Economic Freedom and FDI in Selected Developing Countries

Arash Ketabforoush Badri\textsuperscript{a*}, Aidin Poorabdollahi Sheshgelani\textsuperscript{b}
\textsuperscript{a*}Department of Economics, Faculty of Management and Accounting, Qazvin Branch, Islamic Azad University, Iran
\textsuperscript{b}Department of Management, Faculty of Management, Economics and Accounting, Tabriz branch, Islamic Azad University, Iran

Abstract: One of the factors of providing capital for investment in different economic sectors which can be very useful is foreign direct investment. For we can say that by FDI entering the host countries, in spite of providing capital, technology transfer, import of expert human capital, management and knowledge are happen too. Therefore, special attention to this fact and considering the solutions and improving policies for increasing FDI seem necessary. For achieving this, this study is trying to consider the effect of economic freedom on FDI in 10 selected developing countries in period of 2001 to 2013 using the panel data method. The results show that economic freedom has a positive and meaningful effect on FDI in the studied countries. Also the index of economic openness, gross capital formation and financial development are some of the factors that have a positive and meaningful effect on FDI attraction process in the host country.

Keywords: Economic Freedom, FDI, Financial Development, Index of Economic Openness, Panel Data.

1. Introduction

Foreign direct investment (FDI) is one of the factors which can be a great help to national economy of countries. This important factor helps national economy in case of lack or absence of domestic sources and covers the national capital and investment gap in countries. Because of this, FDI can affect economic growth and development and speed up the economic development process (Rosario \textit{et al.}, 2017).

The role of FDI in economic growth and development of countries has been a debate in the economic literature of countries which has been insisted on by politicians for more FDI attraction. By knowing the abundant advantages of FDI such as provision of capital and transferring of technology since the early 80s, many countries have seemed to welcome it (Nakhaei \textit{et al.}, 2015).

Many attempts to attract FDI is more than this general belief that FDI has several positive effects such as simplification of technologic knowledge transfer, increase of local markets competitions, creation of new job opportunities, improvement of quality and quantity of entrepreneurship and positive external effects, all of which must have an important role in dynamism of the economy of the host countries (Azman-Saini \textit{et al.}, 2010).

So it can be concluded that one of the most important major economic goals is stable and continuous economic growth and development. Achieving economic growth and development is a goal which all the governments and politicians insist on. Several factors have been offered by experts for achieving the goal of economic growth, among which, all the theories and patterns of growth have considered capital as the engine and determiner of economic growth and development.

Also because of the deep technological gap and problems such as lack of factors like financial sources, knowledge and management, we have a deep gap of the per capita income and competitiveness of developing countries with the developed economies. Therefore the developing countries must consider the determining factors of the FDI income flow for lessening technological gap between them and the developed countries and for increasing their competitiveness for achieving stable and continuous economic growth and development.

Because the FDI income flow to the host country causes transfer of technology, provision of financial sources, knowledge and management, and in case of suitable management and planning by the
principals, this can remove many of the problems with economic growth and development of developing countries (Arslan et al., 2015).

One of the most basic determining factors of the FDI income flow is economic freedom, for we can say economic freedom is one of the most crucial factors of capital attraction.

For this purpose, identification and determination of effective factors and appropriate policies for more FDI attraction, specially in developing countries, seems very crucial. For achieving this, the present study tends to consider the effect of economic freedom on FDI in selected developing countries in the period of 2001 to 2013.

2. Theoretical Basics and Previous Studies
2.1. Foreign Direct Investment

Nowadays, many countries in the world have been strongly tending to attract foreign capital because of lack of domestic sources for investment. On the other hand, foreign investors, specially transnational companies, for increasing their competitiveness and getting more profit, have been tending to invest in apt regions. Also during the recent two decades by increasing the level of technology, it has been efficiently possible to transfer capital. The natural result of the following factors is growth of foreign investment in different developed and developing countries. Ever since the 70s the growth of foreign investment has been very severe and has overtaken the growth of trading, so that more than double of the growth of the trading has been goods and services (Ghaffari and Niknejhad, 2012).

There is a process by which a country (the source country) takes control of the property in another country (the client country) with the purpose of controlling production, providing and other activities. FDI is the conflict with long-term investment and is the reflector of long-term appropriations and controlling an economic factor in the source country. The expression long-term shows the difference of FDI with the other kinds of investments like Pretflio investment; as in Pretflio investment, the reflector of keeping the worthy documents like foreign share, bond and financial sources, none of which causes the holder of the worthy papers have management control on the foundation which has given the papers. Pretflio investment is short-term and the expression short-term shows that Pretflio investment is chosen for many times and efficiently (Taghavi and Rezayi, 2010).

Most of the developing countries have the problem of lack of sources of investment for solving the phenomena of economy, creating job opportunities and achieving stable economic growth and development. Lack of foreign exchange incomes caused by exports and the unfair price of exchange which is usually against the exporters of products and raw materials is changing and the mass of population and almost high consumption are some of the reasons which limit the savings transferable sources to generating investments in countries like this (Abzari and Teymouri, 2007).

2.2. Economic Freedom

The dominant economic theories in the theorizing space of recent years, consider free cooperation of individuals and institutes the best way to provide economy performance. This is while there are many conflicts in the way of economic freedom definition. Also, economic freedom means individuals’ being free in manipulation, exchange, swap and transfer of personal property which are gained legally (Razmi et al., 2009).

The Heritage foundation considers economic freedom based on which, individuals are free to produce, distribute and consumption of the products and services. According to the expert designers of economic freedom index of Heritage foundation, since freedom is absence of persuasion, pressure or limitation in selection of action and economy is related to production, distribution and consumption of the products and services, so economic freedom can be defined as absence of imposing or limitation on production, distribution and consumption of the products and services (Herrera et al., 2014).

Generally, what we get from the mentioned definitions is that economic freedom is nothing but emphasis on personal or private possession and it determines the range based on which the market works. So people are the possessors of their own property in consumption, transfer or keeping and no obstacles like the government should limit them; in a condition that these properties haven’t been gained by theft, force, cheating or rubbery and not be exchanged by any of these ways. One of the duties of the government is to protect the people’s properties. Therefore, in any economy the least interference is defined considering their economic status for the governments and if the governments overact, economic freedom will have been limited.
2.3. Previous Studies

Rosario et al. (2017) in a study, considered the relation between FDI, economic growth and financial development in Cape Verde in period of 1987 to 2014 using the ARDL method. The results show that with increase of FDI in a country, economic growth has increased. Also with increasing FDI, the financial development status will be improved.

Faisal et al. (2016) have considered the relation between economic growth and FDI in the financial sector of China using the ARDL method. The results show that increasing FDI has had a positive and meaningful effect on China’s economic growth.

Bello and Bright (2015) have considered the relation between economic freedom and economic function in Sub-Saharan Africa. The results show that with increasing economic freedom, FDI also increases in the country and this has a meaningful effect on economic function of the country.

Bekhet and Al-Smadi (2015) in a study using the Granger method have considered the relation between FDI, GDP and economic openness. The results show that there is a meaningful relation between FDI, GDP and economic openness.

Nakhaei et al. (2015) in a study, considered the effect of economic freedom and foreign direct investment on economic growth in 84 selected countries in period of 2000 to 2012 using GMM method. The results of the estimation show that FDI alone doesn’t have positive effect on economic growth, but the effect of FDI on economic growth depends on the economic freedom level of the host countries. Also FDI has positive and meaningful effect on economic growth of host countries with high and higher than medium economic freedom.

Nahidi and Ketabforoush (2014) have considered the effect of FDI on economic growth in MENA countries in a study, in period of 2005 to 2010. The results show that FDI has had a positive and meaningful effect on economic growth of the studied countries in the studied period.

(Rahmani et al., 2014) have considered the effects of economic freedom on economic fluctuations in 48 developing countries in period of 2000 to 2010. To measure economic fluctuations two indexes standard deviation of gross domestic production growth and gross domestic production deviation have been used and also for testing economic freedom the index of Freezer institute has been used. Estimation of the patterns using cross-sectional and combined data shows that increasing the amount of economic freedom index causes decrease of economic fluctuations.

Samimi and Salehi (2013) considered the effects of economic freedom index on financial corruption in developing countries emphasizing on Iran in period of 2003 to 2011. The results of the estimation in Iran, show that the more freedom of employment, the size of the government, financial freedom, freedom from corruption and freedom of labor force there is, the more financial corruption you have. Also the more freedom of trading, freedom of investment and financial freedom there is, there is less financial corruption. In the world’s selected developing countries too, the total index of economic freedom has negative and meaningful effect on financial corruption in these countries.

Campbell and Snyder (2012) have considered the effect of global economic freedom growth on economic fluctuations in 109 selected countries in period of 1990 to 2005. The results of this study show that and increase in total economic freedom can decrease the fluctuations for the country with weak property rights and legal structure.

Ghaffari and Niknejhad (2012) considered the effect of foreign direct investment on economic growth of some of the countries of the regions of Mena during the period of 1992 to 2010 and for this purpose econometric data integration method has been used. The results of the estimation of this model show that the effect of foreign direct investment on economic growth of member countries, during the considered period is positive and meaningful. Also the effect of trade freedom and capital stock rate on economic growth of the member countries during the considered period is positive and meaningful.

3. Introducing Data and Estimation Model

3.1. Data and Research Model

The data used in the studied model of this study are board data. The studied period is 2001 to 2013. The statistical society of this study are 10 selected countries including Argentina, Armenia, Bulgaria, Bolivia, Colombia, India, Iran, Russia, Romania and Turkey. The serial data are collected form WDI 2016. The introduced model of this study inspired from Bello and Bright (2015) go like the following:
\[ LFDI_i = \alpha_0 + \beta_1 LEF_i + \beta_2 LOPEN_i + \beta_3 LGCF_i + \beta_4 LFD_i + \epsilon_i \] (1)

\begin{align*}
LFD_i &= \text{Log rhythm of percentage of pure foreign investment from GDP} \\
LEF_i &= \text{Log rhythm of economic freedom index} \\
LOPEN_i &= \text{Log rhythm of percentage of economic rate openness from GDP} \\
LGCF_i &= \text{Log rhythm of percentage of physical capital from GDP} \\
LFD_i &= \text{Log rhythm of economic development index}
\end{align*}

3.2. Panel Data Method
The econometrical model used in this study is based on panel data method. In panel data model, the data are serial and sectional which means the data are calculated during time between the sections.

According to econometrical principals, the mentioned model is estimated using the Ordinary Least Squares method (OLS) and the \( \beta \) ratios are acquired. This method provides more awareness information, more variation of changeability, Less collinearity between the variables and more freedom and performance rates, while the series of time have collinearity. In panel data, considering the fact that they are a combination of time and section series, the sectional dimension causes adding changeability or much variation having which we can do more reliable estimations (Ashrafzadeh and Mehrgan, 2010).

4. The Estimation Results
4.1. Studying the Stationary of the Variables
One of methods by which we can avoid fake regression, is making sure of the stationary of the variable. For studying the stationarity of the variables there are different tests like Levin, Lin and Chu (LLC), generalized Fisher-Dickey Fooler (ADF), Philips-Perron (PP), etc. in this study the Levine Lin Chu (LCC) test, which is one of the most important single root tests in panel data, has been used. The results of studying the stability of the variables of the study are presented in table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>( T ) Statistics</th>
<th>( Prob )</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>-4.9583</td>
<td>0.0000</td>
</tr>
<tr>
<td>EF</td>
<td>-6.1889</td>
<td>0.0000</td>
</tr>
<tr>
<td>OPEN</td>
<td>-6.0484</td>
<td>0.0000</td>
</tr>
<tr>
<td>GCF</td>
<td>-5.9312</td>
<td>0.0000</td>
</tr>
<tr>
<td>FD</td>
<td>-3.6977</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Reference: Research findings
As we can see, the results of table (1) show that all the variables are in a stable level.

4.2. The Results of F Lymer and Housman Tests
According to table 2 the possibility of the F statistic test show that using the stable effects method will be more decent. Also the statistic of Housman test show the decentness of using the random effect method for estimating the model.

<table>
<thead>
<tr>
<th>Test</th>
<th>( F ) test</th>
<th>Housman test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>93.4820</td>
<td>7.9357</td>
</tr>
<tr>
<td>Prob</td>
<td>0.0000</td>
<td>0.0940</td>
</tr>
</tbody>
</table>

Reference: Research findings

4.3. Results of Model Estimation
Based on this, the results of model estimation for determining the effect pattern of economic freedom on FDI using the random effect panel data is represented in table 3.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>( T ) Statistic</th>
<th>( Prob )</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF</td>
<td>1.2818</td>
<td>2.1073</td>
<td>0.0372</td>
</tr>
<tr>
<td>OPEN</td>
<td>0.7670</td>
<td>3.8310</td>
<td>0.0002</td>
</tr>
<tr>
<td>GFC</td>
<td>1.1979</td>
<td>9.2882</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
The results of random effect method show that all of the ratios of the variables of the model are statistically meaningful and have the theoretically expected signs.

As we can see, with 1 percent increase in economic freedom variable, FDI increases by 1.28 percent. Improving the status of economic freedom assures the foreigner investor that in case of investment in different sectors of the host country, he will be able to increase his capital. For the same reason we can say that improving economic freedom motivates the foreigner investor and encourages him to invest. So we can see an increase in entrance of foreign direct investment to the host country.

The estimated ratio for economic openness variable is 0.76 and positive. This show that with 1 percent increase in economic openness variable, FDI increases by 0.76 percent. Increasing the rate of economic openness results improvement in the country’s trade atmosphere. Increasing trading in both exports and imports sections, results improvement of working atmosphere and investment in agriculture, industry and services. The growth of economic rate openness index mostly increases competitiveness in production sectors which causes positive effects on FDI level which causes quality improvement and product variability and that itself increases production. This causes improvement of investment circumstances and as a result, it provides for increasing the FDI entrance amount.

Presence and formation of gross capital is one of the factors that can have a positive effect on FDI attraction. As it is observed, the estimated ratio for this variable is 1.19. In other words we can say that with 1 percent increase in gross capital formation index, FDI increases 1.19 percent. This shows that there is a positive and meaningful relation between gross capital formation index and FDI.

Financial development is also one of the factors that can have a positive and meaningful effect on FDI attraction process in the host countries. As we see, the estimated ratio for the financial development variable is 1.38. This shows that with 1 percent increase in the economic development status in the studied countries, FDI increase by 1.38 percent. Financial development and FDI can have different relations. These relations can be found in cases like development rate of the countries, readiness of proper opportunities in the host countries from financial system view and the role of financial development in FDI attraction. The better financial development status the host countries have, the more FDI attraction will be there.

The estimated $R^2$ by the model was 0.89. This shows the explanatory of independent variables and shows the high percentage of the reliability of the results. There is also no autocorrelation in the estimated model and Durbin Watson 2.28 is confirmed it.

5. Conclusion

Foreign direct investment has an important role in economic growth and development because it causes transfer of technology, management and knowledge; because of that, almost all of the countries especially developing countries are looking forward to attract more and more foreign direct investment. Considering the effect that foreign direct investment has on the power to reduce technology gap and increasing competitiveness, the role of factors affecting it, is very crucial. Economic freedom, economic openness rate and financial development are some of the factors effective on FDI.

Therefore, the present study tried to study the effect of economic freedom on FDI in 10 selected developing countries in period of 2001 to 2013 using the panel data method. The results showed that economic freedom has a positive and meaningful effect on FDI in the studied countries. Also the index of economic openness, gross capital formation and financial development are some of the factors have a positive and meaningful effect on FDI in the host countries.

Also for increasing FDI attraction in the studied countries, the following are suggested:

- Applying decent policies of commercial and foreign sector and controlling the index of by decreasing imports, increasing exports and increasing investment;
- Increasing economic safety and creating a safe and decent atmosphere for the possibility of increasing FDI attraction;
- Increasing the required opportunities and facilities for easing the FDI processes;
- Increasing production and creating more value added for production in different economic sectors for motivating foreign investors;
- Identifying the key sectors and correct direction of FDI to these sectors;
- Investment and training expert human force for taking job opportunities during FDI processes;
Increasing the FDI support by governments for facilitating and attracting it; Providing opportunities for creating connection and cooperation like towns of overseas investment between the investor companies and domestic companies for improving and making the transferred technology native.

References