

Economic growth in conditions of international migration increase

Crecimiento económico en condiciones de incremento de la migración

USHAKOV Denis [1](#); KHAIRIREE Krongthong [2](#) & PODOLSKAYA Tatyana [3](#)

Received: 18/06/2019 • Approved: 30/09/2019 • Published 07/10/2019

Contents

- [1. Introduction](#)
 - [2. Methods of the study](#)
 - [3. Main results](#)
 - [4. Conclusions](#)
- [Bibliographic references](#)

ABSTRACT:

Fast growing international migration as a factor of labor globalization now is one of the most important trends of world economy and determinants of social – political transformations. The Study of fundamental economical reasons for international migration is relevant due to their prognostic, predictable and normative potential, which can be used in conditions of global economic non-stability. This paper analyzes role of natural-resources, financial and labor factors in economic growth of the modern states; studies relationships between stimulating role of natural resources, finance and labor with levels of modern countries' economy development.

Keywords: international migration; migrant; labor productivity; economy efficiency of migration; migration policy

RESUMEN:

El rápido crecimiento de la migración internacional como factor de globalización laboral ahora es una de las tendencias más importantes de la economía mundial y determinantes de las transformaciones sociopolíticas. El estudio de las razones económicas fundamentales para la migración internacional es relevante debido a su potencial pronóstico, predecible y normativo, que puede utilizarse en condiciones de no estabilidad económica mundial. Este documento analiza el papel de los recursos naturales, los factores financieros y laborales en el crecimiento económico de los estados modernos; estudia las relaciones entre el papel estimulante de los recursos naturales, las finanzas y el trabajo con los niveles de desarrollo económico de los países modernos.

Palabras clave: migración internacional; inmigrante; Productividad laboral; eficiencia económica de la migración; política migratoria

1. Introduction

Factors for national economy development within the frames of complex global economic system, as well as conditions for long-term economic progress even in turbulent market environment have always been prior areas of science research (Nureev, 2008; Day, 1994; Hicks, 1973; Keynes, 1936; Kondratiev, 1928). Today, economic growth is a central problem of macroeconomic policies of all nations and states.

Most of existing approaches (Keynes, 1936; Kuznets, 1968; Marx, 1953; Tobin, 1992)

identifies few factors for economic growth that are related with natural resources, finance, labor and technological capabilities of the country. In this study we evaluated a role of each factor (resources, finance and labor) in providing of economic growth for modern countries from 2004 to 2016.

It should be noted that proposed study is not leveling a value of factor of innovative and technological development for countries' economic growth (Acemoglu, 1998; Harrod, 1973). In the limited frameworks of this study we considered a factor of innovativeness of national economic system in conjunction with national labor potential.

The purpose of the study is to determine (based on the analysis of countries' macroeconomic indicators) an importance of three factors (natural resources, human resources and financial resources) to ensure a dynamic economic growth of the modern states in the short term (2006 - 2018). In connection with this purpose following research objectives were set:

- analyze an impact of natural-resource potential on countries' economic growth;
 - define the role of financial resources of the country to ensure economic growth;
 - characterize an importance of labor potential of countries in implementation of the world economic progress;
 - track a dynamics of factors for economic growth in modern states for last 8 years (from 2006 to 2018);
 - test an effect of "diminishing utility" for three factors of economic growth (resource, financial, and labor);
 - correlate dynamics of economic growth in the world with dynamics of economic efficiency of the using of natural, financial and labor factors in national economic systems.
-

2. Methods of the study

To conduct the study we used the secondary data - statistical data of World Bank (2006 - 2018) that is available on the World Bank official website (www.worldbank.org).

For evaluation of natural- resources role in providing of countries' economic growth we calculated a synthesizes index that aggregates following characteristics of the country - estimated value of land and natural resources of the country; share of mining in GDP; energy capacity of the national economy; degree of concentration of energy in the country; energetic efficiency of the country; country's share in world export-import of natural resources; internal and external competitiveness of the country's mining sectors.

To assess the role of financial factors of economic growth we calculated an index that aggregates (Clark et al., 1981): level of capitalization of the national economy, national annual balance of payments, level of capitalization of the country's leading stock exchanges, level of liquidity of the national economic system, level of investment in fixed assets.

Finally, for evaluation of impact of labor factor on national economical growth we used following macroeconomic indicators: capacity of country's labor market, productivity of labor, GDP per employed person, rate of unemployment, national structure of employment.

3. Main results

The results of stimulating economic growth impact of natural resources, financial and labor factors are presented in Tables 1, 4 and 5.

Taking in account that balanced value of each of three analyzed factors in countries' economic progress should be about 33%, we can note that possible highest role of natural-resources in economic progress belong to rapidly developing countries of the Asia-Pacific region, North Africa and Latin America.

At the same time, countries with developed economic systems, and modest dynamics of

economic growth (EU, USA), as well as small countries that are geographically deprived of powerful natural-resource basis (Kyrgyzstan, Armenia) have small stimulate impact of this factor.

In order to test a hypothesis of diminishing economic efficiency of natural-resources for economic growth, we made a comparative analysis of countries with largest and smallest (among the analyzed countries) territories (land is one of the most important natural resource) (Table 2).

Results of comparative analysis show that stimuli role of natural resources in ensuring of countries' economic growth is not reducing together with growth of their natural resource potential. However homogeneity of this group is very low.

Only testing of the correlation between stimulating impact of natural resource potential and level of countries' economic development (Gross Domestic Product, GDP, per capita) confirms that the role of natural resources in economic growth of developed countries is significantly lower than in developing ones (Table 3).

Table 1

Stimulate impact of natural resources on economic growth of the modern countries (leaders and outsiders), 2018 (Calculated by authors)

№	Leaders	Index of stimulating impact of natural resources	№	Outsiders	Index of stimulating impact of natural resources
1	Philippines	82,83	63	Latvia	22,8
2	Peru	77,28	64	Kazakhstan	22,53
3	Colombia	76,5	65	Finland	21,34
4	India	75,83	66	Canada	21,13
5	Morocco	73,22	67	Saudi Arabia	20,92
6	El Salvador	73,09	68	Australia	19,86
7	Sri Lanka	72,51	69	Norway	18,32
8	Thailand	67,95	70	Kyrgyz Republic	12,27
9	Panama	67,14	71	Armenia	9,78
10	Montenegro	63,86	72	Iceland	9,48
				Average Index	23,1

*Maximal Index (100%) means that country is developing only due to own natural resource potential

Data in Table 3 shows that countries with the lowest GDP per capita remain extremely high role of natural resources in ensuring their economical growth. On the one hand, this can be explained by simply lack of other sources for economic progress (for example, financial resources or skilled labor) in the poorest countries. On the other hand, this fact proves an urgent need to find new, more efficient sources for economic growth in the poorest countries, deprived of own natural resources (e.g. , Jordan and Kyrgyzstan), that

will be able to guarantee long-term and responsible strategy for national economic progress.

Table 2
Comparison of natural resources' stimulating impact in biggest and smallest countries of the world, 2018 (Calculated by authors)

Index of stimulating impact of natural resources	TOP-15 countries with smallest territories		TOP-15 countries with biggest territories	Index of stimulating impact of natural resources
67,14	Panama	1	Peru	77,28
30,46	Ghana	2	Colombia	76,5
33,52	Singapore	3	India	75,83
33,24	Denmark	4	Indonesia	62,4
72,51	Sri Lanka	5	Brazil	58,71
31,75	Netherlands	6	Mexico	57,62
24,66	Slovak Republic	7	China	53,36
63,86	Montenegro	8	Bolivia	52,72
24,61	Belgium	9	South Africa	43,15
73,09	El Salvador	10	Russian Federation	31,2
42,95	Average			46,5

*Among 72 analyzed countries

Table 3
Comparison of natural-resource factor's impact on economic growth of 15 richest and 15 poorest countries, 2018 (Calculated by authors)

Index of stimulating impact of natural resources	TOP – 15 Richest economies		TOP – 15 Poorest economies	Index of stimulating impact of natural resources
9,48	Iceland	1	Kyrgyz Republic	12,27
9,48	Norway	2	Paraguay	25,47
9,78	Australia	3	Ghana	30,46
12,27	Canada	4	Zambia	35,04
18,32	Finland	5	Jordan	52,14

19,86	United States	6	Pakistan	52,69
20,92	Belgium	7	Bolivia	52,72
21,13	Sweden	8	Egypt, Arab Rep.	53,8
21,34	France	9	Bangladesh	58,21
22,53	Netherlands	10	Vietnam	58,35
19,012	Average			53,4

*By number of GDP per capita,
among 72 considered countries

The values of financial (saturation by capital) resources impact on countries' economic growth are shown in Table 4. An analysis of this data shows:

- highest role of financial factor in economic growth of developing countries, both with huge natural-resource potential (Ukraine, Venezuela , Kazakhstan) or without it (Uruguay, Armenia, Kyrgyzstan);
- high inverse correlation between the value of stimulation impact of financial potential and capital's saturation of the countries. It is noticeable that countries with high financial saturation have extremely low capital's impact on their economic growth;
- despite of extremely high demand for capital from developing countries, within all analyzed countries an average stimulating impact of financial factor is much lower than stimulating impact of natural- resources. This can be explained by high mobility of capital and by high concentration of capital in three global centers of capitalism with maintenance of extremely needs for capital in many developing countries (De Hass, 2009; Röpke, 1985).

Table 4

Impact of financial factor on the stimulation of economic growth of the modern countries (leaders and outsiders), 2018 (Calculated by authors)

Nº	Leading countries	Index of stimulating impact of financial factor	Nº	Outsiders	Index of stimulating impact of financial factor
1	Uruguay	92,47	63	Chile	4
2	Armenia	87,58	64	Netherlands	3,46
3	Kyrgyz Republic	86,19	65	Norway	3,24
4	Paraguay	69,07	66	Denmark	3,14
5	Ghana	64,1	67	Australia	2,76
6	Georgia	61,96	68	Canada	2,73
7	Latvia	59,26	69	Sweden	2,45
8	Macedonia, FYR	59,08	70	United States	2,32

9	Ukraine	57,84	71	United Kingdom	2,23
10	Zambia	57,58	72	Singapore	1,77
				Average	19

*Maximal Index - 100% - means that country is developing only due to own financial potential

Finally, Table 5 shows the performance of stimulating effect of the labor factor. Data in Table 5 shows a highest stimulate role of the labor factor mainly in developed countries of the West with high labor productivity and innovative (Aghion & Howitt, 1990), high technological structure of national economies, contributing a further growth of labor efficiency.

At the same time, economically underdeveloped countries, including agrarian states of Africa, Asia and Latin America, are growing not due to their labor force potential.

Table 5

Impact of the labor factor on economic growth of the modern countries (leaders and outsiders), 2018 (Calculated by authors)

Nº	Leading countries	Index of stimulating impact of labor potential	Nº	Outsiders	Index of stimulating impact of labor potential
1	Norway	78,44	63	Zambia	7,38
2	Australia	77,39	64	Pakistan	7,36
3	Canada	76,14	65	Georgia	7,1
4	Finland	73,93	66	Vietnam	5,7
5	United States	73,39	67	Paraguay	5,46
6	Sweden	72,71	68	Ghana	5,44
7	Iceland	72,27	69	Armenia	2,63
8	Saudi Arabia	71,94	70	Uruguay	2,46
9	Belgium	70,95	71	Bangladesh	2,39
10	France	65,63	72	Kyrgyz Republic	1,54
				Average index	22,4

*Maximal Index - 100% - means that country is developing only due to own labor potential

4. Conclusions

An analysis of macroeconomic indicators of the modern states allows making several conclusions.

Extremely high positive correlation (0.88) between stimulating role of labor factor with

GDP per capita in the modern states. At the same time there are almost identical negative correlations between the stimulating role of natural resources and financial factors with GDP per capita in the modern states (-0.47 and -0.49 respectively).

This statistical finding directly confirms an important economic transformation – an economic growth of the country has increasingly provided not by natural and financial resources (including borrowed ones) but by productivity and quality of the labor force.

Allowing a possibility of feedback (a reducing of the role of high-skilled labor in economic growth determines simplification of national economy and its further impoverishment) we can make an extremely important finding for countries that actively attract low-skilled labor (including Russia, UAE, and Thailand).

Qualitative economic progress of the country due to involvement of unskilled workers is impossible in the long term! With a growth of number of arriving migrants national economic progress continues to be provided only by financial and natural resources of the countries.

In conditions of rapidly decreasing of stimulating effectiveness of capital, as well as limited natural resources potential of the country, this strategy has a dead end, is unable to change country's positioning in the structure of international division of labor, can't guaranty discovery and development of new resources for economic growth.

- taking in account a specific of macroeconomic indicators of the countries of global avant-garde, a negative correlation between stimulating role of the labor factor and dynamics of economic growth of modern states (-0.42) seems logic. It can be concluded that states are growing fastest due to their natural resource potential (high economic dynamics is traditionally peculiar for developing countries). While an importance of the labor factor is more typical for countries with low dynamics of economic progress (usually developed ones).

- finally , analyzed a correlation between indicators of stimulating roles of three factors for economic development and indexes of international migration in the modern countries, we can determine that the maximum positive correlation is between a stimulating role of the labor factor and dynamics of international migration (0.51). These results suggest that countries developing mostly due to natural or financial resources now practically do not attract foreign workers, or even supply workers on the global labor market. At the same time, countries with high labor productivity, with a great stimulating effect of labor on their own economic growth are the main global receptors of migrants.

This result leads to the definition of main problems of the contemporary world labor market functioning.

Global migrant workers' receptors traditionally have limited capacity for own economic growth (often dynamics of their economic growth is timely less than dynamics of migration flows' increasing). In these conditions, the national systems of these countries are required to increase labor productivity as the most important factor and stimulator of economic growth (as was proved a stimulating effect of natural-resource and financial potentials in economic growth in these countries is insignificant).

In this connection, economic success of these countries will depend on the performance of two important conditions:

- The effectiveness of measures to ensure an influx of highly skilled professionals that are capable to positive impact on growth of labor productivity in the country later (for example, carriers of education, skills, abilities, technologies, and so on);
- The effectiveness of tools to ensure a greater concentration of local population on increasing of their own educational and professional level (with the further application of these skills in productive activities) by providing unskilled jobs to foreign migrants.

A presence of two directions of National migration policy of the modern developed countries permits a presence of international migration both of high-skilled and unskilled workers. And it requires defining of differentiated effective migration policies within an offered model from every state.

Bibliographic references

- Acemoglu, D. (1998), Why do New Technologies Complement Skills? Directed Technical Change and Wage Inequality, in: The Quarterly Journal of Economics, 113, 4. 1055–1089.
- Aghion, P. & Howitt P. (1990). A model of growth through creative destruction // NBER 1050 Massachusetts. January. 19-21.
- Clark, J., Freeman, C. & Soete, L. (1981). Long Wave, Invention and Innovations. Futures. 13. 4. 72-73.
- Day, R.H. (1994). Do Economies Diverge? Economics of Growth and Technical Change. Ed. by G. Silverberg & L. Soete. Cornwall. 201-210.
- De Hass, H. (2009), Mobility and Human Development, New York: United Nations Development Programme. 71-72.
- Harrod, R. (1973). Economic Dynamics. London: Macmillan. 284.
- Hicks, J. (1973). The Mainspring of Economic Growth, Nobel Lectures, Economics 1969–1980, Editor Assar Lindbeck, World Scientific Publishing Co., Singapore, 1992. 407-412.
- Keynes, J. (1936). The General Theory of Employment, Interest and Money. 210-219.
- Kondratiev, N. (1928). The Major Cycles of the Conjunction. 321-325.
- Kuznets, S. (1968). Toward a Theory of Economic Growth, with Reflections on the Economic Growth of Modern Nations. 270-278.
- Marx, K. (1953). A Contribution to the Critique of Political Economy. contained in the Collected Works of Karl Marx and Frederick Engels: Volume 29. 269–302.
- Nureev, R. (2008). Economics of development: models of market economy formation. Moscow, EKSMO. 87 (in Russian).
- Röpke, W. (1985). A Humane Economy: The Social Framework of the Free Market. http://mises.org/books/Humane_Economy_Ropke.pdf
- Tobin, J. (1992). The New Palgrave Dictionary of Finance and Money. In Newman, P., Milgate, M. & Eatwell, J. eds., The New Palgrave Dictionary of Money and Finance, 1992, PP. 770-779..

-
1. International college, Suan Sunandha Rajabhat University, Bangkok, Thailand. Corresponding author. E-mail: denis.us@ssru.ac.th
 2. International college, Suan Sunandha Rajabhat University, Bangkok, Thailand. E-mail: khairree.kr@ssru.ac.th
 3. Russian Presidential Academy of National Economy and Public Administration, South Russia institute of management, Russia. E-mail: tvkuraeva@mail.ru
-

Revista ESPACIOS. ISSN 0798 1015
Vol. 40 (Nº 34) Year 2019

[\[Index\]](#)

[In case you find any errors on this site, please send e-mail to [webmaster](#)]