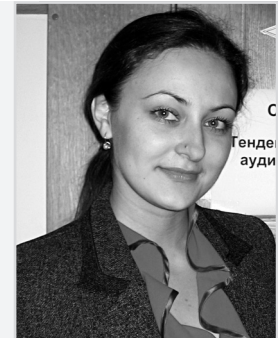UDC 332.122.009.12

Valerii Ponikarov
PhD (Economics), Professor, Kharkiv
National University of Economics
named after S. Kuznets, Ukraine
9a Lenin Ave, Kharkiv, 61166, Ukraine
elsvit@ukr.net

Olha Kozhushko
PhD (Economics), Lecturer, Kharkiv
National University of Economics
named after S. Kuznets, Ukraine
9a Lenin Ave, Kharkiv, 61166, Ukraine
olga_kozhushko_z@ukr.net

Karina Butenko
Lecturer, Kharkiv National University
of Economics named after
S. Kuznets, Ukraine
9a Lenin Ave, Kharkiv, 61166, Ukraine
karina.butenko@ukr.net

OPERATIVE TAX PLANNING AS A KEY ELEMENT OF INDUSTRIAL ENTERPRISE'S BUSINESS REPUTATION

Abstract. In the current economic conditions, characterized by high uncertainty and substantial tax environment, tax burden on industries, special importance is given to the improvement of decision-making speed in the field of taxation. An important component of that is operative tax planning. The authors ground the necessity of operative tax planning as a key element of industrial enterprise's business reputation by development of a model of discrete space situational finding out of ways for quick intellectual capital respond to uncertain tax environment and creation a game model of operative tax planning mechanism at industrial enterprise. The models developed give the opportunity of rapid response under tax environment uncertainty, depending on the size of the deviation from the specified search parameters. This discrete space situational approach allows solving the problem of the possible scenarios choice in a continuous space of «intellectual capital – tax environment». The game model of effective operative tax planning mechanism allows assessing the optimal number of involved employees to remove the maximum amount of tax risks and threats.
Keywords: operative tax planning; business reputation (goodwill); intellectual capital; knowledge capital; financial stability, game model.
JEL Classification: L14, F32, H23, L52, O21

В. Д. Поникаров
кандидат экономических наук, профессор,
Харьковский национальный экономический университет им. С. Кузнеца, Украина
О. В. Кожушко
кандидат экономических наук, преподаватель,
Харьковский национальный экономический университет им. С. Кузнеца, Украина
К. В. Бутенко
преподаватель, Харьковский национальный экономический университет им. С. Кузнеца, Украина
**ОПЕРАТИВНОЕ НАЛОГОВОЕ ПЛАНИРОВАНИЕ КАК КЛЮЧЕВОЙ ЭЛЕМЕНТ
БИЗНЕС-РЕПУТАЦИИ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ**
Аннотация. Разработаны модели, которые позволяют быстро реагировать на влияние окружающей налоговой среды, характеризующейся неопределенностью, в зависимости от размера отклонения от заданных параметров поиска наиболее эффективных путей взаимодействия предприятия с налоговой средой для поддержания деловой репутации предприятия. Это делает возможным решение проблемы выбора альтернативных сценариев в непрерывном пространстве «интеллектуальный капитал – налоговая среда». Предлагается использовать игровую модель механизма эффективного оперативного налогового планирования, с помощью которой можно рассчитать оптимальное количество сотрудников для устранения максимального количества налоговых рисков и угроз.
Ключевые слова: оперативное налоговое планирование, бизнес-репутация, интеллектуальный капитал, капитал знаний, финансовая устойчивость.

В. Д. Понікаров
кандидат економічних наук, професор, Харківський національний економічний університет ім. С. Кузнеця, Україна
О. В. Кожушко
кандидат економічних наук, викладач, Харківський національний економічний університет ім. С. Кузнеця, Україна
К. В. Бутенко
викладач, Харківський національний економічний університет ім. С. Кузнеця, Україна
**ОПЕРАТИВНЕ ПОДАТКОВЕ ПЛАНУВАННЯ ЯК КЛЮЧОВИЙ ЕЛЕМЕНТ
БІЗНЕС-РЕПУТАЦІЇ ПРОМИСЛОВОГО ПІДПРИЄМСТВА**
Анотація. Авторами розроблено моделі для швидкого реагування на вплив навколишнього податкового середовища, що характеризується невизначеністю, залежно від розміру відхилення від заданих параметрів пошуку найбільш ефективних шляхів взаємодії підприємства з податковим середовищем для підтримки ділової репутації підприємства. Це дозволяє вирішити проблему вибору можливих сценаріїв у безперервному просторі «інтелектуальний капітал – податкове середовище». До впровадження пропонується ігрова модель механізму ефективного оперативного податкового планування, що дає змогу розрахувати оптимальну кількість співробітників для усунення максимальної кількості податкових ризиків.
Ключові слова: оперативне податкове планування, бізнес-репутація, інтелектуальний капітал, капітал знань, фінансова стійкість.

Introduction. In the current economic conditions, characterized by high uncertainty and substantial tax environment, tax burden on industries, special importance is given to the improvement of decision-making speed in the field of taxation. An important component that provides such decisions is tax planning, especially its operative part.

Brief Literature Review. Abovementioned issues were analyzed by such researches as Solomanidina T., Resontov S., Novik V., Sherbakova K., Bernytska D., Kravchuk N., Dudova I., Gordienko E., Larichev O., Cherednikova L., Glotova D., Timartsev O.

We should also mention such economists as Aumann Robert J. (1987), Jones Sally M. (2002), Morgan J. P. (2001), MacWilliam K. (2001) and others who paid attention to such a problem.

The purpose of the research is to ground the necessity of operative tax planning as a key element of industrial enterprise's business reputation by development of model of discrete space situational finding of ways of quick intellectual capital respond to uncertain tax environment and make a game model of operative tax planning mechanism at the industrial enterprise.

Result. In the structure of the modern Ukraine economy, large, medium and small businesses co-exist and co-work complementary.

Small and medium-sized enterprises (SMEs) operate mainly in the domestic market. Their work contributes to employment and a creative capability of the population, reduces unemployment, maintains middle class, and strengthens political stability of the country. They adapt quickly to changes in the business environment and ensure sustainable movement of capital from one business sphere to another. Therefore, SMEs provide competitiveness of the national economy due to political and economic stability in the internal market mostly.

However, the historical experience of developed countries shows that large enterprises successfully operate both in domestic and international markets. It should be noted that the territorial leaders of foreign economic activity of our country during last years are Donetsk region, where there are 806 exporters with export volume of $17.197 million (25.1% of total exports of Ukraine), Dnipropetrovsk region: 1055 exporting companies with export volume of $10,363.3 million (15.2% of total export of Ukraine), Kyiv city: 2592 exporters with export volume of $9,061.7 million (13.2% of the total export amount), and Kharkiv region: 1031 exporters (2.7% of total exports of Ukraine) [1]. In these regions, large industrial enterprises are mainly registered. Due to the high economic potential, they can work with large volumes of unique products, maintain and develop high technology focus group of highly qualified personnel, create the conditions for higher level of competition in the world markets. Thus, in today's global economic processes the main elements are large industrial enterprises. They ensure the competitiveness of the national economy through effective action at both the domestic and foreign markets that forms the image of our country. Kharkiv region is leading in engineering in Ukraine. The region has formed a powerful tractor building complex, it occupies a prominent position in output of power equipment, aircraft, machine tools, fuel, electronic, chemical, pharmaceutical, food and light industries. By the volume of industrial production, Kharkiv region is ranked as the seventh among the regions of Ukraine. During the period between January and May 2013, industrial production index in Kharkiv region compared with January-May of 2012 was 93.6% [2].

The features mentioned above also define the different conditions of different size groups of companies as well as the leverages of influence on them by the state. One of the key levers is control as a function of government and its focus on large-scale industrial enterprises with the highest fiscal impact.

According to the analysis of the current Ukrainian legislation, it can be concluded that there are 70 regulatory authorities in Ukraine. Statistics shows that some enterprises are checked several times a year, which sometimes leads to the suspension of production downtime and businesses with all consequences (default, material losses, loss of reputation of the company and contractors, as well as future orders) through distraction workers of the enterprise and its resources for the inspection. In addition, this situation has threatened the investment attractiveness of Ukrainian enterprises, as there are cases considered with the complete suspension of the enterprise with foreign investments in Ukraine and carrying capacity in other countries. It should be noted that 30 inspection authorities may decide to limit or cease business of enterprises [2].

Thus, according to the Federation of employers of Ukraine (FEU), in 2012 in Ukraine, only central executive authorities held on 1 million 113 thousand inspections and made 67 500 decisions about termination, suspension or restriction of economic activity.

According to the International Finance Corporation (IFC), in 2010, 74% of Ukrainian enterprises were visited by the inspection of regulatory authorities, and their direct costs of inspections exceeded to $3.2 billion [2].

Equally revealing the fact, characterizing the conditions for businesses in our state, the World Bank annually prepares the Doing Business ranking, by which the Ukrainian business spends an average of 491 hours per year for tax accounting. However, in Poland, Italy and Germany, the figure is 286, 269 and 207 hours respectively, and the number of payments in Ukraine reached 28, when the Polish, Italian and German businessmen are making 18, 15 and 9 tax payments per year [3].

According to the official data of the Ministry of Revenue and Duties of Ukraine n modern work of the tax authorities there is a «risk-oriented development system of control and inspection work, such as detection agents are not as specific customers minimization schemes, i.e. representatives of the real economy» [4], which in turn should increase revenues. Analysis of the data presented on the official website of the Ministry of Revenue and Duties of Ukraine in Kharkiv region indicates a significant number of tax audits conducted (by 2012 their number was 603 scheduled and 2119 unscheduled inspections), their effectiveness in terms of additional tax to the budget (efficiency is 100%) and a high level of adjustment agreed tax liabilities (UAH 296.3 million in 2012) [4].

The research of modern business conditions suggests that one of the important resources of the enterprise is its business reputation – the reputation of the company in the business environment with the consequences of past events that provides long-term competitive advantages in terms of stable operation of the business and its development in changing external environment.

Of course, we should agree with Solomanidina T. that goodwill of an enterprise operating in the information business development is its main intangible asset that has significant value and is formed by such assets as reputation, image and financial stability of the company [5]. In its term, reputation of any company consists of the following six components, which are taken into account in the preparation of sustainable business ideas: emotional appeal, products quality, relationships with partners, reputation management, social responsibility and financial performance [6].

Over the past decade, the share of the value of goodwill in the total value of «Western» companies increased from 18 to 82%. The analysts say that the increase of the index of company's goodwill for 1% provides its market value increase for 3%. The value of goodwill of the enterprise increases if it encourages trust of partners and customers to its products. Companies spend millions of dollars to increase their goodwill all over the world [5].

Thus, it should be noted that goodwill is essential intangible asset which is strategically important for modern businesses. It should be noted that it refers to the strategic assets, provides the organization with sustainable competitive advantage and can bring economic benefits in achieving company's goals.

Thus, according to D. Bernytska and N. Kravchuk [7], the goodwill of the company can't be copied or replaced. It is unique characteristic of each company. Goodwill for the company is a rare and unique asset that can not be bought or obtained without the application of some effort. It is required for development and is an integral part of the company.

One of the factors that shape the reputation of the enterprise performs its reputation as a taxpayer, as tax audit is connected with the financial and economic activity in general. It should be paid particular attention to the taxpayer reputation in today's environment of unlimited access to the information on the official websites of the tax authorities as any actual or prospective counterparty is able to track the company's reputation as a taxpayer and assess its reliability and business integrity that enable him to make a decision about the possibility of further cooperation. The presence of these acts of inspection findings worthless deals with the absence at the location of the taxpayer, the failure possibility of reconciliation or counter checks, based on the establishment survey any persons no real business transactions, even if in the future they will be challenged to negative affect the reputation of the company.

Ensuring of successful long-term development requires the choice of directions and definition of the scope and sequence of predictable changes, their speed and direction that depends on the timely and rapid response of the company. Therefore, qualitative and quantitative characteristics of its strategy should be determined by the characteristics of organizational knowledge (knowledge capital) and performance management market, human and organizational components of the intellectual capital of industrial enterprises [8].

It is known that the operation of any businesses is important to the environment, which included an important and influential in the work of these entities is tax environment. Uncertain tax environment management industry of Ukraine is a major cause of significant losses, which are expressed in foregone tax payments due to the shadow economy, because of the growing tax debt and inefficient tax breaks, as well as tax obstacles in the process of existing businesses in the event of new ones.

In these circumstances, it is necessary to ensure responsiveness of the intellectual capital of industrial enterprises to external factors that reduce the effectiveness of the tax environment management to determine its effectiveness as a whole and in reference to each of them. As the result of the study, the authors determined that intellectual capital is a lever to ensure safety of the industrial enterprises, based on the combined knowledge and skills of the employees of the company and generating them. The implementation of this knowledge in practice leads to some economic effect, which is the monetary equivalent of intellectual capital.

Specificity of industrial products is the fact that this process produced wealth. Feature of industrial products due to its main features: a concrete form (a physical characteristic), unboundedness in time (significant useful life) separateness of staff (permanent opportunity to improve).

The authors of this research define the intellectual capital of industrial enterprises as accumulated at a certain point of time a set of business intelligence that belongs to the enterprise and presents static and dynamic parts of the human intellect, and produced in the process of new value creating.

At the same time, work in the tax environment of the enterprise by means a series of external and internal tax conditions, operation of the business factors, principles, methods, and methodological techniques of managing the planning, calculation and control of taxes is paid by the company [9].

It is shown the trend of combinatorial search options which are necessary for rapid response under uncertainty environment tax, depending on the size of the deviation from the specified search parameters. This discrete space situational approach allows solving the problem of the choice of possible scenarios in a continuous space of «intellectual capital – tax environment».

The functional relationship between the numbers of search paths is described by the mathematical expression:

$$Cnxy + 1 \, x = Cnxy \, x - 1 + Cnxy + 1 \, x - 1, \tag{1}$$

where $Cnxy + 1 \, x$ – the number of paths of search for a rapid response option of intellectual capital in the current step, or x number of variants of this reaction (this should be borne in mind that the more effective reaction is the shorter one of search paths); y is serial number of decision making ways; $Cnxy \, x - 1$, $Cnxy + 1 \, x - 1$ – the number of search paths in the previous step $s - 1$ respectively by diagonal lines $(nxy +1)$, nxy $(nxy = 0$ – line with a number of knowledge management, which is equal to $1)$.

Model of finding the ways of intellectual capital response to the uncertain tax environment, built on the lines of the attractor, is shown in Figure.

It should be noted that, in practice, an expert is not involved exhaustively in all possible response options, and in accordance to the cognitive technology of decision making, several options follow and we should chose the most significant variant of them [10]. In addition, the current economic conditions choice of prompt response direction, according to the authors, based at understanding of the nature of change management processes and creating innovation. It is necessary to take into account the principles of the intellectual capital of modern industrial enterprise: the unity of the upgrade process knowledge capital to other production processes; connection of technological and commercial effects [11]; incremental evaluation of future innovations in the implementation of individual projects; the dependence of the intellectual capital of an enterprise of the intellectual capital of an individual employee.

Thus, in the current operating conditions of the external factors affecting the state of operative planning management, company should use all possible ways to optimize internal tax environment. It is important to choose the optimal planning of such activities that may provide through the proposed discrete model.

The problem solving by operative tax planning is a situation or position of coincidence, reflecting the interest fight of the parties (the entity and tax environment components) in the circumstances of uncertainty, which is called a conflict. It is entirely subordinates to the general theory of conflicts. In the case of the implementation of the operative tax planning, on the one hand, the parties «conflict» interest in concealing their intentions, which creates uncertainty and tax environment of industrial enterprises, on the other hand, uncertainty can be estimated as an enemy entity that decides. The most effective expression of conflict theory advocates the theory of games, which are widely used in economics and allows displaying a behavior in situations in which the success of the entity making the choice depends on the choice of the other participants. According to the researches, an appropriate way of matrix
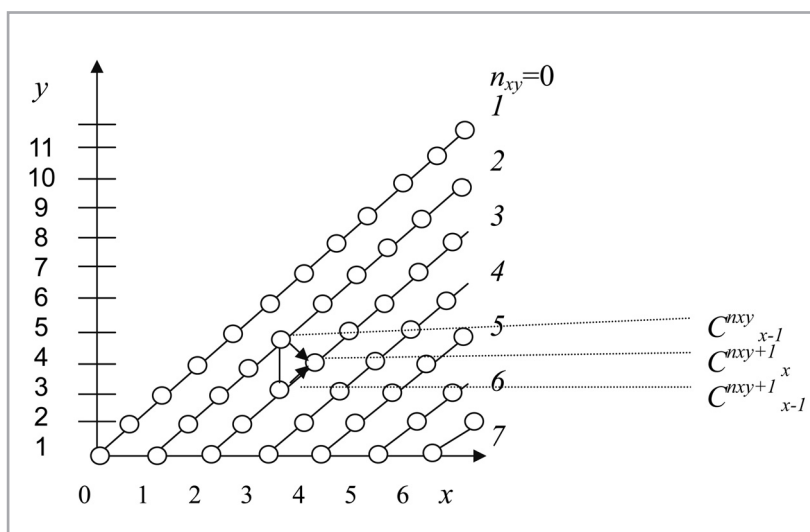

Fig. : **Discrete space situational finding of ways of quick intellectual capital response to uncertain tax environment**
Source: Developed by authors

games applying is to build economic and mathematical model of the mechanism of effective tax planning at an industrial enterprise.

We set the following conditions of the task:

s – the number of parties of tax planning to solve specific practical problems;

z – the number of tax risks and threats.

Thus, we can make a matrix A of $(s \times z)$ dimension, which will reflect the elimination of this or that particular subject or additional tax risk or tax threat. In this case, it should be noted that 0 is pointed when the employee is not involved in the elimination of risk or threat, and 1 – when the risk or threat are eliminated.

The next step is to form a matrix of $(s \times 2s)$ dimension – the matrix of participation options eliminating tax risks and threats.

Matrix C dimension is $(x \times y)$. It is a matrix of threats and eliminating tax risks in different variants of employees participation where x – tax threats and risks, $y = 2s$ – participation options, s – number of employees.

In this case,

$$C (x \times y) = A(1,x)*B(1,y)+A(2,x)*B(2,y)+...$$
$$+A(n-1,x)*B(n-1,y)+A(n,x)*B(n,y) \qquad (2)$$

$$C(x,y) = 1, C(x,y) > 0$$
$$C(x,y) = 0, C(x,y) = 0$$

$$N = 1/s \qquad (3)$$

So,

$$\sum C(y) = C(1,y) + C(2,y) +...+ C(n-1,y) + C(n,y) \qquad (4)$$
$$N = 1/z$$

$$\sum C(y) \geq z_v, \qquad (5)$$

where z_v – minimum number of threats that should be removed.

To achieve the main goal of this economic-mathematical models building – optimizing of executive tax planning mechanism – in our opinion it should be provided such optimization criteria and constraints as: 1) the number of employees involved in the elimination of tax risks and tax threats and 2) wages of employees.

$$1) \sum{}^{\grave{}} C(y) = z_v$$
$$y = 1/2^s$$
$$\sum B(y) = B(1,y) + B(2,y) +...+ B(s,y)$$
$$2) \sum B(y) \rightarrow min, \text{ when } \sum C(x) \geq z_v \qquad (6)$$

$$3) \sum{}^{\grave{}} C(y) = B(1,y)*z_1 + B(2,y)*z_2 +...+ B(s,y)*z_s; \qquad (7)$$
$$\sum C(y) \rightarrow min, \text{ if } \sum C(x) \geq z_v$$

where $Z = 1/s$ – employee wages.

Based at the model given above, we can calculate the optimal number of involved employees to remove the maximum amount of tax risks and threats. One of the options for further improvement and simplification of the optimization model can be regarded as the calculation of the optimal number of involved employees to remove the maximum amount of tax risks and threats, taking into account the fact that some workers must participate in any way, or some risks can not be accounted in the calculation. At the same time, the system of equations and constraints remain unchanged.

Conclusions. Thus, a game model of the mechanism of tax planning at the industrial enterprise, includes the key tax planning subjects such as chief accountant, deputy – chief of the tax office, tax lawyer, head of the legal department, head of planning – economic department, head of financial department under the leadership of a company director and his deputy on financial-economic issues, who is responsible for the business reputation of the enterprise and as a consequence for the financial stability of it. This model was tested on the industrial enterprise of Kharkiv region and it was proved that this model helps to improve the level of organization of tax planning via using of intellectual capital to maintain industrial enterprise business reputation.

References

1. State Statistic Service of Ukraine *(Official website)*. Retrieved from http://www.ukrstat.gov.ua/ (in Ukr.).
2. Federation of Employers of Ukraine *(Official website)*. Retrieved from http://ua.fru.org.ua/ (in Ukr.).
3. Doing Business (2013). *Doing Business in 2014: What did officials and deputies for the business.* Retrieved from http://finance.liga.net/economics/2013/9/23/articles/35618.htm
4. Verkhovna Rada of Ukraine (2010). *Tax Code of Ukraine.* Retrieved from http://zakon1.rada.gov.ua/laws/show/2755-17 (in Ukr.).
5. Solomanidina, T., Resontov, S., & Novik, V. (2005). Business reputation as one of the most important strategic advantages of the company. *Upravlinnya personalom (Personnel Management), 3,* 32-35 (in Russ.).
6. Sherbakova, K. V. (2010). Reflective management of business reputation of enterprise. *Economichnyi prostir (Economic Space), 42,* 313-323 (in Russ.).
7. Bernytska, D. I., & Kravchuk, N. O. (2011). Business reputation as a strategic factor of enterprise development. *Innovaciyna ekonomika (Innovative Economy), 3*(41). Retrieved from http://archive.nbuv.gov.ua/portal/soc_gum/inek/2011_3/41.pdf (in Ukr.).
8. Dudova, I. (2013). Human and social capital under conditions of intelligent and inclusive growth. *Ekonomicnij Casopis-XXI (Economic Annals-XXI), 7-8*(1), 30-33 (in Eng.).
9. Gordienko, E. S., & Shevchenko, Yu. I. (2008). *Optimization of the tax environment of an enterprise.* Retrieved from http://www.rusnauka.com/ (in Ukr.).
10. Larichev, O. I. (2002). *Theory and methods of decision-making, as well as the Chronicle of events in Magic countries.* Moscow: Lotos (in Russ.).
11. Cherednikova, L. E. (2008). Intellectual capital in the strategic planning of the enterprise. *Sibirskaya finansovaya shkola (Siberian School of Finance), 1,* 85-93 (in Russ.).
12. Glotova, D. V. (2013). Measurement of intellectual capital in the process of company evaluation. *Ekonomicnij Casopis-XXI (Economic Annals-XXI), 9-10*(2), 18-21 (in Ukr.).
13. Timartsev, O. Y. (2013). Tax secret: debatable aspects. *Ekonomicnij Ekonomicnij Casopis-XXI (Economic Annals-XXI), 7-8*(1), 65-68 (in Ukr.).

References (in language original)

1. Державна служба статистики України / Офіційний сайт. – Режим доступу : http://www.ukrstat.gov.ua/
2. Офіційний сайт Федерації роботодавців України / Офіційний сайт. – Режим доступу : http://ua.fru.org.ua/
3. Doing Business / Офіційний сайт. – Режим доступу : http://www.doing-business.org/
4. Податковий кодекс України [Електронний ресурс]. – 2010. – Режим доступу : http://zakon1.rada.gov.ua/laws/show/2755-17
5. Соломанидина Т. Деловая репутация как одно из важнейших стратегических преимуществ компании / Т. Соломанидина, С. Резонтов, В. Новик // Управління персоналом. – 2005. – № 3. – С. 32–35.
6. Щербакова К. В. Рефлексивне управління діловою репутацією підприємства / К. В. Щербакова // Економічний простір. – 2010. – № 42. – С. 313–323.
7. Берницька Д. І. Ділова репутація як стратегічний чинник розвитку підприємства / Д. І. Берницька, Н. О. Кравчук // Інноваційна економіка. – 2011. – № 3(41). – Режим доступу : http://archive.nbuv.gov.ua/portal/ soc_gum/inek/2011_3/41.pdf
8. Дудова І. Людський і соціальний капітал в умовах інтелектуального та інклюзивного розвитку / І. Дудова // Економічний часопис-XXI. – 2013. – № 7–8(1). – С. 30–33 (англ. мовою).
9. Годієнко Є. С. Оптимізація податкового середовища підприємства [Електронний ресурс] / Є. С. Годієнко, Ю. І. Шевченко. – Режим доступу : http://www.rusnauka.com/
10. Ларичев О. И. Теории и методы принятия решений, а также Хроника событий в Волшебных странах : учебник / О. И. Ларичев. – М. : Лотос, 2002. – 392 с.
11. Чередникова Л. Е. Интеллектуальный капитал в системе стратегического планирования предприятия // Сибирская финансовая школа. – 2008. – № 1. – С. 85–93.
12. Глотова Д. В. Вимірювання інтелектуального капіталу у процесі оцінки вартості підприємства / Д. В. Глотова // Економічний часопис-XXI. – 2013. – № 9–10(2). – С. 18–21.
13. Тімарцев О. Ю. Податкова таємниця: дискусійні аспекти / О. Ю. Тімарцев // Економічний часопис-XXI. – 2013. – № 7-8(1). – С. 65–68.