Dmitry V. Nikolaev¹, Victor V. Sazonov², Maria V. Grebneva³ DISTORTION OF COMPETITIVE INCENTIVES AT LABOR MARKET AND ITS CONSEQUENCES

The paper describes the essence of the phenomenon of distortion of competitive incentives which provokes desire not to compete but to avoid competition while reducing effectiveness of resources use of the whole society. Change in the employment structure is one of the indicators characterizing the distortions of competitive incentives. The best way to solve this problem is to increase awareness of market participants.

Keywords: distortion; incentives; competition; labor market; irrational behavior.

Дмитро В. Миколаїв, Віктор В. Сазонов, Марія В. Гребньова ВИКРИВЛЕННЯ СТИМУЛІВ ДО КОНКУРЕНЦІЇ НА РИНКУ ПРАЦІ ТА ЇХ НАСЛІДКИ

У статті здійснено спробу розкрити суть феномену викривлення стимулів до конкуренції, що провокує не прагнення до конкуренції, а відхід від неї за одночасного зниження ефективності використання ресурсів всього суспільства. Зміна в структурі зайнятості є одним з показників, що характеризують викривлення стимулів к конкуренції. Кращий спосіб вирішення проблеми викривлення стимулів полягає в підвищенні інформованості учасників ринку.

Ключові слова: викривлення; стимули; конкуренція; ринок праці; нераціональна поведінка. **Форм. 1. Рис. 1. Літ. 16.**

Дмитрий В. Николаев, Виктор В. Сазонов, Мария В. Гребнева ИСКАЖЕНИЯ СТИМУЛОВ К КОНКУРЕНЦИИ НА РЫНКЕ ТРУДА И ИХ ПОСЛЕДСТВИЯ ^{*}

В статье предпринята попытка раскрыть суть феномена искажения стимулов к конкуренции, провоцирующего не стремление к конкуренции, а уход от неё, при одновременном снижении эффективности использования ресурсов всего общества. Изменение в структуре занятости является одним из показателей, характеризующих искажение стимулов к конкуренции. Лучший способ решения проблемы искажения стимулов заключается в повышении информированности участников рынка.

Ключевые слова: искажения; стимулы; конкуренция; рынок труда; нерациональное поведение.

Introduction. Everyone is likely to behave irrationally. It depends on many reasons such as lack of knowledge, experience, skills, health and quality of life etc. As for external factors, we are talking about conditions which are valid for all market participants and affect everyone in varying degrees. There are several examples of them: government policy, unexpected changes in the economy, market inefficiencies etc.

Irrational behavior creates negative experience and further reduces incentives for working and reaching goals. In our understanding, in relation to economic field it is the phenomenon of competitive incentives distortion.

© Dmitry V. Nikolaev, Victor V. Sazonov, Maria V. Grebneva, 2015

-

Far Eastern Federal University, Vladivostok, Russia.

² Far Eastern Federal University, Vladivostok, Russia.

³ Far Eastern Federal University, Vladivostok, Russia.

Исследование выполнено при финансовой поддержке РГНФ в рамках проекта проведения научных исследований «Моделирование и оценка конкурентной активности в дисперсных рыночных средах. Разработка эффективного механизма по преодолению конкурентной инертности российской экономики», проект № 15-32-01273.

In general, the distortion of competitive incentives is the phenomenon arising from external causes and leading to inefficient use of society's resources.

In this paper, we consider the labor market distortions only but there are also economic effects of the distortion of competitive incentives in the areas of science, entrepreneurship etc.

The distortion of competitive incentives has serious consequences for society in the long term. In particular, unequal subjectivism can create different conditions for market participants. Thus, it slows down competition and natural selection.

Literature review. The distortion of competitive incentives is a new aspect in economics. At this moment there are no specific models and concepts related to our research. However, the issues of competitive incentives distortion are closely related to the theory of rational and irrational behavior.

Rationality plays an important role as a methodological principle in social sciences. Smith (1904) was one of the first to look at the issue of rationality, analyzing the behavior of "homo economicus". Homo economicus is the concept which considers humans as rational and self-interested subjects.

The neoclassical theory mainly understands rationality as the utility maximization of individuals and its individual parameters within the resources they have, and expectations regarding the actions of other partners. Different models of optimization and decision-making are used for this, for instance, in game theory (Harsanyi, 1966).

Behavior behind profit maximization is also considered as the rational one (Klein, 1946). Marschak (1950) defined utility as a quantity the mathematical expectation of which is maximized by rational economic individual. In turn, Barnett (1983) said that in a bargaining situation rational agent will insist on the outcome providing maximum equal value gain. So, rational behavior eliminates any emotion generating irrationality (Nissan, 2009).

The theory of rational behavior involves many aspects. For example, rational behavior can be analyzed in terms of bargaining costs (Hessel, 1981). Some economists state that rationality is limited to morality (Kraus and Coleman, 1987; Frank, 1987).

In addition, it is necessary to mention the application of the research of rational behavior theory in various fields (Becker, 1978) and unfalsifiability of utility maximization (Hodgson, 2012). Certainly, it would be interesting to distinguish some accompanying elements and opposites: normative, moral, deviant and cooperation behaviors (Kondo, 1991).

It is important to mention that rational behavior is opposed to irrational behavior. According to the Keynesian aggregate demand shocks, both expected and unexpected shocks can lead economy to prolonged underemployment (Akerlof and Yellen, 1987). However, this deviation simply cannot happen in the model which assumes full rational optimization and rational expectations (Akerlof and Yellen, 1987).

Sometimes rational market actors are forced to behave irrationally because of change in opportunities to respond rationally (Becker, 1962). In this paper the distortion of competitive incentives is presented as irrational behavior caused by certain conditions. The main part of the paper considers this aspect.

The goals of this paper are the following: uncovering the essence of the phenomenon of distortion of competitive incentives, theoretical analysis of its consequences and search for ways of liquidating distorting incentives' impact on the economy.

Key research findings.

Distortions of competitive incentives as unforeseen changes in the parameters of the market environment. Unforeseen changes in market environment parameters lead to reduction in justification of economic expectations and distortion of competitive incentives. In significant manifestations unforeseen changes of these parameters create conditions for the effect of "spraying", i.e. the inability to concentrate efforts due to the total destabilization of the environment.

Regarding the case of inflation and deflation, it is a well-known phenomenon that unexpected inflation or deflation leads to funds redistribution between individuals which have nothing common with their real merits or needs. For example, bank loan will lose its real value in case of unforeseen hyperinflation, so borrower actually becomes richer. Nevertheless, unexpected deflation contributes to banks enrichment. However, not everyone is aware of the consequences of such redistribution. Unfair redistribution creates false incentives, namely move away from competition. Sometimes it can lead to the loss of purpose in life, unjustified change of profession and transition to the marginalized edge of the society.

In our opinion, unexpected inflation and deflation can also have the following strongest effects:

- Sharp changes in real income of population and high income differentiation.
- High unemployment.

Distortion of competitive incentives impact on the employment structure. The hypothesis states that one of the consequences of competitive incentives distortion is change of profession, significant labor migration from one industry to the other and growth of natural unemployment.

We propose to measure these effects with the indicator of structural changes at the labor market:

$$\theta = \frac{\sum_{t=1}^{n} \left| \nu_{i,t+1} - \nu_{i,t} \right|}{n},\tag{1}$$

where θ is the indicator of structural changes at the labor market; υ is share (%) of the i industry workers (by kind of economic activity) in the total number of employed in the economy in t period; n — the number of industries (economic activities) taken for the analysis.

The economic meaning of this indicator is the calculation of average change of the share of employment by main sectors. It allows us evaluate employment changes in the main areas.

Hypothetically, the maximum value of θ is 100%, provided that all employees have changed their fields of activity.

At this stage, we analyze the value of θ for the period from 1970 to 2013 (Figure 1). High value of θ in the period of 1970–1985 was caused by the systemic crisis of totalitarian socialism in the USSR. The 1990s were mainly characterized by worsening of lives for many social groups and increased mortality in Russia. It is the period of radical market reforms in the country. The value of θ reached the maximum dur-

ing the analyzed period. In the 2000s, there was a sharp rise of the world energy prices which had positive impact on real incomes, balance of payments and economic growth. Moreover, series of effective socioeconomic reforms was also implemented. From 2006 to 2009, significant changes in the employment structure were related to economic growth and subsequent decline in production. After that, there was a relatively stable period in Russian economy. Basically, there was a move in the employment structure from agriculture and manufacturing to wholesale and retail trade, services, financial operations and management.

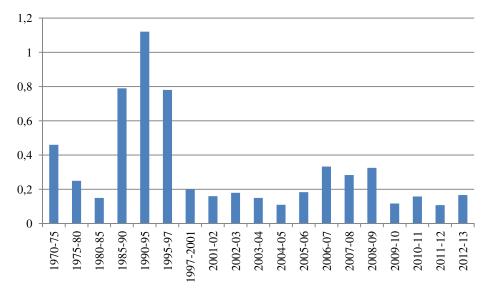


Figure 1. Structural changes at the labor market of Russia, calculated by the author according to (www.gks.ru)

Unequal subjectivism distorting competitive incentives as a cause of narrowing the size of the market and non-optimal selection. At the stage of an interview, an employer has to subjectively evaluate competences of a candidate, often using perception and emotional intelligence. After that, the employer has to compare subjective assessments based on the interviews of all candidates. But, the more candidates apply for a position, the harder it is to make such a comparison. So, the question arises whether the sensory perception can be comparable in terms of optimal selection of candidates for a position? It is obvious that it is difficult to justify the accuracy of gradation in this case. There are often cases when the employer cannot conduct a full interview with a large number of candidates for a post. Thus, there is an effect of narrowing the size of the labor market and non-optimal selection. In our opinion, first of all, this problem occurs at the labor market of state-owned institutions managers.

We suppose that competitive selection for executive positions in public institutions should be based on standardized and special computer tests.

Test base for each specialty should be also standardized, i.e. unified and applied for all state institutions in the country. It is also necessary to provide equal opportunities for all people who want to participate in this testing. The most important thing is that the test base should be updated regularly by participating universities.

Algorithm of personnel competence estimation for reducing the distortion of competitive incentives at the labor market. Along with the above suggestions, the following measures could be further steps towards reducing the factors, which contribute to the distortion of competitive incentives at the labor market:

- development and introduction of criteria to the practical use of the system that would allow an objective assessment of quality, timeliness, effectiveness, expediency of performed duties, including results and consequences of managerial decisions;
- examination of the criteria and introduction of the test-based and unprejudiced assessment system should be made for the evaluation of candidates and current employees;
- the system should be standardized and used for the selection of managers for all government organizations;
- information basis for testing should be regularly updated by participating universities;
- level of competences and the ability to cope with certain situations should be considered as the main criteria of the test-based selection.

In our view, an important step towards the establishment of effective economic system of the new format, which would use its resources effectively, is the creation of healthy competition at the labor market, in all fields of activity. We hope that the proposed system of personnel selection through independent testing of candidates would strengthen the requirements to applicants, thus increasing their competitiveness.

Conclusion. The distortion of competitive incentives at the labor market is a quite common phenomenon in our society. Significant market changes underlie it. We put forward the view that it leads to the phenomenon of deformation of economic actors' expectations and ineffective use of resources. In general, the distortion of competitive incentives arises in the following cases:

- unequal subjectivism and non-optimal selection;
- unforeseen changes in the market environment;
- market inefficiencies etc.

The distortion of competitive incentives affects the structure of employment, growth of natural unemployment and in extreme cases it can reduce the quality of natural selection and slow down the evolutionary development of society.

Thus, there are some solutions which we propose:

- competitive selection for management positions in public institutions should take place according to the algorithm we offer;
- government should raise awareness of employees about the state of the labor market and its possible future changes.

In this case, workers will form appropriate expectations and society's resources will be used most effectively.

References:

Занятость и безработица, используемые по видам экономической деятельности 2005—2013 // Федеральная служба государственной статистики // www.gks.ru.

Среднегодовая численность занятых в экономике по отраслям, 1970—2004 // Федеральная служба государственной статистики // www.gks.ru.

Akerlof, G.A., Yellen, J.L. (1987). Rational Models of Irrational Behavior. The American Economic Review, 77(2): 137–142.

Barnett, P.M. (1983). Rational Behavior in Bargaining Situation. Wiley, Nous, 17(4): 621–635. *Becker, G.S.* (1962). Irrational Behavior and Economic Theory. Journal of Political Economy, 70(1): 1–13.

Becker, G.S. (1978). The Economic Approach to Human Behavior. The University of Chicago. Chicago.

Frank, R.H. (1987). If Homo Economicus Could Choose His Own Utility Function, Would He Want One with a Conscience? The American Economic Review, 77(4): 593–604.

Harsanyi, *J.C.* (1966). A General Theory of Rational Behavior in Game Situation. Econometrica, 34(3): 613–634.

Hessel, M. (1981). Bargaining Costs and Rational Behavior: A Simple Model, The Journal of Conflict Resolution, 25(3): 535–558.

Hodgson, G.M. (2012). On the Limit of Rational Choice Theory. Economic Thought, 1: 94-108.

Klein, L.R. (1946). Macroeconomics and the Theory of Rational Behavior. Econometrica, 14(2): 93–108.

Kondo, T. (1991). Some Notes on Rational Behavior, Normative Behavior, Moral Behavior, and Cooperation. The Journal of Conflict Resolution, 34(3): 495–530.

Kraus, S.J., Coleman, J.L. (1987). Morality and the Theory of Rational Choice. Ethics, 97(4): 715–749.

Marschak, J. (1950). Rational Behavior, Uncertain Prospects, and Measurable Utility. Econometrica, 18(2): 111–141.

Nissan, E. (2009). Computation model of the emotions: from models of the emotions of the individual to modeling the emerging irrational behavior of crowds. Ai & Soc, 24: 403–414.

Smith, A. (1904). An Inquiry into the Nature and Causes of the Wealth of Nations. Fifth edition. London: Methuen and Co., Ltd.

Стаття надійшла до редакції 2.03.2015.