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"Armenian-Iranian Investments Cooperation"

Mohsen Heydari

[1]Department of Economics, Ardestan Branch, Islamic Azad University, Ardestan, Iran.

Abstract*:* FDI is a very important element for the development of each country, especially for developing countries, such as Iran and Armenia, which cannot invest in large high-technology projects. The article reviewed the dynamic and the structure of Armenian-Iranian FDI by sectors and analyzed the impact of regulation on the investment environment to attract FDI in the Republic of Armenia.

Keywords: FDI, structure, dynamic, sectoral distribution, regression analysis

Introduction

The Islamic Republic of Iran was one of the first countries to recognize Armenia's independence (in 1991) and establish diplomatic relations [1, 2]. Armenia had bad relations in the 1990s with two of its four neighbors, Turkey and Azerbaijan, therefore, it was important to establish good relations with the other two neighbors, Iran and Georgia [3, 4]. Therefore, the development of Armenia's economy considers a step forward to establishing good relations with Iran from the beginning [5].

But currently, the available statistical data indicate that Iran and Armenia are not significant business or investment partners. In the framework of this research, we have addressed the unsatisfactory level of cooperation in investments and its productive reasons and will try to find appropriate solutions.

Subject

Since 1991, many mutual documents have been signed between Armenia and Iran to improve trade-economic relations [6] including: Agreement of "Border trade between Meghri region of the Republic of Armenia and Marand Province of the Islamic Republic of Iran" in 1994, memorandum understanding of"Cooperation between the Republic of Armenia and the Islamic Republic of Iran in the field of agriculture", agreement of "International Freight Transportation between the Government of the Republic of Armenia and the Government of the Islamic Republic of Iran", agreements of "Construction of Iran-Armenia Gas Pipeline", "Construction of Joint Hydropower Plant on Aras River" "Construction of Iran-Armenia High Voltage Power Transmission Line" "Mutual Promotion and Support of Investments between the Government of the Republic of Armenia and the Islamic Republic of Iran" in 1995, memorandum of Understanding of "Cooperation between the Customs Department of the Republic of Armenia and the Customs Service of the Islamic Republic of Iran" in 1996, agreements of "Mughri-Kajaran Traffic Tunnel", "Cooperation in Licensing and Standards", "Quotas and Privileges" in 2001, contract of "Iran-Armenia Gas Pipeline Construction" in 2004, Memorandum of Understanding of "Cooperation in the field of railway between the Ministry of Transport and Communications of the Republic of Armenia and the Ministry of Roads and Transport of the Islamic Republic of Iran and the construction of a railway line with a direct connection between the Republic of Armenia and the Islamic Republic of Iran", Memorandum of Understanding of "Determining the Free Trade Regime between the Ministry of Economy of the Republic of Armenia and the Ministry of Commerce of the Islamic Republic of Iran" in 2009, contract of "Construction Permit for Meghri Hydropower Plant between the Ministry of Energy of the Republic of Armenia and the Ministry of Energy of the Islamic Republic of Iran" in 2010, memorandum of Understanding of "Construction of a pipeline to transfer oil products from Iran to Armenia" in 2012.

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According to the data at the end of 2015, the export from Armenia to Iran was equal to 5.2% of the total export of Armenia and the import from Iran to Armenia was equal to 6.1% of the total import of Armenia [7] The relevant numbers have a lower relative weight in investments. (Table 1) .

analysis

shows a more detailed analysis of the investments made by Iran in Armenia based on distribution according to fields

Table 1. Investments made by Iran in Armenia according to years and fields [8]

Years		Agriculture	Construction	Wholesale trade	Retail trade	Transportation and warehousing	Chemical industry
2002	Percentage of Iran in foreign investments	18.5	0	12.5	0	0	0
	Percentage of Iran in FDI	12.2	0	15	0	0	0
2003	Percentage of Iran in foreign investments	0	0	5.1	1.9	0.3	0
	Percentage of Iran in FDI	0	0.2	6.5	2.5	0.3	0
2004	Percentage of Iran in foreign investments	0	0	0	0	0	5.5
	Percentage of Iran in FDI	0	0	0	0	0	35.7
2005	Percentage of Iran in foreign investments	0	0	0.9	0	0	6
	Percentage of Iran in FDI	0	0	1.4	0	0	6
2006	Percentage of Iran in foreign investments	0	0	0.7	0	0	62.6
	Percentage of Iran in FDI	0	0	0.9	0	0	62.6
2007	Percentage of Iran in foreign investments	0	0	0	0	0	78.4
	Percentage of Iran in FDI	0	0	0	0	0	78.4
2012	Percentage of Iran in foreign investments	0	0	0	0	0	0
	Percentage of Iran in FDI	0	0	0	0	0	0
2014	Percentage of Iran in foreign investments	0	0	0	0	2	0
	Percentage of Iran in FDI	0	0	0	0	4.5	0

According to Table 1, the investments made by the Islamic Republic of Iran in the Republic of Armenia are random and are not subject to any rules. The relative balance of the Islamic Republic of Iran is very small on average in the foreign investments made in the Republic of Armenia but this picture is different while analyzing the foreign investments made in some fields. In the Table of foreign investments, the relative weight of Iran in FDI in each of the fields of Armenia is presented in terms of years. Analyzing the Table acknowledges that in the total amount of FDI made in 2002 in the agricultural field of the Republic of Armenia, the FDI made by the Islamic Republic of Iran was equivalent to 12.2%, and in the field of major trade, 15%. The field of the chemical industry is more interesting. In the years 2004, 2006, and 2007, at the time point in question, the FDI made in the field of chemical industries of the Republic of Armenia were 35.7%, 62.6%, and 78.4%, respectively, and they are provided by the Islamic Republic of Iran in the form of foreign direct investments. In this regard, the FDI of the Islamic Republic of Iran in the chemical industries of the Republic of Armenia has been made more frequently

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compared to other fields. It should notice that in the volume of FDI made by the Islamic Republic of Iran between 2002 and 2015, the field of major trade is in the first place, agriculture is in the second place, and the chemical industry is in the third place. In addition, the FDI made in the fields of transportation and warehousing, construction and retail trade are very small (Table No. 2).

Table 2. The FDI made by the Islamic Republic of Iran in some fields of the economy of the Republic of Armenia, amounts are in terms of million drams [9]

	Agriculture	construction	wholesale trade	retail trade	transportation and warehousing	chemical industry
Amounts of FDI made by the Islamic Republic of Iran during the years 2002-2015	**414**	**2,2**	**1629,7**	**8**	**46,1**	**382,8**

In this regard, the Iranian investments made in Armenia were analyzed in detail as much as possible based on the limited statistics available. In this part of the research, we also addressed the issue of to what extent any of the agreements, memorandums or contracts, laws, and legal documents related to the regulation of the field of investments in Armenia contribute to the inflows of FDI in Armenia. A similar analysis has been carried out for Iran in subheadings 1-2 of the research. It can be understood that in the conditions of the available data about Armenian-Iranian investments, it is impossible to perform this analysis only from the perspective of the inflows of Iranian FDI in Armenia. Therefore, we will observe the impact of each reform on the general inflows of FDI of the Republic of Armenia.

When it comes to signing an agreement between Armenia and Iran, this issue will often help the inflow of FDI from the Islamic Republic of Iran.

If the general investment conditions improve, the investments will be generally discussion including the growth of Iranian investment inflows. The following data will be used to adjust the model: Quarterly data of 1998-2014 GDP and FDI in dollars published by the National Statistics Service of the Republic of Armenia, variable X1, which indicates the existence of an approved legal to improve the investment environment, the resolution is a legal document [10] and an international contract [11], which means that X1=1 (its absence: X1=0). The number of observations is 68. We will perform the analysis with EViews 7 software. In addition, we will evaluate the linear model showing the dependence of FDI on the gross domestic product and approved laws using the least square method. As mentioned, the stationarity of the used variables is one of the necessary conditions for the validation of the regression equation [12]. The expanded Dickey-Fuller unit root test is used to examine the stationarity of the time series of FDI and GDP.

Based on the results of this test, the time series of both GDP and FDI are not stationary for the Republic of Armenia. Therefore, it is not suitable to use them to adjust the regression equation. For this reason, the time series of GDP growth and FDI will be used.

In Table 3, the econometric model showing the change in the growth of FDI of the Republic of Armenia with the growth of the GDP and effective laws and contracts on the formation of the investment field is presented. The effect of the reforms made in a quarter is possibly not clearly visible. Therefore, we have observed the effect of the laws and legal documents passed during the last four three-month periods on the growth of FDI in the mentioned period. For this purpose, in this model, X1 represents the effect of the approved law at the same point in time, X1(-1) represents the effect of the approved law in the last quarter, X1(-2) represents the effect of the approved law in the last second quarter, X1(- 3) shows the effect of the law passed in the last third quarter and X1(-4) shows the effect of the law passed in the last fourth quarter.

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Table 3. The model shows the changes in FDI with the growth of GDP and the laws and contracts organizing the investment field

Dependent variable: FDI growth				
Analysis method: least square method				
Study period: 1998:1 2014:4				
Number of observations after reviews: 63				
Variables	Coefficient	standard error	t-statistic	probability
C / constant	11.23	2.11	5.32	0.01
GDP growth	1.19	0.48	2.47	0.02
X1	0.60	0.23	2.59	0.03
X1(-1)	0.55	0.15	3.65	0.02
X1(-2)	0.43	0.20	2.14	0.00
X1(-3)	0.77	0.12	6.42	0.04
X1(-4)	0.94	0.29	3.24	0.01
R^2				0. 36
Durbin-Watson statistic	2.31	Probability (F-statistic)		0.00

R^2 = 0.36, which means that the selected variables justify only 36% of the change in the growth of FDI. Like the previous model, this is not the best result. The result is that the change in FDI depends on other factors, such as the equivalent rate, exports, imports, and strategic conditions, which are not observed in our model. The model that we have set up shows how the effective laws in the field of investment in the form of FDI affect the attraction of FDI and this is the main purpose of setting up this model. Like the previous model, we will also use all the necessary steps to check the model step by step. For all observed indicators, the absolute value of the t-statistic is $2 <$ and its probability is $0.05 >$. Therefore, the model is allowed and the influence coefficients of all observed variables are statistically significant. The Durbin-Watson statistic is equal to 2.31, which is in the range (1.46,2.53 (=4-1.46)). That is, there is no autocorrelation between errors [13]. The existence of homoscedasticity or heteroscedasticity between errors is investigated through White's heteroscedasticity test.

Table 4. Results of the homoscedasticity test between errors

F-statistic	2.25	Probability	0.12
Observation * R2	3.25	Probability	0.15

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The hypothesis of homoscedasticity was rejected [14] if the probability of observation is * $R^2 < 0.05$. In this way, the homoscedasticity hypothesis is not rejected. Therefore, the model is statistically significant. The evaluated coefficients in the result of the mentioned model are summarized.

FDI growth=11.23+1.19*GDP growth+ 0.6*X1+0.55*X(-1)+ 0.43*X1(-2)*1.77+X(-3)+ 0.94* X1(-4)

Results

Based on the results, 1 unit of change in the growth of GDP changes the growth of FDI by 1.19 units. The approval of the investment field regulation law during this period leads to an increase in the growth of FDI by 0.6 units. As a result of the approved laws during the last quarter, the growth of FDI will increase by 0.55 units. This increase is 0.43 units in the last second quarter, 0.77 units in the third quarter, and 0.94 units in the last fourth quarter as a result of the approved laws. It means that the approval of laws and approved legal documents in setting the investments in the Republic of Armenia 1 year or 4 quarters later have the most positive effect on the attraction of FDI (when the corresponding coefficient is equal to 0.94).

suggestion

It should notice that it is necessary to implement appropriate legislative reforms to ensure the inflow of investments from the Islamic Republic of Iran.

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[10] We have based our work on the information available on the following sites based on the date of legal validity: http://mineconomy.am/arm/505/free.html, http://mineconomy.am/arm/34/gortsaruyt.html

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[11] The information available on the following site has been used for agreements related to the support of bilateral investments. Agreements are presented in the model based on the date of commencement of legal validity: http://mineconomy.am/arm/34/gortsaruyt.pastatuxt.html

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