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COMPARATIVE ANALYSIS OF THE RAPID DEVELOPMENT AND ITS ALTERNATIVES

This article deals with a new criterion “relation to the leader” to classification of development types. According to this feature the development is divided into catching-up, rapid and development at the leader’s level. Authors determine three blocks of characteristics that enhance to understand the nature of these types: economic characteristics, innovation activity and governance. A comparative analysis of these development types is conducted.

Keywords: economic development, rapid development, catching-up development, development at leader’s level, acceleration.

Problem statement. The pro-European policy, chosen by the country's government will allow the native economy overcome the crisis and achieve the developed countries’ indexes. However, this way has many drawbacks and obstacles. In addition, it should be noted that developed countries have passed not one decade on their way of market reforms. In Ukraine, these changes should be implemented faster. It makes impossible for our country to apply catching-up development. Today there is an alternative to it, i.e. rapid development. The main hypothesis of this approach is advancing without overtaking. It means to create new features for achieving of the desired factors without copying, but through offering another benefits.

Analysis of the recent research and publications. It should be noted that in most cases rapid development appears in works of Ukrainian and Russian scientists. It is not surprising, because these are developing countries and they are trying to accelerate their transition to the developed countries. Thus, the main principles and foundations, devoted to the rapid development are described in works of such scholars as S. Glazyev [1] A. Buzgalin [2] A. Moskalenko [3; 4] V. Zakharov [5] M. Lyzun [6] and others. However, some aspects of the rapid development were discussed long before, in the works of world famous foreign scientists such as D.Bell [7] M. Buckanan [8] Schumpeter [9] K. Christensen [10] R. Foster and S. Kaplan [11].

But all above-mentioned researches are devoted to only a few theoretical foundations of the rapid development in a greater extent, and they have no clear definition of its nature and content. One can’t understand characteristics of the rapid development which distinguish it from other types of development.

The aim of the article is to establish the rapid development nature and content, based on its comparison with development alternative types.

The main material. Firstly, it should be noted, in order to understand the objects of comparative analysis, we proposed to add one more criterion – “relation to the leader” to classification of the development types. Each person, an enterprise and the country in general want to be leaders in their field. The leader dictates the rules and affects others. Therefore, we suppose, this feature is more characteristic than others, while choosing the development direction.

Let’s observe this classification in more details, its features and types of development and

focus on the factors that contribute to the realization of these varieties. Thus, in relation to the leader there are such types of development:

– **catching-up development** involves imitation the leader's experience in goods and services production. This type of development is aimed at constant "race" on the leader's level. However, in fact due to this type of development it is impossible either to overtake or to reach the leader, because he never stops and continues his development. Although the main motto of this type is "catch up and overtake", there is no result in practice. Countries with catching-up development are those, which are developing, i.e. all countries of the former Soviet Union, South America, Mexico, Turkey, Iran and others. It should be noted that these countries have great potential, because about 80% of the Earth's total population live there;

– **development at leader's level** in fact is a reflection of the leaders' and their immediate followers' development. Today the statistics of economically developed countries indicates the growth rate of GDP at 1,5-2,5% annually. Although this rate is not constant. So after the crisis during 2008-2009 growth rates of many world leaders' economies were all negative. And many of them have managed to regain their lost positions by faster GDP growth in recent years. Basically, this development demonstrates the leading position in various international rankings, the main criteria of which are: GDP, GDP per capita, Human Potential Development Index, Global Competitiveness Index and others. All developed countries are the brightest representatives of the leaders (as a basis of comparison). Today they are about sixty, main part of which is based on the "Big Seven": the U.S., Japan, UK, France, Italy, Germany, Canada. They share about half of world's GDP. Besides, this list includes the Netherlands, Belgium, Sweden, Switzerland, Finland, Norway, Denmark, Austria, Australia, New Zealand and others;

– **rapid development** has its main motto "outstrip without overtaking". In this case it is not about imitation but creation of new features that allow to breakthrough and outstrip leaders. It may be realized only if the growth rate is at least twice higher than the leaders' ones. Indeed, as statistics proves that every ten years each country doubles its incomes. There is no country that has chosen rapid development in all spheres of activity. More often, rapid development is leading, but it is supplemented with other types. But there are countries that proved the effectiveness of the rapid development. These include China, that outstripped Japan several years ago and took second place in terms of economic development in the world after the United States; India, Singapore, Thailand, Hong Kong, South Korea, and others. Their success owes the innovation activity and producing of the obtained inventions to the world stage.

Basically, all the above-mentioned types of development are not absolute, and cannot be chosen as the only appropriate for the whole economy. They should be complementary. If you refer to the language of numbers it is advisable to apply the Pareto principle and based on it technique of ABC analysis. It is the Pareto principle (and its derivatives) that is more likely observed in the analysis of the development theory. Thus, 20% of the population live in countries that generate about 80% of global GDP and 80% of the population live in countries that bring the rest; about 10% of developed countries have 90% of all foreign investment; 10% of developed countries have 90% of all macro technologies in the world; the share of STP in rate of developed countries GDP growth is 75-90%. Therefore, it is necessary to choose such proportions of catching-up, rapid and leading development which would allow the country develop holistic, with synergistic effect. For example, 20% of all manufacturers have chosen the rapid development, and they generate 50% of GDP, 30% of producers – development at the leader's level, bringing 30% of GDP and 50% of producers – catching-up development, which brings the remaining 20% of GDP. The economy of Ukraine is appropriate to use the

principles of catching-up development to such industries as household appliances produce, motor industry, automobile industry, chemicals; principle of development at the leader's level – for defense, aerospace and shipbuilding industries, heavy and power engineering, information technology industry; principles of the rapid development-all other possible areas.

Talking about the optimal structure of development types, it should be noted that each type has certain development strategy. Thus, catching-up strategy is characterized by “persecution”, i.e. the assimilation of competitive products that are available in the developed countries. This strategy should be used in cases, when existing products and services do not require significant improvements. Here, the principle of “why re-invent the wheel” is used. This approach can save resources for use in areas where the country can really make a sharp break. The development at the leader's level is characterized by the strategy of “leader technologies”. It means to use own scientific and technological advances on the basis of fixed capital for new products and technologies, to form the demand, and to enter new markets. The catching-up development is characterized by a “breakthrough” strategy – the creation of innovative products that outstrip modern designs during one or two generations, and / or form new demands and markets.

In addition, in the case of different types of development, certain features to form the structure of the economy can be traced. Traditionally economy is divided into two spheres – the sphere of production, which includes mining and manufacturing sectors (both first and second sectors) and non-productive sphere, which includes the service sector and knowledge, research and development (the third and fourth sectors).

Material manufacturing, i.e. mining sectors is dominated in the structure of economies with catching-up development. Thus the greater emphasis is on mining, primary industries. These countries are the raw materials additions for developed countries. The structure of economies with the development at leader's level is presented by immaterial sphere, namely the service sector. Until recently it was believed that the economic development of the country is based on the materials production. Today, however, the share of the service sector in world gross domestic product is more than 65%, and the share of employment in services in economically developed countries is over 70%. Currently, the growth of services production sphere is almost doubled worldwide and overtakes twice the material goods production. It proves the leading position of the services sector. In general, the active development of services is associated with a new stage of society development – the post-industrial society. According to the Daniel Bell's concept of “post-industrial society” the main feature of this phase is the domination of new knowledge and science, leading to innovations in all life areas. The main manpower in this case is the leading experts and consultants who form a new “intellectual technology”. And the level of the population affluence is measured by the amount and quality of purchased services.

Non-productive sphere is also characteristic for economies oriented at outstripping development, but the fourth sector plays a leading role. The science and new knowledge allow inventing new technologies and gaining the world.

Analyzing the structure of the economy, it is also worth noting which technological modes dominate in it. So the 3rd and 4th technological modes dominate in countries where catching-up type is leading, and it indicates that they lag behind the developed countries. In the leading countries 5th and 6th modes dominate. It should be noted that the last one is still being formed. That is why it is principal for the catching-up development. It provides new technologies creation that will become the core of the new technological structure and development cycles. Besides, today people talk about the seventh mode, based on human consciousness as a productive force.

Based on the leading sectors within a particular kind of development, the main means which provide this development are also singled out. The basis of the catching-up development is to sale raw materials to other countries, and to produce products that are competitive only in the native market. To achieve development at the leader's level the main means are production and marketing of innovation. It should be noted that over the past decade, innovations in services and products manufacturing technologies became more radical and profitable. The Internet invention is one of the main discoveries that changed people's lives forever. In general, the major inventions of recent decades include: wireless technologies, alternative technologies, the study of the genome, Energy and Water-saving technologies, space exploration technology, DNA analysis, computer modelling technology, and others. It should also be noted that in recent years, countries who have chosen an innovative development declared its export orientation, i.e., the introduction of new goods and services to foreign markets. The basis of the rapid development is human capital. New features that change the world are created due to new knowledge and human experience. Therefore, one of the main tasks for the rapid development should be an investment in human capital and formation of the wide motivation system for the intellectual work.

Talking about the innovative orientate of the leading countries, we should also study relations to innovations in other countries. The objects of the investigation are both domestic inventions and imported innovative technologies. Countries that have chosen the catching-up development usually produce only pseudo-innovations or innovative activity is almost absent. Pseudo-innovations are either small changes in traditional goods and services, or limited innovation space, i.e. goods and services are new only to the country, and other countries (more developed) have already mastered them. In fact, these countries are engaged in importing of innovations. For countries, developing at the leader's level, characteristic is the production and selling of modifying innovations. They improve previous designs and create a new generation of already known products for foreign markets. The rapid development is characterized by the creation of radical innovations, i.e. the formation of new markets, segments and generally new needs.

We should also note that rapid development is aimed to meet the existed but unsatisfied customers' needs. The development on the leader's level provides meeting of the hidden needs or searching and implementing of new ways to meet the existing ones.

Analyzing the success of the leading countries it is necessary to investigate the activities in certain areas used for implementation of this purpose. Firstly, the development at the leader's level provides significant support from the state in the innovation sphere [12]. This support is both internal and external. Thus, the leading countries have enormous financial resources and possess 9/10 of foreign investment in industrial, agricultural, trade and other industries in other countries. Economically developed countries are members of the Organization of Economic Cooperation and Development (OECD) and the so-called Paris Club, which controls the global financial market. Countries with catching-up development are recipients of the investments. Their development is seriously doubtful without the financial support of international organizations and other countries. Hence, one should note the necessity for aggressive governmental support in the field of innovation for effective rapid development. The aggressive support is significant economic reforms, radical changes towards innovation-directed branches, strict time limits for the support program, etc.

Second, the leading countries pay much attention to social policy. They are characterized by high social guarantees and quite expensive manpower, in contrast to the countries of the catching-up development type, where the salary is average, and in some areas – at lower level than average. Social guarantees are almost absent in those countries. Consequently, with rapid

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development the level of wages should be decent and social guarantees should be provided for intellectual work employees. Indeed, as we have already stated, the human capital is the foundation of rapid development.

It is characteristic for developed countries that employees have several diplomas in various fields. This is due to the fact that in recent years the term of knowledge aging has reduced. Today, this factor is about five years. That means that after graduation students possess knowledge that lost their importance and relevance. Therefore, multiple studies are demand of the modern world. A single education is enough for the catching-up development. While working employees stop learning and developing. It ultimately leads to a backlog of their professional development, and economy in general. That is why the rapid development process provides a permanent, continuous and multi-level learning. This approach will allow getting ahead the others and taking a leading position. All the above allowed us to create a list of characteristics to compare the types of development. It clearly demonstrates features of the rapid development, its nature, the means to achieve (Table 1).

Table 1 – Comparative characteristics of “relation to the leader” development (authoring) alternatives

Type of development Characteristics	Catching-up – desire to achieve the level of leading countries development	On the leader’s level – continuous development, which results in the annual GDP growth rate of 1,5-2,5%	Rapid – ahead of leading countries GDP growth 2-3 times
1	2	3	4
Characteristics of the countries’ economy			
Countries	Developing countries. The brightest representatives: CIS countries, South American countries	Developed countries. The most brightest representatives: the “Big Seven”, small industrialized European countries: Netherlands, Belgium, Sweden, Switzerland, Finland, Norway, Denmark, Austria and others, as well as industrialized countries of the southern hemisphere: Australia, New Zealand	Brightest representatives of recent years: China, India, South Korea, Singapore, Thailand
The strategy applied	Strategy of “persecution”	Strategy of “leader technology”	“Breakthrough” strategy
Economy structure	The sphere of material manufacture prevails, a mining sector has larger share	The sphere of non-material manufacture prevails, a service sector has larger share	The sphere of non-material manufacture prevails, the fourth sector has larger share
The development basis	Selling of raw materials to other countries, producing goods for the domestic market	Manufacture and export of innovative products and services, and technologies for their production	The use of human intelligence, knowledge and experience to discover new technologies
Technological mode prevailing	3 rd and 4 th	5 th and 6 th	6 th and foundation of the 7 th
Characteristics of the governmental management			
The state policy in the field of innovation and investment development	Receiving investments from international organizations and other countries	Supporting of innovations, large investments in other countries	Aggressive support for innovation, innovation oriented to export
Social policy	Low social guarantees, the average manpower level	A high level of social guarantees, the expensive manpower	A high level of social guarantees, the expensive intellectual manpower

Table 1 (continued)

1	2	3	4
Characteristics of the innovation activity			
Society type	Pre-industrial	Industrial and post-industrial	Post-industrial
Features in education	Occupational education, higher education	Several diplomas of higher education in different fields	Continuing and multi-level education
Satisfied demands	Existing demands, dying demands	Hidden demands, other ways to satisfy existing demands	New demands
Innovative behaviour	Import of innovations	Export of innovations	Forming of new markets for innovations both inside and outside the country
Type of innovations	Pseudo-innovations and traditional goods	Upgrading	Radical

Analyzing the data from the table 1 it should be noted that rapid development is mentioned in the context of the macro-level, i.e. the level of the state, and the main criterion to determine the type of development is the GDP growth rate. However, GDP is formed under the influence of companies that conduct their business activities within the country and, we suppose, that the rapid development firstly needs to be implemented at the separate companies level. An appropriate level of native enterprises development will allow the development of the whole country. This is proved by many developed countries. Today the first place in terms of GDP is taken by the United States. And U.S. companies take first places of the world rankings among companies in terms of profitability, market capitalization and brand value [13-15]. In addition, they have a larger share of the companies' totality, represented in the rankings. China is an example of the effective rapid development use for enterprises and thus, achieving of the whole country significant improvement. In recent years the growth rate of Chinese companies profits were several times higher than their rivals. This allowed to get top positions in the world rankings and lead the country to the second place in terms of GDP. Thus, it proves the need to develop a mechanism to implement the rapid development on the individual enterprises level, i.e. in the micro level.

Conclusions and perspectives for further research. Today the rapid development has an alternative – the catching-up development. In this paper, we proposed a criterion “relation to the leader” which allows to classify them. Hence, one more type of development can be singled out – development at the leader's level, which is the basis for comparison. Based on the analysis of available information we singled out a number of characteristics that should be considered while investigating the rapid development and its alternatives. These characteristics were used in the comparative analysis. It was also found out that the rapid development prevails at the macro level, or level of a particular industry, and is not present at the enterprise level. Although the companies form the country's economy.

In this regard, the author's further research aim is to develop the theoretical and methodological bases of the rapid development at the level of individual economic subjects.

1. Глазьев С.Ю. Стратегия опережающего развития России в условиях глобального кризиса : монография / С.Ю. Глазьев. – М. : Экономика, 2010. – 287 с.

2. Бугалин А.В. В поисках будущего России: «Экономика для человека», или Стратегия опережающего развития – III / А.В. Бугалин, А.И. Колганов // Стратегия опережающего развития – III. Том 16. Российские модернизации: диагнозы и прогнозы / под общ. ред. А.В. Бугалина, Р. Крумма. – М. : ЛЕНАНД, 2011. – С. 297-352.

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3. Москаленко О.М. Випереджаючий економічний розвиток у системі стратегічних потреб світового суспільства / О.М. Москаленко // Вчені записки : збірник наукових праць. – К. : КНЕУ, 2012. – Вип. 14. – Ч. 1. – С. 41-48.
4. Москаленко О.М. Методологія дослідження теоретичної моделі випереджаючого економічного розвитку в сучасній політичній економії / О.М. Москаленко // Економіка розвитку. – 2013. – №3(67). – С. 16-20.
5. Захаров В. Опережающее развитие Санкт-Петербурга – Проект мирового сообщества? [Концепция и План действий] [Электронный ресурс] / В. Захаров // Личность и культура. – 2003. – № 3/4. – Режим доступа: http://www.peacefromharmony.org/?cat=ru_c&key=179
6. Лизун М.В. Випереджаюче економічне зростання: міжнародний та український аспекти : дис. ... канд. екон. наук : 08.00.02 / М.В. Лизун. – Тернопіль, 2007. – 207 с.
7. Bell D. Notes on the Post-Industrial Society / D. Bell // The Public Interest. – 1967. – №7. – P. 102-118.
8. Бьюкенен Дж.М. Сочинения. Конституция экономической политики. Расчёт согласия. Границы свободы / Дж.М. Бьюкенен / Нобелевские лауреаты по экономике. Т. 1 / Фонд экономической инициативы. – М. : Таурис Альфа, 1997. – 560 с.
9. Schumpeter J.A. Capitalism, socialism and democracy [Electronic resource] / J.A. Schumpeter [introduction by R. Swedberg]. – George Allen & Unwin Ltd., 1994. – Access mode: <http://digamo.free.fr/capisoc.pdf>
10. Christensen Clayton M. The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business / Clayton M. Christensen. – New York : Harper Books, 2000.
11. Foster R. Creative Destruction: Why Companies That Are Built to Last Underperform the Market And How to Successfully Transform Them / R. Foster, S. Kaplan. – Currency publisher, 2001.
12. Ильяшенко Н.С. Развитие национальной инновационной системы Украины как перспектива выхода на мировой рынок / Н.С. Ильяшенко, Е.А. Мицура // Актуальні проблеми економіки. – 2013. – №5(143). – С. 83-94.
13. Топ-100 найбагатших компаній світу [Електронний ресурс]. – Режим доступу: <http://infolight.org.ua/content/top-100-naybagatshih-kompaniy-svitu-v-2008-2013-г>
14. Топ-50 наиболее прибыльных компаний мира в 2013 году [Электронный ресурс]. – Режим доступа: <http://globalstocks.ru/materialyi/rejtingi/top-50-naibolee-pribyilnyih-kompaniy-mira-v-2013-godu/>
15. Топ-100 крупнейших компаний мира по рыночной капитализации [Электронный ресурс]. – Режим доступа: <http://www.pwc.com/ua/ru/survey/2013/all/top-100-capitalisation-2013.html>

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Порівняльний аналіз випереджаючого та альтернативних йому типів розвитку

У статті запропоновано доповнити класифікацію типів розвитку ще однією ознакою «відношення до лідера». За цією ознакою розвиток поділяють на наздоганяючий, випереджаючий та на рівні лідера. Виокремлено три блоки характеристик, які покращують розуміння сутності цих різновидів: блок економічних характеристик, інноваційної діяльності та державного управління. Проведено порівняльний аналіз зазначених типів розвитку.

Ключові слова: економічний розвиток, випереджаючий розвиток, наздоганяючий розвиток, розвиток на рівні лідера, прискорення.

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Сравнительный анализ опережающего и альтернативных ему видов развития

В статье предложено дополнить классификацию видов развития еще одним признаком «позиция относительно лидера». По этому признаку развитие разделяют на опережающее, догоняющее и на уровне лидера. Выделено три блока характеристик, которые улучшают понимание сущности этих видов развития: блок экономических характеристик, инновационной деятельности и государственного управления. Проведено сравнительный анализ обозначенных видов развития.

Ключевые слова: экономическое развитие, опережающее развитие, догоняющее развитие, развитие на уровне лидера, ускорение.

1. Hlazev, S.Yu. (2010). *Stratehiia operezhaiushcheho rozvitiia Rossii v usloviakh hlobalnoho krizisa [Strategy of outstripping development of Russia in the global crisis]*. Moscow: Economics [in Russian].
2. Buzhalin, A.V., & Kolhanov, A.I. (2011). V poiskakh budushcheho Rossii: «Ekonomika dlia cheloveka», ili` Stratehiia operezhaiushcheho rozvitiia – III [In search of the future of Russia, «Economics for the man», or outstripping development strategy]. A.V. Buzhalin & R. Krumm (Eds.). *Stratehiia operezhaiushcheho rozvitiia – Outstripping development strategy*. (pp. 297-352). Moscow: LENAND [in Russian].
3. Moskalenko, O.M. (2012). Vyperedzhaiuchy ekonomichnyi rozvytok u systemi stratehichnykh potreb svitovoho suspilstva [Outstripping economic development in the system of strategic needs of the global community]. *Vcheni zapysky – Scientific notes*, 14/1, 41-48 [in Ukrainian].
4. Moskalenko, O.M. (2013). Metodolohiia doslidzhennia teoretychnoi modeli vyperedzhaiuchoho ekonomichnoho rozvytku v suchasni politychnii ekonomii [Methodology of research of the theoretical model of outstripping economic development in modern political economy]. *Ekonomika rozvytku – Economics of development*, 3(67), 16-20 [in Ukrainian].
5. Zaharov, V. (2003). Operezhaiushcheie rozvitiie Sankt-Peterburha – Proekt mirovoho soobshchestva? [Konseptsiia i Plan deistvii] [Outstripping development of St. Petersburg – The project of global community? [Concept and Action Plan]. *Lichnost i kultura – Personality and Culture*, 3/4. Retrieved from http://www.peacefromharmony.org/?cat=ru_c&key=179 [in Russian].
6. Lyzun, M.V. (2007). Vyperedzhaiuche ekonomichne zrostantia: mizhnarodnyi ta ukraïnskyi aspekty [The outstripping economic development: international and Ukrainian aspects]. *Doctor's thesis*. Ternopil [in Ukrainian].
7. Bell, D. (1967). *Notes on the Post-Industrial Society. The Public Interest*, 7, 102-118 [in English].
8. Buchanan, J.M. (1997). Sochineniia. Konstitutsiia ekonomicheskoi politiki. Raschet sohlasiiia. Hranitsy svobody [Works. The constitution of economic policy. Settlement agreement. frontiers of freedom]. *Nobel laureates in economics. Foundation economic initiative*. Moscow: Taurus Alfa [in Russian].
9. Schumpeter, J.A. (1994). *Capitalism, socialism and democracy*. George Allen & Unwin Ltd. Retrieved from: <http://digamo.free.fr/capisoc.pdf> [in English].
10. Christensen, C.M. (2000). *The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business*. New York: Harper Books [in English].
11. Foster, R., & Kaplan, S. (2001). *Creative Destruction: Why Companies That Are Built to Last Underperform the Market And How to Successfully Transform Them*. Currency publisher [in English].
12. Illiashenko, N.S., & Mitsura, O.O. (2013). Razvitiie natsionalnoi innovatsionnoi systemy Ukrainy kak perspektiva vykhoda na mirovoi rynok [Development of Ukraine's national innovation system as the prospect of entering the global market]. *Aktualni problemy ekonomiky – Actual Problems of Economy*, 5(143), 83-94 [in Russian].
13. *Top-100 naibahatshykh kompanii svitu [Top-100 the richest companies in the world]*. Retrieved from <http://infolight.org.ua/content/top-100-naybagatshih-kompaniy-svitu-v-2008-2013-rr> [in Ukrainian].
14. *Top-50 naiboliie prybylnykh kompanii mira v 2013 hodu [Top 50 the most profitable companies in the world in 2013]*. Retrieved from <http://globalstocks.ru/materialyi/rejtingi/top-50-naibolee-prybylnyih-kompaniy-mira-v-2013-godu/> [in Russian].
15. *Top-100 krupneishykh kompanii mira po rynochnoi kapitalizatsii [Top-100 World's largest companies by market capitalization]*. Retrieved from <http://www.pwc.com/ua/ru/survey/2013/all/top-100-capitalisation-2013.html> [in Russian].

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