Мировое хозяйство и международные экономические отношения

УДК 339.727.22/24

Sargsyan Lilit
PhD in Economics, Research Associate
Institute of Economics after M. Kotanyan, NAS RA
Саргсян Лилит Норайровна
Научный сотрудник, к.э.н.
Институт экономики им. М. Котаняна НАН РА

IMPACT OF FDI ON ECONOMIC GROWTH IN THE WORLD AND IN ARMENIA

ВЛИЯНИЕ ПИИ НА ЭКОНОМИЧЕСКИЙ РОСТ В МИРЕ И В АРМЕНИИ

Summary. FDI plays a significant role in the development of economy of every country. It is of vital importance, especially for the economy of a small and developing country, such Armenia is, since the limited opportunities for domestic investments may hinder the achievement of potential economic growth. The objective of the article is to estimate the impact of FDI on economic growth in the world and in Armenia. The results of the analysis show that the change in FDI facilitates the economic growth in Armenia to a greater extent than in the world on the average. Therefore, this indicator shall serve as a basis for the development of a policy aimed at creating a more favorable investment climate for the RA economy.

Key words: Foreign direct investments, economic growth, economic development, regression analysis, correlation, share, FDI/GDP ratio.

Аннотация. ПИИ играют значительную роль в развитии экономики каждой страны. Это имеет жизненно важное значение, особенно для стран с небольшой и развивающейся экономикой, как Армения, поскольку ограниченные возможности для внутренних инвестиций могут препятствовать достижению потенциального экономического роста.

Целью данной статьи является оценить влияние ПИИ на экономический рост в мире и в Армении. Результаты анализа показывают, что изменение ПИИ способствует экономическому росту в Армении больше, чем в мире в среднем. Поэтому этот показатель может быть основой для разработки политики, направленной на создание более благоприятного инвестиционного климата для экономики РА.

Ключевые слова: Прямые иностранные инвестиции, экономический рост, экономическое развитие, регрессионный анализ, корреляция, ПИИ/ВВП.

Statement of the problem. The modern world is characterized by a high degree of integration and globalization. Currently there are almost no entirely self-sufficient and closed economies in the world economy. Every country is tied with the external world by trade, transport, financial and other processes.

In fact, attraction of foreign investments and creation of favorable conditions for it becomes one of the issues requiring urgent solution especially for the countries with developing and transition economy. It is clear enough that the size and structure of foreign investments directly influence the volume of GDP of the host country, as well as the rate of economic growth. However, the size of this impact is different depending on the country specifications, the conditions of the investment environment, investments sectors, sizes, structure and other factors.

Analysis of recent researches and publications. Economic literature suggests various definitions of foreign investment. In Oxford Dictionary of Economics the following definition of FDI is provided: foreign direct investment (FDI) is the acquisition by residents of a country of real assets abroad. This may be done by acquiring land, constructing buildings, mines, or machinery, or buying existing foreign businesses abroad [4].

According to Nobel Prize winner W. Sharp investment means investing money today hoping to get more money in the future [15]. Sharp believes that the investment is typically influenced by two main factors - time and risk.

The International Monetary Fund and Organization for Economic Cooperation and Development have jointly developed the following definition [10]: Foreign direct investments are investments that are made with the objective of establishing an interest in an enterprise operating abroad and one objectives of this investment is to obtain degree of influence on the management of the direct investment enterprise.

Many economists referred the analysis of foreign investments. For example, Romer in his study shows that there exists "conceptual gap" between rich and poor countries [12]. He indicates that foreign investments facilitate the flow of technologies and business innovations to poor countries. From this point of view the investments increase the productivity of all entities and not only of those that had capital inflow. Studies about influence of FDI also demonstrate their positive role in promotion of economic growth. In this respect the study of Balasubramanyam, Salisu and Sapsfor (1996) can be referred, where the authors show that trade openness of the country have an important role in realization of benefits received from FDI [3].

Another interesting statement is proposed by De Mello, who believes that FDI raises the productivity of the host country in two ways- direct and indirect. The direct effect is the growth of productivity as a result of foreign direct investment, but apart from this, it has an indirect effect too: FDI leads to activation of investment process within the country in general [6].

Markuzen and Venables again, having elaborated this idea, have come to the conclusion that the positive impact of FDI on growth of productivity of domestic firms is significant in almost all countries. In some countries it occurs through the flow of domestic capital invested in non-effective sector to more productive sectors, in other countries, through introduction of new technologies to resist the competition of foreign investors [8]. Another group of scientists has referred to the fact that FDI contributes to the technological progress of the host country, which is especially relevant for the developing countries [1, 5].

Foreign direct investments are driving forces of the economy especially for developing or transition economies. However, depending on the investments types, the sizes of the benefits for the country can be different. Thus, the study carried out by the United Nations for the World Investment Report in 2000 has demonstrated that for the host country the flow of FDI in the form of acquisition of operating enterprises is less beneficial than the investments started from scratch [14]. According to the same study, investments made in operating enterprises do not create new vacancies for the simple reason that no new production capability is generated. Moreover, it can lead to a temporary suspension of the production, whereas the investments started from scratch already implies the creation of new vacancies. Many developing countries create favorable conditions for stimulating investments, supposing that FDI will lead to economic growth [13]. But the International Monetary Fund and World Bank insist that foreign direct investments have important role for the economy growth of the developing countries [9].

Nowadays various studies have been conducted for estimating the impact of FDI on economic growth.

A. Khaliq and I. Noy having analyzed the data of 12 industrial sectors of Indonesia for 1997-2006, have come to the conclusion not in all sectors the attraction of FDI have a positive effect on the economc growth. In particular, they have indicated that during the period under review the attraction of FDI in Indonesia's mining sector had an negative impact on the economic growth [7]. Thus, the authors conclude that the government's policy of attracting FDI can be effective only if it is based on preliminary precise calculations and directed to the sectors where investments will have a positive impact on economic growth.

As a result of regression analysis of FDI and economic growth data of Bangladesh for 1999-2013, A. Rahman has revealed a negative correlation between FDI and economic growth, which, according to the author, is a result of wrong government policy. He believes that this should serve as a message for the government of Bangladesh to attract FDI to the most profitable sectors, rather than making the inefficient sectors attractive for foreign investors by providing government support [11].

L. Alfaro, having analyzed the data of 47 countries for 1981-1999, has concluded that 1 point increase of FDI in the agricultural sector have caused the decrease of production in this sector by 0.28-0.13 points, and 1 point increase of FDI in the manufacturing industry has caused to the increase of production of the sector by 0.8-1.7 points [2].

Thus, the impact of FDI on economic growth is ambiguous. It depends on various factors, such as the degree of the country's economic development, effectiveness of FDI attraction policy, FDI structure, etc.

Formulation purposes of article (problem). The objective of the article is to estimate the impact of FDI on economic growth in the world and in Armenia.

The main material. For the analysis, the annual data of global FDI and economic growth and the RA FDI and economic growth have been used. Statistical data has been taken from electronic database of the World Bank. Regression analysis has been conducted by EViews 4 application, by ordinary least squares method. Nevertheless, using the regression analysis we tried to estimate the impact of FDI on economic growth in RA and in the world. Time series of economic growth were stationary, thus could be used for regression analysis, but the time series of FDI were not, therefore, for the analysis would be used those time series of FDI growth that were stationary.

Analysis of correlation coefficients shows that significant correlation exists between FDI and economic growth both in the world(0.53) and in RA(0.50).

Using the ordinary least squares method we have estimated $Growth(t)= c_0+c_1*DFDI(t)+e$, model demonstrating the impact of FDI on economic growth for RA and for the world.

The results received indicate that 27.5% of the change of economic growth rate in the world and 23.7% in RA is conditioned by the change in FDI, whereas the other pasrt depends on other factors.

According to the results the growth of global FDI by 10 million USD leads to the increase of the average rate of global economic growth by 0.0000235 percent in the period under review.

Based on the results regression analysis for RA in the period under review, the growth of RA FDI by USD 10 million leads to the increase of the average rate of economic growth of RA by 0.241 percent.

Insights from this study and perspectives for further research in this direction. As a conclusion it should be stated that the potential economic growth of RA was reduced by 3.3% as a result of decline of FDI in 2015. Therefore, this indicator should be considered a basis for development of a policy aimed to create a more favorable investment climate for the economy of RA.

References

1. Ahn S., Hemmings P. "Policy influence on economic growth on OECD countries: An evaluation of the evidence", OECD Economics Department Working Paper, no. 246, Paris: OECD, 2000.
2. Alfaro L., Foreign Direct Investment and Growth: Does the Sector Matter?, April 2003, 32pp., http://www.grips.ac.jp/teacher/oono/hp/docu01/paper14.pdf
3. Balasubramanyam V. N., M. Salisu and David Sapsford, Foreign Direct Investment and Growth in EP and is Countries, The Economic Journal, Vol. 106, No. 434 (Jan., 1996), pp. 92-105.
4. Black John, Hashimzade Nigar and Myles Gareth, A Dictionary of Economics. Oxford University Press,2009, DOI: 10.1093/acref/9780199237043.001.0001, http://www.oxfordreference.com/view/10.1093/acref/9780199237043.001.0001/acref-9780199237043-e-1252?rskey=oHw0aB&result=1181

5. Borensztein E., De Gregorio J., Lee L-W., "How does foreign direct investment affect economic growth", Journal of International Economics, Vol. 45, 1998, p. 115-135.
6. De Mello L.R. "Foreign Direct Investment-led growth: evidence from time series and panel data", Oxford Economic Papers 51, 1999, p. 133-151.
7. Khaliq A., Noy I., Foreign Direct Investment and Economic Growth: Empirical Evidence from Sectoral Data in Indonesia, March 2007, 28pp., No 200726, Working Papers from University of Hawaii at Manoa, Department of Economics
   http://www.economics.hawaii.edu/research/workingpapers/WP_07-26.pdf
8. Markuzen J.R., Venables A.J. "Foreign direct investment as a catalyst for industrial development", European Economic Review, Vol. 43, 1999, p. 335-356.
9. Mwilima N. (2003) Foreign direct investment in Africa, Labour Resource and Research Institute, September 2003.
10. OECD Benchmark Definition of Foreign Direct Investment, FOURTH EDITION 2008, page 17
    https://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf
11. Rahman A., Impact of Foreign Direct Investment on Economic Growth: Empirical Evidence from Bangladesh, International Journal of Economics and Finance; Vol. 7, No. 2; 2015, p.178-185, ISSN 1916-971X E-ISSN 1916-9728 Published by Canadian Center of Science and Education, doi:10.5539/ijef.v7n2p178.
12. Romer Paul, Idea gaps and object gaps in economic development, University of California, Berkeley, CA 94720, USA, 1993, pages 543-548.
13. Rusike, T. G.,Trends and determinants of inward foreign direct investment to South Africa, Rhodes University, September 2007.
14. United Nations Conference on Trade and Development, World Investment Report 2000.

15. William F. Sharpe, Gordon J. Alexander, Jeffery V. Bailey, 1999, Prentice Hall Upper Saddle River, NJ, Sixth Edition, p.1, 962 pp.

References

1. Ahn S., Hemmings P. "Policy influence on economic growth on OECD countries: An evaluation of the evidence", OECD Economics Department Working Paper, no. 246, Paris: OECD, 2000.
2. Alfaro L., Foreign Direct Investment and Growth: Does the Sector Matter?, April 2003, 32 pp.
   http://www.grips.ac.jp/teacher/oono/hp/docu01/paper14.pdf
3. Balasubramanyam V. N., M. Salisu and David Sapsford, Foreign Direct Investment and Growth in EP and is Countries, The Economic Journal, Vol. 106, No. 434 (Jan., 1996), pp. 92-105.
4. Black John, Hashimzade Nigar and Myles Gareth, A Dictionary of Economics. Oxford University Press,2009,
   DOI: 10.1093/acref/9780199237043.001.0001
   http://www.oxfordreference.com/view/10.1093/acref/9780199237043.001.0001/acref-9780199237043-e-1252?rskey=oHw0aB&result=1181
5. Borensztein E., De Gregorio J., Lee L-W., "How does foreign direct investment affect economic growth", Journal of International Economics, Vol. 45, 1998, p. 115-135.
6. De Mello L.R. "Foreign Direct Investment-led growth: evidence from time series and panel data", Oxford Economic Papers 51, 1999, p. 133-15.
7. Khaliq A., Noy I., Foreign Direct Investment and Economic Growth: Empirical Evidence from Sectoral Data in Indonesia, March 2007, 28pp., No 200726, Working Papers from University of Hawaii at Manoa, Department of Economics
   http://www.economics.hawaii.edu/research/workingpapers/WP_07-26.pdf

8. Markuzen J.R., Venables A.J. "Foreign direct investment as a catalyst for industrial development", European Economic Review, Vol. 43, 1999, p. 335-356.
9. Mwilima N. (2003) Foreign direct investment in Africa, Labour Resource and Research Institute, September 2003
10. OECD Benchmark Definition of Foreign Direct Investment, FOURTH EDITION 2008, page 17 https://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf
11. Rahman A., Impact of Foreign Direct Investment on Economic Growth: Empirical Evidence from Bangladesh, International Journal of Economics and Finance; Vol. 7, No. 2; 2015, p.178-185, ISSN 1916-971X E-ISSN 1916-9728 Published by Canadian Center of Science and Education, doi:10.5539/ijef.v7n2p178.
12. Romer Paul, Idea gaps and object gaps in economic development, University of California, Berkeley, CA 94720, USA, 1993, pages 543-548.
13. Rusike, T. G.,Trends and determinants of inward foreign direct investment to South Africa, Rhodes University, September 2007.
14. United Nations Conference on Trade and Development, World Investment Report 2000.
15. William F. Sharpe, Gordon J. Alexander, Jeffery V. Bailey, 1999, Prentice Hall Upper Saddle River, NJ, Sixth Edition, p.1, 962 pp.