growth in general; shadow behavior is observed not only in economics but also in a variety of non-economic areas of the state: political system, law and order sphere, media, education, health, culture and science, etc. Globalization of the world economy has not only opened up new possibilities for progressive economic development of post-Soviet countries, but at the same time caused a number of qualitatively new global threats. Today the shadow economy became one of such threats. The statistical analysis shows that to calculate the exact share of the shadow economy in the world GDP is extremely difficult. According to the staff of the International Monetary Fund, the total amount of shady transactions in the world reaches up to 10-11 trillion dollars, which is comparable to the size of the U.S. GDP (Global nature of the shadow economy).

*The goal of the article* is to define the principles of shadow economy and its repercussions. *The objectives of the article* are: 1) to define nature of the shadow economy; 2) to identify the shadow economy main causes; 3) to analyze the shadow economy structure; 4) to identify its components; 5) to determine the factors contributing to development of the shadow economy; 6) to evaluate the system in order to struggle with underground economy and how to control it in practice. This article investigates the shadow economy mainly in the macro level. Criminal shadow economy is not considered, especially its extreme variant, i.e. *latent economy* (germ. Latentwirtschaft, fr. Economie latente).

## MATERIALS AND METHODS

Comparative analysis is used as a main method of research.

## RESULTS

**Essence of shadow economy:** With the development of management, views on the shadow economy also develop. It is considered that the shadow economy emerged simultaneously with commodity and commodity-money relations. Prior to the formation of state legal systems major limitation of unfair business practices was a tribal moral or religious morality. Ethical standards were formed mainly on the basis of religious principles (e.g. "Thou shalt not kill," "Thou shalt not steal"). The problems of today's informal economy increased attention the attention of researchers in the 30-ies of the last century. In the late 70s there was serious study of this scope, e.g. the work by P. Gutman (1977).

In 1991, the Geneva Conference of European Statisticians was devoted to the hidden and informal economy, which is based on published specific guidelines on statistics of the shadow economy in countries with a market economic system. In May 1996, at a joint meeting of Eurostat has been considered the problem of assessing the scale of the shadow.

Although the shadow economy intensified research has been going on for several decades, economists have still not formed a unified conceptual framework for analysis. Most authors trying to measure the shadow economy still face the difficulty of a precise definition of the shadow economy (A. Buehn, A. Karmann and F. Schneider (2009)). To determine the shadow economy used different terms: in English-speaking countries, it is called a "shadow", "unsanctioned", "parallel", "hidden" economy, in French-speaking "informal" (informelle), "underground" (souterraine), "informal" (inofficielle); in German sources "shadow" means (Schattenökonomie). In most cases, the shadow economy creates the crime situation in which the subject avoids taxes. There may be other reasons if the economic subject does not want to report his economic activities to everybody.

The UN specialists engaged in national accounting consider the shadow economy in three, partly overlapping spheres of activity, but describing a well-defined, distinct from the other set of phenomena:

- The legitimate activities for the goods production by households and consumed by them- that is not subject to official registration and taxation ("informal"). For example, agricultural production in the farms is considered beneficial to society activities.

- The legitimate activities that, in order to evade the payment of taxes is hidden or minimized, and carried out without the appropriate licenses. ("Hidden") This type of informal economic activity covers a significant share of the economy, ranging from large enterprises, firms, financial institutions and ending by activities of small enterprises with informal employment (e.g. temporary builder teams). It poses a threat to the economic safety of the country, first in the form of concealment of income and taxes, and secondly, in the form of the criminal economic environment creation.

- Illegal activities representing forbidden by law production and distribution of goods and services (for example, the production and distribution of drugs, weapons, prostitution, smuggling), as well as the activities representing illegal obtaining of income not related to the production of goods and services (eg, racket, fraud). It represents a direct threat to the security of individuals, society and the state (S. Kovalev, J. Latov (2006)).

In light of the above, the shadow economy is part of the national economy, where are conducted business operations that are outside the legal field. In the most general form, the shadow economy is defined as the set of economic activities, which, for some reason are not considered by official statistics, are not covered by taxation and are not included in the gross domestic product (A. Grjaznova, N. Dumnaja (2005)).

Summarizing considered views on the shadow economy, the authors propose the following definition: "The shadow economy is uncontrollable by state and society production, distribution, exchange and consumption of commodity, i.e. material assets, money, services, hiding from the government and the public".

**Scales of the shadow economy:** There are many approaches to the shadow economy study. The peculiarity of the economic approach is the study of its impact on the economic policy effectiveness, distribution and use of economic resources, the development of reliable methods of measurement and evaluation. This is economic concept of exploring the underground economy at various levels.

At the macro level, shadow economic activities are analyzed in terms of its impact on the economy structure, production, distribution, redistribution and consumption of the gross domestic product, employment, inflation, economic growth and other macroeconomic processes. In this case are used a variety of different methods to quantify the scale of the shadow economy (V. Burov). As a result of the different methods application yielded the following estimates of the shadow economy (in% of GDP) of the countries that differ in a number of cases among each other in several times: for Austria from 4 to 9%, Belgium from 2 to 20%, France from 6 to 9%, Germany from 3 to 15%, UK from 2 to 8%, U.S. from 4 to 30%.

Publication of the article by the American economist E. Faige (1979) caused a scandal. He calculated that irregular economy covers a third of the U.S. official GDP, i.e. approximately the same as the informal economy in the countries of the "Third World".

In Europe, the share of shadow economy in 2012 decreased to 19% from gross domestic product (GDP). The research of Linz University scientists involved the EU, as well as Switzerland, Norway, Croatia and Turkey. In 2012, the shadow economy in these countries amounted to 2.175 trillion euro (1.5 trillion lats). In 2011, the share of shadow economy in Europe was 19.2% (Schneider F. (2012)).

### **The connection of the shadow economy to the economic development of the Baltic States (Lithuania, Latvia, Estonia)**

*Table 1* reflects dynamics of shadow economy scale in Baltic States:

Table 1

The scale of shadow economy in Baltic countries (% from GDP)

Country	1989	1992	1995	2010	2011	2012
Estonia	12.0	22.4	12.8	19.4	28.6	19.2
Lithuania	12.0	39.2	21.6	18.8	29.0	18.2
Latvia	12.0	34.3	35.3	27.3	26.5	21.1

Source: author's construction from (Burov V.; Sauka A. (2013))

Data analysis of *Table 1* shows a tendency of downward trend in the shadow economy level in Latvia in the post-crisis period, however, in comparison with Estonia and Lithuania, in 2012 Latvia was the leader of the shadow economy scale, which to some extent correlated to the economic development of these states.

The important factor in the shadow economy grow is the corruption level in the state.

There are two different explanations of high interdependency between the shadow economy and corruption: the shadow economy is an attempt to eliminate corruption, the entrepreneur goes into hiding to avoid paying bribes, corruption generates additional growth of the shadow economy.

According to some estimates, the increase in the corruption index by one point leads to the growth of the shadow economy by 7.6% (A. Illarionov).

**Influencing factors on the shadow economy development:** It is possible to select several groups of causes that affect the shadow economy development.

1. Economic factors restructuring of the economic activity spheres, which are not always focused on the development of legitimate business structures, financial system crisis and the impact of its adverse effects on the economy; imperfect investigation of the privatization process; operation of unregistered economic structures; problems of economic competition; low income level of the main inhabitants; rise in prices of basic foodstuffs; improper tax burden; shortcomings in the regulation of the labor market; quality of social services and inadequate formal assessment of the current economic situation in the country.

2. Social factors, i.e. low standard of living, which contributes to the hidden economic activities development; high level of unemployment; the uneven distribution of the gross domestic product.

3. Legal factors, i.e. poor enforcement of law enforcement agencies with necessary material and technical resources; poor training of law enforcement agencies in the activities of the economic conditions of the market economy; low level of legal awareness and legal culture; imperfect legislation.

4. Political factors caused controversy in the political system. One of the fundamental questions here is about the relationship of power and big business.

5. Anthropological factors are connected to contradictory human nature. The aspiration to receive more having expended less efforts is peculiar to the person.

6. Ethical factors due to poor ethical foundation of entrepreneurship.

7. Social and cultural factors is the basis of entrepreneurship are essential to explain the features of the shadow economy in one or another country.

The analysis shows that to the already mentioned factors influencing the shadow economy development in Latvia should be classified also low income of the main part of the Latvia inhabitants; minimum gross salary in Latvia is 200 LVL (net salary of about 146 LVL), which is significantly lower than the subsistence minimum established by government (176 LVL).

The rise in prices of basic foodstuffs and especially utilities, reduces living standards of the indigents. With the global financial crisis and recession in the economy, many Latvian companies went bankrupt, and the remained "afloat" are still experiencing the effects of the global crisis. As noted the head of Compensa Life branch in Latvia V. Gustsons, for this reason many companies are trying to optimize (including illegally) operations, reducing costs, most of which are salaries of employees; thus, improving the financial position of the company but at the same time worsening the situation for the employee (V. Gustsons).

According to the World Bank, an important reason for the shadow economy growth is improper tax burden (Latvia is the first in Europe in terms of the shadow economy).

According to the CSB, in 2011, in Latvia expenditures on social protection, calculated according to the methodology of ESSPROS, was 15% of GDP, which is 2.8% less than in 2010 when they was 17.8% of GDP (Latvian statistics). Latvia is still one of the poorest countries in the EU. The well-being of Latvians is lower than in neighboring Baltic countries.

**Measures taken to control the underground economy:** On 11.08.2010, Latvian Government has supported the plan developed by the Ministry of Finance to control the underground economy, which purpose is to make shady financial transactions unprofitable for enterprises. The plan proposed benefits to businesses operating legally, the introduction of zero declaration and partial taxes amnesty from July 1, 2011. Entrepreneurs were offered the opportunity to legalize undeclared income by paying a certain tax. At the same time, the Ministry of Finance has proposed to create a "white list" of companies that will have benefits for government contracts and easier access to EU funds. Also was supported the idea of possible differentiation of the minimum wage, depending on the scope of activities. In general, the Ministry of Finance plan contained 60 proposals, most of which eventually had repressive character. However, international experience shows that the repressive methods are not effective mechanism for solving the shadow economy problems. The best that can be considered is so-called "stimulating" tools. Thus, according to V. Gustsons, one of the important government decisions should be the right long-term program of fiscal discipline and strategy. Another very effective "stimulating tool" is the Minister of Health offer which provides a connection of tax payment with obtaining of planning health services. Introduction of such regulation will set thinking everyone who gets paid in an envelope, whether it will not cause even greater losses in case of medical assistance need. Gustsons considers as an important factor the government procurement and procurement of self-governments, which account for a significant part of the total purchase briefcase; in perspective it should be a system in which any entrepreneur who claims to get the government contracts will be assessed according to the taxes payment criteria. In addition, the government first of all should think about the tax alignments in the entire Baltic region, as now in modern Latvia compared with other neighboring countries, the tax burden on workers is the highest.

## CONCLUSIONS

To combat effectively the shadow economy, it is necessary to understand its causes, which are implied by the economic environment of Latvia. These causes include, low living standards of the majority of Latvian population, as well as a fairly high level of tax burden on business. At the same time, the actions of various government agencies, unfortunately, are insufficiently coordinated with each other and not systemic. In addition, the legal system of the country is not adapted to deal with money laundering and a huge bureaucratic apparatus of public administration provides a favorable breeding ground for various corruption schemes at the level of public governing structures and especially municipal agencies.

Comprehensive measures to combat the shadow economy should be based on international practices and should include the following points: 1) constant monitoring of new schemes of "laundering" money and the exchange of received information at the international level; 2) tracking the penetration of organized crime into the sphere of politics and state structures by means of illegally obtained capital; 3) monitoring processes of fusion of organized crime with legitimate criminal financial institutions; 4) continuous tougher attitude of banks regarding

their control over customers and punishing the nonobservance of such control by criminal prosecution, fines, and withdrawal of licenses; 5) greater control over the activities of non-banking financial organizations and institutions, as well as over the functioning of non-profit organizations creating charitable foundations; 6) analysis of the impact of criminal activity on the "laundering" money to the national law enforcement authorities and economic structures; 7) continuous improvement of the work of public agencies involved in the suppression of criminal activities related to "laundering" money.

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# PECULIARITIES OF MARKETING MANAGEMENT CONCEPT OF SELLING ACTIVITY AT PRODUCTION COMPANIES

Maryna Tsopa, PhD-Student,

Vinnytsia National Agrarian University, Vinnytsia, Ukraine

**Abstract:** *The nature of marketing management is discovered in this article. The main features and characteristics of marketing management are determined. The analysis of marketing concept and its influence on selling activity of production companies were carried out.*

**Keywords:** *marketing management, concepts of marketing, selling, selling activity*

## INTRODUCTION

The success of the work of enterprises and their competitiveness are defined by the development of all elements of the system of its management, but the most important role is the management of selling activity of the company. One of the core functions of marketing is sales management. Despite of exciting scientific and practical non-failure operating time, the peculiarities of impact of the marketing concept on selling activity of production companies are not revealed completely. This causes the necessity of further extending of theoretical and practical life-length in this direction.

## MATERIALS AND METHODS

The research was carried out with the help of the organizational and economic management methods.

## RESULTS

The market demands a marketing approach to the management of all spheres of activity of the company, including selling. Sales marketing management is a multifold management process, which is based on the marketing concept and directed towards the ensuring of effective selling on the long-term perspective due to satisfaction of consumers' needs under the conditions of changeability of marketing environment [1, p. 24]. It is necessary to combine the instruments of strategic management and strategic marketing to effective management. But it is undeniable that it is impossible to reach market success without rendering of marketing characters to the management by: a) detecting and taking into account current needs and interests of consumers; b) analyzing and taking into account factors influencing the activity of a company; c) directing to the constant usage of marketing supply lines to the consumers; d) promotion of managers who are responsible for marketing on key positions. Summarizing the results and analyzing literature sources allows defining the following main tasks of the marketing management: 1) detailed market study, and its situation; 2) rich in content study of consumers; 2) analysis of company's resources; 3) realization of market segmentation; 4) research of competitors; 5) formation of close interconnection of production and selling influenced by the demand.

In conclusion it means that the most important task of marketing management is studying of need and demand of consumers. In our opinion, marketing management of selling activity of production companies is the management of a company with the focus on the consumer. The following ideas lie at the heart of marketing management: need, demand, product, market. The main task of marketing is to find or form needs and to satisfy them.

Marketing management is a process of planning and realization of marketing concept. For its turn, the marketing concept is a new enterprise philosophy, orientated to the needs and demand of the consumers, built on the integrated marketing, aimed at supply of consumers' satisfaction as the basis for reaching the company goals [2, p. 27]. The company produces the

goods which are necessary to the consumer and gets the profit due to the fullest satisfaction of its needs. Marketing is one of the most important kinds of economic and social activity. In the most common definition marketing is understood as a management concept that provides market orientation of production-selling activity of the company as well as a system of management that expects a directed activity to the sales market, adaptation of production to its needs, active influence on the marketing processes, and to the consumers with the purpose of increasing of sales and receiving high profits.

The essence of marketing activity lies in the following: it is directed to the orientation of the production, creating different kinds of goods, which reflects the needs of the market. First of all, it is a study of current and perspective demand on the goods on a certain market and wishes of consumers. Marketing as a management activity presupposes taking the decision on the ground of different economic calculations, foresees the creation of organizational, economic and legal conditions for effective development of the company. Marketing as a concept holds in itself the definition of channels and methods of selling; performs calculations of expenses of the sales organization, advertising and transportation of goods [3, p. 62]. Marketing as a management concept of production companies forms the base of internal management, directed on reaching a level of high effectiveness of economic activity in conditions of modern market. Marketing management aims at solving tasks of influence on the company of level and structure of demand at a certain period of time, as well as defining the optimal relation of demand and offer in order to reach the company goals.

There is a line of different concepts, on the basis of which the production companies realize the management of their activities. *Table 1* shows all of them having analyzed the influence on the sales activity of the company.

Table 1

Concepts of the marketing management and its influence on the selling

<i>Concept</i>	<i>Influence on the selling</i>	<i>Result</i>
Improvement of goods	Consumer prefers products characterized by high quality	Growth of amount of sold goods due to constant renewal and improvement of the goods of the company
Intensification of commercial efforts	Consumer is influenced by the help of the effective sales organization	Increase of amount of product sales due to expensive advertising, special discounts, and influence on character of consumers' behavior
Classical marketing	Consumer prefers goods which fully meet his needs and interests	Increase of amount of sold goods due to fullest satisfaction of consumers' needs
Social-moral marketing	Consumer prefers goods which fully meet not only his personal interests, but also the interests of the whole society, forms a positive influence on the environment	Increase of amount of sold products due to improvement of high living standard of society
Production concept	Consumer prefers those production goods which have lower cost and are handy while buying	Increase of amount of sold products due to reduction of price of goods, and increasing part of market scope
Marketing interaction	Consumer prefers goods of the company which have positive image	Increase of amount of sold goods due to an effective communication policy

*Source: summarized by author*

The concept of improvement of goods helps increasing the amount of sales of products due to a constant renewal and improvement of the company goods. The quality of goods has an important place. Consumers prefer products which are characterized by high quality.

The concept of intensification of commercial efforts is more known as the "concept of selling". It characterizes the direction, which is followed by manufacturers in their aspiration for rightly organized sales activity. The main goal of this concept is reaching a fixed amount of sales due to effective means of stimulation of selling. Given concept is reasonably used speaking about selling as a process of interaction with the buyer. In contrast to the concept of intensification of commercial efforts, the concept of classical marketing meets the primary phase of selling. At the primary phase of selling or as we call it "the preparatory phase", the

company studies the market conditions, consumers' needs and interests, sets production of the tasks. It is necessary to define its target market. Defining the target market is the key factor of success of selling activity of production companies.

The concept of social-moral marketing accents its attention not only on the personal interests and the consumer's demands but also on the interests of the society as a whole. The increase of the amount of sales happens due to the improvement of the living quality of the whole society. The company should pay unusual attention to the concept of improvement of production than to the reduction of prime costs of the goods, which increases the part of market scope probably easier than increase the amount of sold products. We should notice that in this case the buyer prefers goods of the company that have a positive image. That is, applying to the given concept, reasonable to pay attention to the following concepts such as loyalty of the consumer and branding. Branding takes considerable place in growing and promotion of the goods on the market. The branding policy is an important component of sales policy of a company.

### **DISCUSSION AND CONCLUSION**

In summary, we conclude that the companies, which are guided in their policy by marketing concepts, are successful and competitive on the market. Effective marketing activity positively influences on the general development of companies and is an important factor of competitiveness. Marketing at production companies should combine interests of the company in receiving profit due to considerable amount of selling their goods as well as interests of consumers to satisfy their needs.

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# EVALUATION CRITERIA OF INTERNAL CONTROL EFFECTIVENESS OF ENTERPRISES

**Olena Vinichenko**, PhD in Economics, Associate Professor,

*Alfred Nobel University, Dnipropetrovsk, Ukraine*

**Abstract:** *We defined that lots of areas of the control activity of the enterprise still require improvement and further development. We also developed recommendations according to the evaluation of the internal control system effectiveness as a means of the enterprise management as well as its socio-economical development. In particular, the definition of the internal control system, as a means of supporting the economic and social development of the enterprise were specified; the specific features of "the evaluation of the internal control system" and "the evaluation of the effectiveness of the internal control" were determined; the evaluating criteria of the internal control system effectiveness were offered and systemized according to the functional areas of the control.*

**Keywords:** *control, internal control system, effectiveness, evaluation, enterprise*

## INTRODUCTION

The human activity is subject to certain rules of existence, and therefore it is subject to control. The lack of control impugns the existence of any business entity. It is widely known that control is one of the most important functions of a modern enterprise, which allows it to achieve the intended strategic goal. This happens by means of preventing deviations from the given parameters in the enterprise, or in the case of any deviation, by means of its timely identification and its correction. The means of goal achievement can be different, and can provide either effective or ineffective activities of the enterprise, as well as allow to develop its activities in more or less extent. But even if the strategic goal of the enterprise was achieved, whether it is possible to assert that it was achieved by the best way, and the existing system of internal control is effective, as it facilitated the achievement of this goal. Could better organization of the system lead to better results of work and development of the enterprise? Answering this question, we can state that the problem of the study of the existing system of the internal control is very relevant for present-day enterprises.

## MATERIALS AND METHODS

The issue of the internal control is given a lot of attention in contemporary scientific and practical literature [1; 5; 8]. However, many areas of control activities of enterprises still require improvement and further development. In our opinion, one of these areas is improvement of the scientific and practical approaches concerning to evaluating the effectiveness of the internal control system. The *purpose of the article* is to develop the recommendations as to the evaluation of the effectiveness of the internal control as a means of control of the enterprise work and its socio-economic development.

## RESULTS

The internal control classically performs the following functions: 1) to ensure compliance with the legislation; 2) to warn the potential emergence of negative consequences; 3) to monitor the organizing process of the sub-division activities; 4) to monitor the distribution of power and responsibilities between officials; 5) to provide reliable, complete, objective and timely information for the company management; 6) to provide business activities in accordance with the requirements of the legislation; 7) and to monitor and control information flows [3].

In our opinion, at the present stage of the dynamic development of economic relations, monitoring has to define the function of the socio-economic development of the enterprise, since any development of the enterprise, especially, the socio-economical development without control is out of the question.

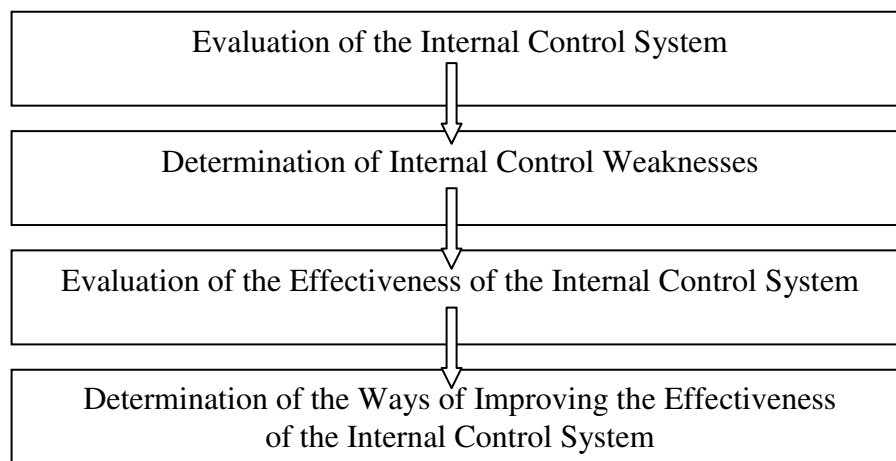
The system of the internal control is the set of interrelated elements providing organizational activities aimed at achieving the goals and the socio-economic development of the business entity through the effective operation in accordance with the internal standards and the requirements of the existing regulatory and legislative framework. In contemporary enterprises, the control can be represented either by a pronounced structural controlling sub-division or by the relations of the functional employees' responsibilities. As a rule, contemporary enterprises don't have the separate control sub-division, and the existing relations of functional responsibilities of controllers require the regulation, in order to ensure the effectiveness of their functions.

The investigation of the internal control system of the enterprise assumes the availability of four stages (*Figure 1*). Each stage has its own goal and objectives.

In some scientific works, specialists in the field of control identify the evaluation of the internal control system with the evaluation of the effectiveness of this system [5; 7]. In our opinion, they are different and the proof of this fact will be presented below.

The investigation of the internal control system of the enterprise may be conducted by the manager or owner of the company, as well as by internal and independent auditors.

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**Figure 1: Research Stages of the Internal Control System**

*Source: created by author*

The investigation of the internal control system of the enterprise may be conducted by the manager or owner of the company, as well as by internal and independent auditors.

In accordance with the International Auditing Standards, independent auditors focus their main attention on the evaluation of the internal control system [6].

To inspect the enterprise, independent auditors should determine the level of confidence to the system of control, implemented in the company. Auditors evaluate the internal control system to develop audit procedures that are necessary for specific circumstances, but not to justify someone's point of view on the effectiveness of the internal control. The result of the evaluation of the internal control system affects the determination of the level of labor costs and working hours of independent auditors during the inspection of the enterprise. Evaluating the internal control system, auditors use developed audit tests, questionnaires, investigation procedures [6].

The auditor will notify the company's management about the state of internal control system in the written form. This is the effectiveness of the internal control system and its influence on the function of the enterprise, which internal auditors, if the company has them, monitor and evaluate. The evaluation of the internal control system assumes staking the measures aimed at understanding each component of the system of the internal control.

The goal of the internal control evaluation is the determination of reliability of the internal control [6].

To achieve this goal, the following tasks have to be solved: a) to decide how to organize the internal control; b) to study the condition of the internal control system; c) to determine the functional areas of the enterprise covered by the control; d) to study the control procedures; e) to determine the level of trust with respect to the internal control results. It should be noted that the internal control can be reliable in the definite amount and in the areas where it is applied; therefore its results can be trusted. However, this does not mean that the system of the internal control has no disadvantages. Determination of the internal control weaknesses is highlighting the problem areas it controls, which increase the risk for enterprise itself.

The purpose of the definition of internal control weaknesses is informing the owners and the company management of the internal control shortcomings and, as a consequence, their removal [6].

To achieve this goal, the following tasks have to be solved: a) to define the standard checklist of procedures necessary for enterprises with the definite specific characteristics; b) to determine the internal control weaknesses; c) to develop recommendations for improvements; d) to implement the developed recommendations.

The elimination of weak points of control supports both the efficient work of the enterprise within the given parameters and the fast response to deviations. However, this approach does not necessarily lead to social and economic development of the enterprise. For its socio-economic development, it is necessary to determine the effectiveness of the internal control system and to provide ways of improving its efficiency. Effectiveness is one of the main characteristics of the quality of the system from the point of view of cost-effectiveness ratio of the system functioning. Depending on costs and, in particular, results, which are taken into account, we can talk about the economic, socio-economic or other effectiveness [2].

The evaluation of the effectiveness of the internal control system is the evaluation of the productivity of the used resources providing the function of the internal control system to achieve the goal of the activity and the socio-economic development of the enterprise.

The goal of the evaluation of the effectiveness of the internal control system is to determine the results of the internal control system functioning.

To achieve this goal, the following tasks have to be solved: a) to determine criteria of the effectiveness of the internal control of enterprises; b) to define the influence of the internal control on the performance of the enterprise; c) to determine the impact of the internal control on the socio-economic development of the enterprise.

Having evaluated the effectiveness of the internal control system, depending on the obtained results, it is necessary to define ways of improving the effectiveness of the internal control system.

The determination of the ways of improving the effectiveness of the internal control system involves creating the dynamic control system of the socio-economic development of the enterprise.

The main goal of the determination of the ways of improving the effectiveness of the internal control system is developing measures of the control, which provide cost savings when the strategic goals of the enterprise as well as its socio-economic development achieved.

To achieve this goal, the following tasks have to be solved: a) to define the promising ways of the socio-economic development of the enterprise; b) to assess the possible risks of the company during its socio-economic development; c) to determine the way of improving the effectiveness of the control of the socio-economic development of the enterprise.

Today, one of the most promising types of control is the risk-based control. It allows to avoid the total control that makes the control cost-effective. However, Ukrainian companies are in difficult economic conditions of their functioning in the environment of the significant own risk. Consequently, this type of control can be minimal and effective simultaneously only theoretically. To determine the effectiveness of the internal control system we need the extensive list of its effectiveness criteria.

The criterion is the distinguishing feature on the basis of which the assessment or evaluation of anything is made.

Table 1 shows the classification of the effectiveness of the internal control criteria, generalized on the basis of "functional areas".

Table 1

Criteria of the effectiveness of the internal control system

<i>Types of control</i>	<i>Criteria of effectiveness</i>
administrative	<ul style="list-style-type: none"> <li>– the availability of internal standards (department regulations, job descriptions);</li> <li>– compliance of the staff's responsibilities with employment agreements and job descriptions;</li> <li>– compliance of the functional purpose of structural sub-divisions with the provisions of departments;</li> <li>– compliance with safety regulations, fire and health and hygiene standards;</li> <li>– study and prevention of the own risk factor of the enterprise</li> </ul>
economic	<ul style="list-style-type: none"> <li>– providing the cost-effective amount of resources;</li> <li>– providing the storage conditions of resources;</li> <li>– efficient use of resources;</li> <li>– no embezzlements, loss;</li> <li>– revenue growth;</li> <li>– minimization of costs</li> </ul>
financial	<ul style="list-style-type: none"> <li>– availability of the budget and its implementation;</li> <li>– optimization of taxation;</li> <li>– timely calculations and payments of taxes;</li> <li>– permissible amount of receivables and payables;</li> <li>– efficient use of financial resources;</li> <li>– conducting business transactions;</li> <li>– timely and correct registration of the accounting records and financial statements</li> </ul>
production	<ul style="list-style-type: none"> <li>– timeliness of work;</li> <li>– rational use of production capacity;</li> <li>– increasing labor productivity</li> </ul>
social	<ul style="list-style-type: none"> <li>– compliance with the staff labor discipline;</li> <li>– compliance with the terms of employment agreements and regulations on employment and wages;</li> <li>– compliance with social standards;</li> <li>– providing the working conditions in accordance with the labor protection standards;</li> <li>– availability of the required number of suitably qualified staff;</li> <li>– slight turnover;</li> <li>– staff development;</li> <li>– no work-related injuries due to non-compliance with safety regulations, lack of experience and qualifications of staff</li> </ul>
technical	<ul style="list-style-type: none"> <li>– no refund of products from retailers, final consumers;</li> <li>– no complaints about services and work from consumers;</li> <li>– lack of warranty cases</li> </ul>
technological	<ul style="list-style-type: none"> <li>– compliance with production technologies, standards, performance of works and rendering of services</li> <li>– no manufacturing defects;</li> <li>– continuous improvement of the applied technologies</li> </ul>
marketing	<ul style="list-style-type: none"> <li>– production, provision of works and services demanded by the market;</li> <li>– availability of information about competitors, sales markets;</li> <li>– conducting research to determine promising areas of development</li> </ul>
engineering	<ul style="list-style-type: none"> <li>– satisfactory conditions of communications, equipment, buildings, structures, machinery;</li> <li>– no work-related injuries due to a faulty of equipment, communications;</li> <li>– availability of and compliance with major repairs;</li> <li>– timely making current repairs;</li> <li>– timely replacement of old equipment by more efficient and less power-consuming</li> </ul>
legal	<ul style="list-style-type: none"> <li>– no litigation through the fault of the company;</li> <li>– efficient work with external law enforcement and regulatory agencies;</li> <li>– no hopeless payables;</li> <li>– availability of the organized internal and external document management;</li> <li>– no penalties from the state and contractors</li> </ul>

Source: created by author

## DISCUSSION AND CONCLUSIONS

In our mind, the internal control system should not only ensure the achievement of the strategic goal of the enterprise, but also its social and economic development. The investigation of the internal control system assumes both the evaluation of the internal control and the evaluation of its effectiveness. The above-mentioned approach of the evaluation of the effectiveness of the internal control system is based on the set of criteria according to functional areas of the enterprise activity. The criteria determine the presence or absence of certain factors in the enterprise activity. Thus, as a result of the research we: a) specified the definition of the internal control system, as a means of supporting economic and social developments of the enterprise; b) determined specific features of "the evaluation of the internal control system" and "the evaluation of the effectiveness of the internal control". The difference is in the tasks of different types of the evaluations and the subjects of the evaluations; c) offered and organized according to the functional areas of the control the evaluating criteria of the effectiveness of the internal control system. This approach gives the opportunity to determine the promising ways of improving the effectiveness of the control supporting economic and social developments of the enterprise.

**The expected future development:** Having evaluated the effectiveness of the system, it is necessary to define the main ways of improving the effectiveness of the internal control system of the socio-economic development of the enterprise.

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# CONDITIONS OF ENTERPRISES' POTENTIAL OF RURAL HOUSING ESTATES IN UKRAINE

**Julia Yarovaya**, Researcher,

*Vinnitsa National Agrarian University, Ukraine*

**Abstract:** *The problems of usage of enterprising potential of rural housing estates are considered in this article. Financial, demographic, socio-cultural, infrastructural and other problems of rural territories are determined. The necessity of the design of complex measures aimed at increasing of enterprising potential of rural housing estates and intensification of their usage is grounded.*

**Keywords:** *enterprise, enterprising potential, housing estate, rural housing estates*

## INTRODUCTION

The aim of the article lies in definition of essence and valuation of structural elements of enterprising potential of rural housing estates in Ukraine and grounding of measures of their usage.

## MATERIALS AND METHODS

Research was carried out with the help of the organizational, economic and socio-psychological methods.

## RESULTS

For agrarian sector the development of enterprise is one of the fundamental factors of the rise of the branch which is able to meet competition, ensuring food safety of the country and the factor of stable development of rural territories, the guarantee of cultural and spiritual revival of the country.

Creation of conditions for the further development of different forms of enterprise in agrarian sphere remains the topical task of state policy. The elaboration of the problems of ensuring efficacy of the mechanism of realization of enterprising potential of the population of rural territories is far from completion. There are even considerable dissensions in the definition of the term "enterprising potential", its essence, composition and inner structure. Enterprising potential is identified with socio-economic potential, production potential and working potential and is examined as the totality of the available resources. Housing estates are the lowest and simplest level of carrying out of the economic activity. Usual private activity, which provides own needs, takes place exactly in it and at the same time the economic unit is understood, initiated and formed. Considerable part of produced output is sold at the market with the purpose of satisfaction of food needs of other consumers and receiving profit.

Rural housing estates are the housing estates which have in their ownership or usage of land and places of dwelling are registered on the territory of rural populated area [6].

Over 17 million housing estates are uncouned in Ukraine, 38,5% of agricultural objects of area of economic significance are in use and possession, and the investment in agricultural production is 48,2% summing up at the end of the year. All factors of production such as land, financial and working resources, entrepreneurial skills, are in the property of the housing estates in the condition of market economy, as it is known from the postulates of classic economic theory. It produces the necessity of more captious attention to this sector of agrarian economy with the purpose of more complete usage of its resources.

It is necessary to clarify its essence and factors which define it for more complete and adequate evaluation of enterprise potential of housing estates. In our opinion, enterprising potential of housing estates is the ability, resources of the economy as to production of goods,

giving services on the basis of the adequate economic conditions of enterprising conduct, which are directed onto the getting the profit. The analysis of the scientific literature on the given range of problems has given the possibility to distinguish some elements of enterprising potential of the population (*Table 1*).

Table 1

The structure of the enterprising potential

<i>Enterprising potential</i>	
Economic potential	Social potential
Natural-resources potential	Demographic potential
Financial potential	Educational-cultural potential
Production potential	Innovative potential
Working potential	Informational-communicational potential
Infrastructural potential	Potential of reproduction and keeping of physical health

It is worth noticing that enterprising potential of urban inhabitants, youth and inhabitants of recreational areas or rural territories fundamentally differs in content and structure. These differences in distinction of ways of living and thinking, educational-professional and intellectual-cultural level, demographic structure of the population, mobility, inclination to taking risks and innovations, size and structure of financial security and communal and everyday conditions of living. In the rural regions the development of enterprise has specific peculiarities, which are caused by historically fixed customs, traditions and mentality. V. Pivtorak points out that subjects of entrepreneurial activity of given sphere function under conditions of institutional environment with specific elements of their own culture, channels of interpersonal interconnections and inner and outer factors, that have direct or indirect influence on their activity [7, p. 141].

In O. Shpykuliak's opinion, the existing institutional system of agrarian enterprise development doesn't guarantee the main thing which is economic interest to work in agrarian sphere [9, p. 6]. Analyzing the low level of development of enterprise in agrarian sphere, M.Y. Malik states the fact that the prime cause of this situation is "incapability of agrarian producers to work under the conditions of independent management" [5, p. 139].

Materials of the statistic reporting give the opportunity to evaluate separate aspects of enterprising potential of housing estates. Annually the inspection of housing estates is held. As the general totality is very mixed after individual size of land area of housing estates, for more adequate reflection of its structure they are broken into three main groups – small in size (up to 0,5 hectare), middle-sized (0,51 – 1,0 hectare), large (over 1 hectare) [6].

The quality of land is evaluated rather high: over 95% evaluate their land as good or average. Sex distribution of the heads of rural housing estates affirms the presence of gender equality in this sphere: men or women, approximately 50/50. A little bit more than 1% of agricultural estates fall on perennial plantations. Meanwhile, gardens and berry plantations in particular give much more return from one hectare and allow using land resource more effectively and that is why they are more perspective in the plan of development of enterprise.

According to the inspection, 71,4% housing estates don't raise any cattle, and 69,5% don't raise any pigs. Only 15% housing estates raise more the 2 livestock and less than 18% of housing estates raise more than 2 pigs. This affirms about poor usage of working potential of rural housing estates as to development of livestock and poultry rising.

The important component of enterprising potential is its financial support, the level of which can be affirmed by the level of availability of machinery in rural housing estates. Only 14,8% of housing estates own rather primitive machinery: 37,3% of which are ploughs, 32% are harrows, only 16,7% are tractors and 1,7% are multipurpose machines. Statistics on large rural housing estates is somewhat better: 28,8% own machinery, which is represented in ploughs (52,1%), harrows (45,3%), tractors (28,4%), tiller (22,3%), skimming machines (20,2%) and etc. But in the up-to-date housing estates it is not enough machinery to provide with modern conditions of work which would provide the high level of work production and output on the basis of large amount of agricultural production. Notwithstanding the low level of technical supply of work, rural housing estates focus mainly on the usage of hands. In average

only 15% of housing estates attract hired workers, mainly for seasonal work. In the segment of large housing estates, the percentage of those which attract hired work is almost 22%.

Financial potential of housing estates, in predominant majority of cases, doesn't allow providing with the start capital the potential enterprising activity. According to State Statistics Committee, average monthly cumulative resources of rural housing estates in 2008 were in average 2478 UAH for one housing estate, or 904 UAH for one person in month, and money profits (including profits from the sale of agricultural production) – 2335 UAH for one housing estate or 832 UAH for one person correspondingly, that is for 21,3% less than in urban housing estates. Together with it, cumulative expenses of rural housing estates were in average 2203 UAH, or 804 UAH for one person in a month, that is for 24,5% less than in urban ones. At the same time rural housing estates direct towards nourishment bigger part of cumulative expenses, that is more than urban (55% against 49%) [2].

Though the income of peasants exceed living minimum, it doesn't guarantee the satisfaction of their needs. In particular, it doesn't meet the European standards of relation of minimal salary and living minimum. Nowadays it makes 6,4:1 in Great Britain, 4,7:1 in France and only 1,5:1 in Latvia, Estonia and Poland. Minimal salary in majority of countries in the world makes 35-40% from the average.

## **RESULTS**

Given data affirm that economic potential of rural housing estates in Ukraine can be evaluated as positive only according to one criterion that is providing the available land resources. But the low provision of machinery, primitive material-technical provision, orientation on the usage of own hand work, the decline of livestock raising, the absence of financial resources give the reasons to evaluate the economic potential of rural housing estates as that having low level and needs captious attention from the direction of the government.

The evaluation of social potential of rural housing estates, which consists from demographic, educational-cultural, communicative, innovative potentials, also affirms the presence of substantial problems. Age complement testifies about the tendency to ageing of inhabitants of rural territories. Only 15% of members of housing estates are children up to 16 years, and 85% of people who work in group are older.

Meanwhile, for this type of people, typical ideology of cooperative housing, which was formed in the rural area within centuries, in M. Malik's opinion, had made the peasant non-competitive in the modern conditions [5, p. 143].

The basis for replenishment of the working balances of capable of working population is completely limited. The creation of conditions of keeping the youth is urgent task of governmental policy.

As V. Yarova states, the problem of youth employment in the country strengthens thanks to the following factors as inability to find acceptable job and to provide with the proper level of material income for himself/herself and her/his family; complication of setting up a business in the country; absence of perspectives and ability of professional growth; lack of development of social infrastructure, unsatisfactory public welfare of the village.

Rural youth from the point of views, interests, and needs are nearer to their coevals than to the older generation of peasants. That is why their prevailing intent is leaving the village and moving to town or abroad [10, p. 85].

To transfer the patriarchal way of life of rural territories on the rails of the modern development can be possible only in the case of availability of personnel, having appropriate level of education, world-view and motivation.

Meanwhile, less than 8% of the heads of housing estates have complete higher education. Most of them are people who completed secondary comprehensive school.

## **DISCUSSION AND CONCLUSION**

In the context of creation of conditions for raising the general educational-professional level of rural population deserves the support the idea of creation of national educational-

coordinative center and regional centers of agricultural servicing cooperation for creation of which mutual purposeful actions of government, projects of international technical support, community, scientific and educational institutions are needed.

In our opinion, the institutions of local governing can influence on the situation in the way of creation of favorable conditions for private entrepreneurs. Setting up the effective system of selling of agricultural production of private peasant economy, creation of conditions for the work of selling and servicing cooperative societies and control for observance labor legislation in the part of payment for work of hired workers by business structures can become considerable factors for growth of the level of welfare of rural population, rise of its enterprising potential.

The structural component of effective creation and usage of enterprising potential of inhabitants of rural territories must become organizational, normative-legal, economic, information, administrative, institutional, political mechanisms, which are directed to the activation of active part of rural population and provision with the steady development of rural territories. The design of such mechanisms is an essential task of the further scientific researches and investigation.

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# ENVIRONMENTAL AND ECONOMIC POTENTIAL DYNAMICS OF FARMING RESEARCH BY COGNITIVE MODELING

**Tetiana Zakhovalko**, PhD in Physics and Mathematics, Associate Professor,

*Department of Economic Cybernetics,  
SHTE "Zaporizhzhya National University", Zaporizhzhya, Ukraine*

**Abstract:** *This paper studies the impact of key factors on the development of ecological and economic potential of the agricultural enterprise. It's based on the selected links established cognitive interaction model and a series of simulation experiments based on pulse process. Simulation results revealed trends swim prospects in management decisions, and allowed to form a direction for further improvement of methods of evaluating environmental and economic potential farmers. Different scenarios are characterized in order to define the best way of agricultural sector development.*

**Keywords:** *modeling, cognitive model, agribusiness, environmental and economic potential, factor in the development, simulation experiment*

## INTRODUCTION

The concept of economic development of an enterprise can be regarded as a derived from the use of available economic potential. However, a major problem for enterprises is the ratio of the components of the economic potential, labor, organization, innovation, nature. Each of these components has its own characteristics and features, chief among which is the possibility of recovery or its lack. For farms feature is the significant use of natural resources that are not reproducible.

Thus, the problem raises of management not only in economic performance of agricultural enterprises, but also its ecological potential. Ecological and economic potential (EEP) represents a set of potential support and improves the profitability of a company, along with a reduction of anthropogenic impact on the environment. Problem EEP management of agricultural enterprises is especially acute in recent years. On the one hand there is a significant increase of demand for agricultural products, and extremely user-friendly products are "green", "ecological", bred by special technology. On the other hand there are much more tangible negative impacts of extensive during previous years. Ecological problems of soil depletion, erosion, salting, etc lead to an annual loss of thousands of hectares of arable land.

Managing environmental and economic potential should be considered from the standpoint of a systematic approach. In this case, economic development goals of the company, and the criteria of achievements are transparent and straightforward, such as sustainable development, increasing profitability, maintaining profitability and more. As for environmental purposes, the issue is still not investigated. The development of agriculture is extremely important. In [1, 2] conducted an analysis of agricultural reform in the system of national historic and social values. In works of L. Abalkina, B. Kvasyuk, A. Lisietskiy, G. Cherevko the issues of reform and agricultural enterprises are in transition. In works Y. Lupanov and V. Mesel-Veselyak defined strategic areas of rural development and directions of modernization of agricultural production by 2020, grounded Development Indicators, the aims and criteria for their achievement. S. Ramazanov [3] conducted the research concept of ecological and economic potential of industrial enterprises. For studying and modeling a farm there are used a variety of approaches [4], for example, the graph theory [5]. To identify existing relationships and influence factors widely used methods of cognitive modeling and impulsive processes [6].

*The purpose of this article is to build a cognitive model of ecological and economic potential of the agricultural enterprise and scenario simulation experiments to determine the prospects of its development under the influence of various external factors.*

## RESULTS

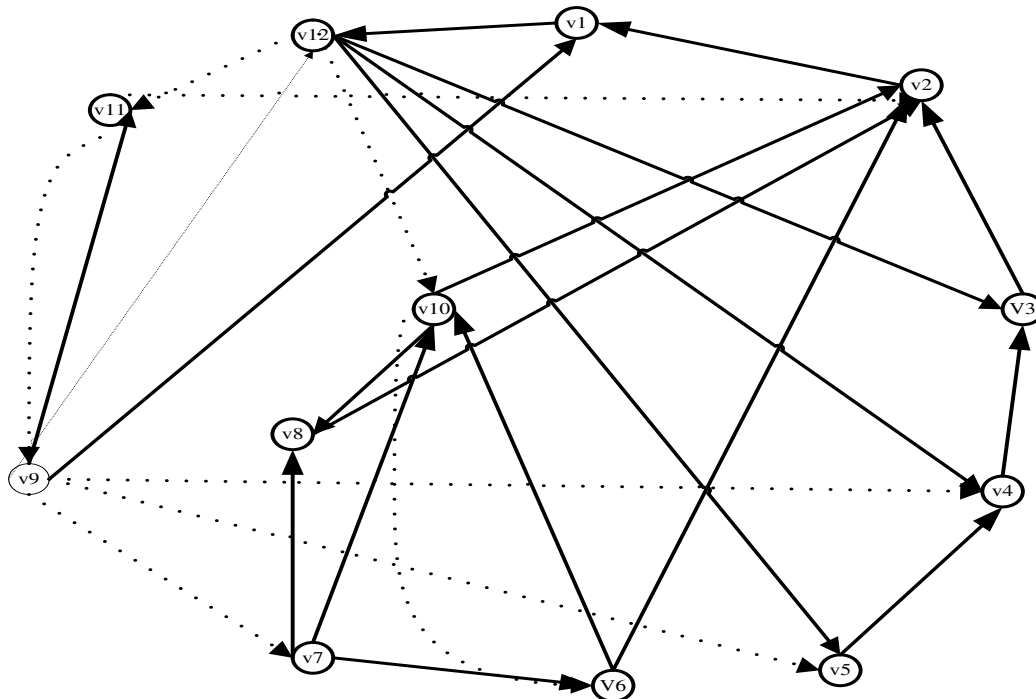
Producing a system of environmental and economic potential of an agricultural enterprise could be as followed: building cognitive models; and scenario study of cognitive maps. Isolated eleven key factors influence the improvement and stabilization of the ecological and economic potential of the agricultural enterprise (*Table 1*).

Table 1

Key factors management of ecological and economic potential of agricultural enterprises

Number	The factors	Designation factor
1	Investment in environmental programs	$V_1$
2	The financial resources of the enterprise	$V_2$
3	Issue of enterprise	$V_3$
4	Yields	$V_4$
5	State Natural Resources Management	$V_5$
6	Demand for products	$V_6$
7	Matching product needs of the population	$V_7$
8	Revenues from sales	$V_8$
9	The level of pollution	$V_9$
10	The price level of agricultural products	$V_{10}$
11	Environmental fines	$V_{11}$
12	Ecological and economic potential farmers	$V_{12}$

Critical development of catalysts are the factors 1, 2, 9, depending on the state of these factors can either stimulate or inhibit the development of the system, because control actions should ensure that changes in these factors in the desired direction to achieve the target states of the system is increasing environmental and economic potential of agricultural enterprises. Based on the existing system factors build a cognitive map and its corresponding display in the form of a directed graph. When a graph will follow the rule: a positive connections between vertices (concepts) graph will display continuous connecting cable, negative will dotted line (*Figure 1*). Directed graph treated in accordance with the adjacency matrix, which is a tool for measuring pulse processes in directed graphs.



**Figure 1: Cognitive model of ecological and economic potential managing at the enterprise**

Source: created by author

To assess the coherence factors searches stabilizing and destabilizing paths. Revealed that the model, there are following outlines of a positive relations:

$$V_1 \xrightarrow{+} V_{12} \xrightarrow{-} V_{10} \xrightarrow{-} V_6 \xrightarrow{+} V_2 \xrightarrow{+} V_1,$$

$$V_1 \xrightarrow{+} V_{12} \xrightarrow{-} V_{11} \xrightarrow{-} V_2 \xrightarrow{+} V_1.$$

An increase or decrease in the value of any vertex in the above circuits leads to amplification of the initial rejection of all other vertices of these paths, indicating a mismatch factors affecting the ecological and economic potential farmers. Further studies aimed at identifying the dynamic development trends. For this simulation was carried out pulse-based plan developed model experiment presented in *Table 2*.

Table 2

Plan pulse modeling trends of ecological and economic potential of agricultural enterprises

The script first	Pulses	V <sub>1</sub>	V <sub>2</sub>	V <sub>3</sub>	V <sub>4</sub>	V <sub>5</sub>	V <sub>6</sub>	V <sub>7</sub>	V <sub>8</sub>	V <sub>9</sub>	V <sub>10</sub>	V <sub>11</sub>	V <sub>12</sub>
		+1											
2	q <sub>10</sub> = 1 q <sub>5</sub> = -1					-1					+1		
3	q <sub>11</sub> = 1											+1	
4	q <sub>2</sub> = +1 q <sub>10</sub> = -1		+1								-1		

We describe the main results of the simulation pulse following the previously specified rules: graphic will display only the changes previously identified target factors and factors-indicators of the system, while the graph on the x-axis will celebrate simulation cycles (n = 1, 2, 3, ...) on the vertical axis-change values level factors in relative units. According to the table plan experiments (*Table 2*) let us analyze 4 scenarios trends of ecological and economic potential farmers.

**Scenario 1:** Impulse comes in one height: V1. May increase levels of investment in environmental projects (qv1 = +1) (*Figure 2*).

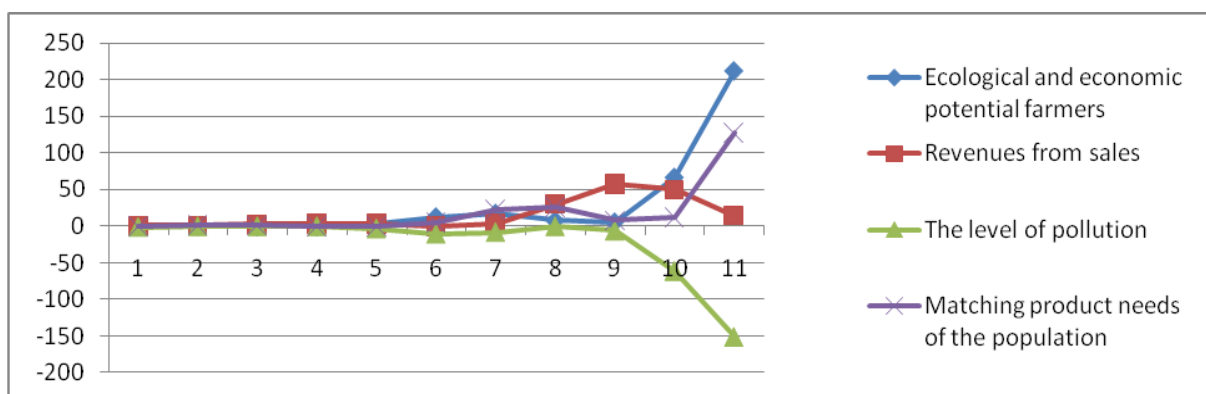


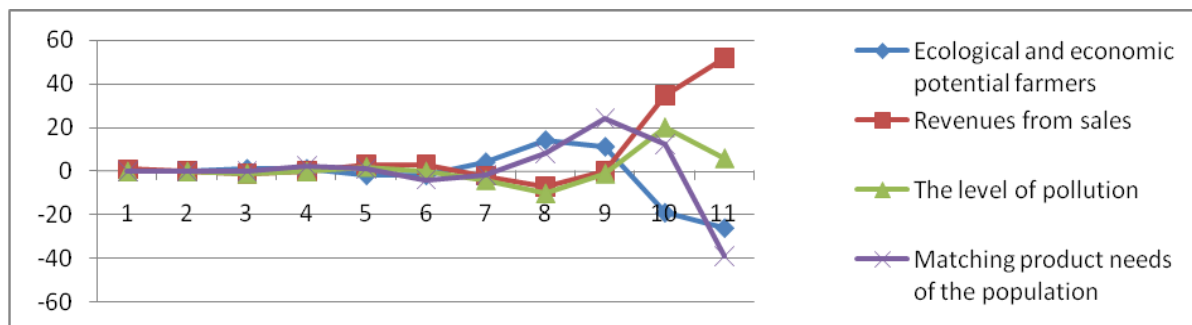
Figure 2: Simulation results for the first scenario

Source: created by author

The second cycle modeling there is no significant change. From the third cycle, there are fluctuations in state factors with subsequent increase of the amplitude of oscillatory processes. In this case, we can conclude that the momentum introduced into the top of V1, encourages progressive changes in the system, but is insufficient for normal functioning of her in the long run. Sudden surges and dips state factors cannot provide the stability and progressive development. Thus, only by increasing the size of investment in environmental measures sustainable environmental and economic growth potential of the company in the long term is difficult.

**Scenario 2:** Impulse comes in two peaks: V5, V10. Let the rising prices of agricultural products (qv10 = +1), but the deterioration of natural resources of the enterprise (qv5 = -1) (*Figure 3*).

Let us consider the situation in details. On world markets is increasing demand for quality agricultural products and there is an increase in prices.

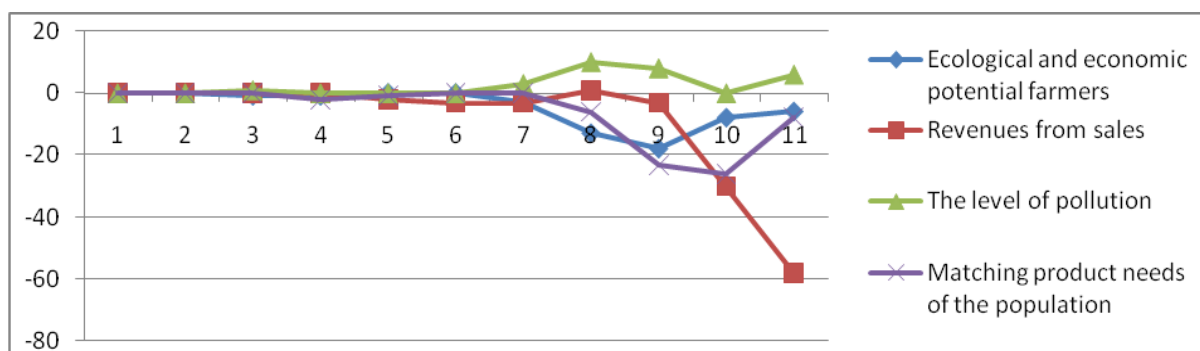


**Figure 3: Simulation results for the second scenario**

Source: created by author

However, neglect of the environmental component of management leads to a permanent loss of natural resources farms (degradation of arable land, pollution of water sources, etc.) for all simulation cycles characteristic oscillatory process development factors with growth trends for decreasing values of factors. In this case, the need for control actions aimed at improving and preserving natural resources companies.

**Scenario 3:** Impulse comes in one height: V11. Let increases the level of environmental fines (qv11 = +1) (Figure 4).

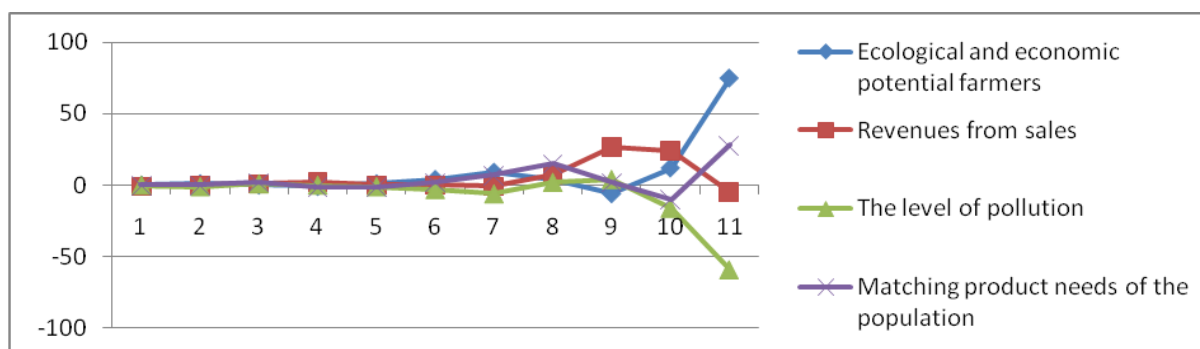


**Figure 4: Simulation results for the third scenario**

Source: created by author

By increasing the level of penalties for environmental violations and constant initial level of other factors in the system remains relatively stable condition to the 5<sup>th</sup> cycle modeling. Since the 5<sup>th</sup> cycle is decreasing target factors, however, followed by stabilization of EEP. Conclusion: The influence of the level of penalties as a regulator systems are not effective. Sudden surges and dips state factors cannot provide the stability and progressive development.

**Scenario 4:** Impulse comes in two peaks: V2, V10. Let will increase the financial resources of the enterprise (qv2 = +1), but also a decrease in the prices of agricultural products (qv10 = -1) (Figure 5).



**Figure 5: Simulation results for the fourth scenario**

Source: created by author



This situation characterizes the development of large agricultural entities, holdings that are able to attract additional financial resources through other parts of sugar holdings and cooperatives. This situation is perfectly acceptable to agricultural enterprises because there are positive changes in key factors.

## DISCUSSION AND CONCLUSIONS

The results of simulation modeling indicate that external influence only by penalties (scenario 3) cannot increase the environmental and economic potential of the company; in fact, this approach has little effect on the level of product contamination and loss of natural resources.

Preservation of existing trends will not cause significant changes in the system in the short term, but in the medium and long term potential significant decline (scenario 2).

To improve the state of the target factors most promising scenario seems the transition to forms of economic activity, which would be able to devote significant resources to support environmental projects and at the same time were not very sensitive to the dynamics of market prices. Most appropriate in this regard is the establishment of agricultural holdings (scenario 4).

Thus, the paper studied the impact of key factors on the development of ecological and economic potential of the agricultural enterprise. Based on the selected links established cognitive interaction model and a series of simulation experiments. Promising for future research is to develop methods of quantitative assessment of ecological and economic potential for decision making based on constructed using guest a lot of methods of analysis and fuzzy mathematics.

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## NACHTRAG

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