

Economical-Trade Relations of Iran and Armenia, Status and its Outlooks

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ABSTRACT

The current research seeks to study the trade-economic position of two neighboring countries, i.e. Iran and Armenia in order to focus on the existing problems related to these two countries and finally introduce the future prospects in the relations between them for the purpose of promoting trade and economic cooperation. Due to the fact that the major income of Iran is related to oil production, in contrast to Armenia which has no role in this kind of income, the place of industry and agriculture sector in the income of these two countries, etc can determine the level of relations between these two countries. The current existing situation in international economy undoubtedly influences all economies from different respects. Therefore, strengthening the level of the mutual relations with regard to having a common frontier can reduce the negative reactions of world economic events on trade and economic indicators of these two countries. The main purposes behind this research include the study of the level of trade-economic relations between two countries, the determination of the place of Iran and Armenia's trade-economic relations in comparison to other neighboring countries, the recognition of goods having a high amount of transaction between Iran and Armenia, and finally the presentation of some solutions for expanding the mutual relations between them. The result of this study seeks to promote dialogue and a deeper understanding of these relations among experts and officials in these two countries, and develop a comprehensive assessment of the forces driving these relations and their long-term implications, and offer various policy recommendations.

KEYWORDS: Trade-economic relations, Non-oil income, Oil income, Iran, Armenia.

INTRODUCTION

Armenia with its geographical status has the most improper situation among the other tow countries of Caucasus region (Azarbijan and Georgia) and considering to the present problems among its three neighbors (Azarbijan, Georgia and Turkish), Iran strand in fact is its vital path. Taking some factors like scope, population and common boundary length into account, Armenia is is very small in comparison to Iran. However, thanks to its limiting in land, blockage by offensive countries, having different religion with region countries and also ample immigrants in Iran and other places of the world, this country is so important to Iran. Islamic republic of Iran has a relationship with all three Republics of Caucasus and based on its foreign policy is interested in improving its relations with other regional countries However, some trans-regional factors have been influencing on developing its relation Iran with Armenia.

International trade is the exchange of capital, goods, and services across international borders or territories. In most countries, it represents a significant share of gross domestic product (GDP). While international trade has been present throughout much of history (see Silk Road, Amber Road), it is the economic, social, and political importance having been on the rise in recent centuries.

Industrialization, advanced transportation, globalization, multinational corporations, and outsourcing are all having a major impact on the international trade system. Increasing international trade is crucial to the continuance of globalization. Without international trade, nations would be limited to the goods and services produced within their own borders.

International trade is in principle not different from domestic trade as the motivation and the behavior of parties involved in a trade do not change fundamentally regardless of whether trade is across a border or not. The main difference is that international trade is typically more costly than domestic trade. The reason is that a border typically imposes additional costs such as tariffs, time costs due to border delays and costs associated with country differences such as language, the legal system or culture.

Instead of importing a factor of production, a country can import goods that make intensive use of the factor of production and are thus embodying the respective factor. An example is the import of labor-intensive goods by the United States from China. Instead of importing Chinese labor, the United States is importing goods from China that were produced with Chinese labor.

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Regarding the above-mentioned problems between Iran and Armenia, the current article wants to consider the economical-trade Relations of these two countries, their status and outlooks, some suggestions for strengthening more relations between these two countries according to economical point of view.

2. REVIEW OF LITERATURE

2.1. Theoretical Framework

New Trade Theory tries to explain empirical elements of trade that comparative advantage-based models above have difficulty with. These include the fact that most trade is between countries with similar factor endowment and productivity levels, and the large amount of multinational production (i.e. foreign direct investment) which exists. New Trade theories are often based on assumptions like monopolistic competition and increasing returns to scale. One result of these theories is the home-market effect, which asserts that, if an industry tends to cluster in one location because of returns to scale and if that industry has high transportation costs, the industry will be located in the country with most of its demand to minimize cost.

2.1.1. Export

In national accounts, "exports" consist of transactions in goods and services (sales, barter, gifts or grants) from residents to non-residents. The exact definition of exports includes and excludes specific "borderline" cases. A general delimitation of exports in national accounts is given below:

An export of a good occurs when there is a change of ownership from a resident to a non-resident; this does not necessarily imply that the good in question physically crosses the frontier. However, in specific cases, national accounts impute changes of ownership even though in legal terms no change of ownership takes place (e.g. cross border financial leasing, cross border deliveries between affiliates of the same enterprise, goods crossing the border for significant processing to order or repair). Also, smuggled goods must be included in the export measurement.

As it is clear from Figure 1(a), there was an increase in Armenia exports sine 1997 to 2007. Also, there has been an increase in Iran exports since 1998 to 2009 according to this Figure 1(b).

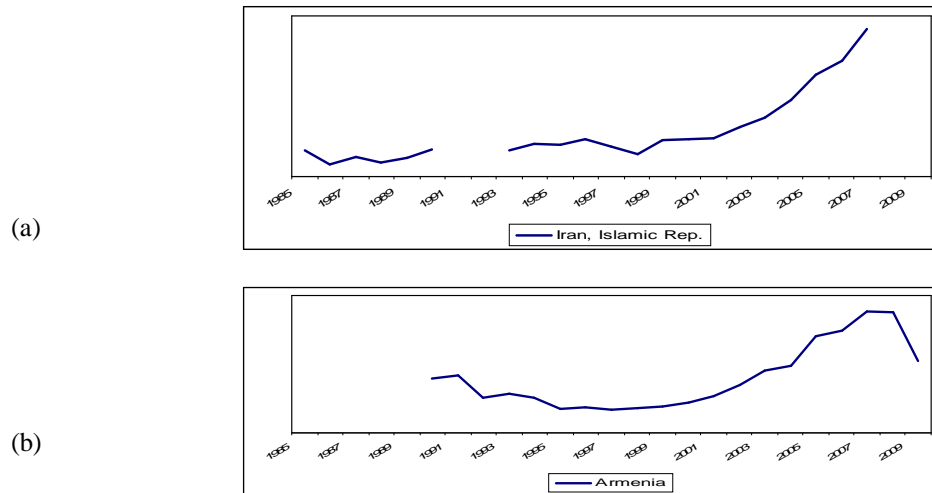


Figure 1. Export comparison of Iran and Armenia

2.1.2. Import

"Imports" consist of transactions in goods and services (sales, barter, gifts or grants) from non-residents to residents [3]. The exact definition of imports in national accounts includes and excludes specific "borderline" cases. A general delimitation of imports in national accounts is given below:

An import of a good occurs when there is a change of ownership from a non-resident to a resident; this does not necessarily imply that the good in question physically crosses the frontier. However, in specific cases national accounts impute changes of ownership even though in legal terms no change of ownership takes place (e.g. cross border financial leasing, cross border deliveries between affiliates of the same enterprise, goods crossing the border for significant processing to order or repair). Further, smuggled goods must be included in the import measurement.

Figure 2 compares imports of goods and services for the countries of Iran and Armenia. There was an increase in Iran and Armenia imports from 1999 to 2009.

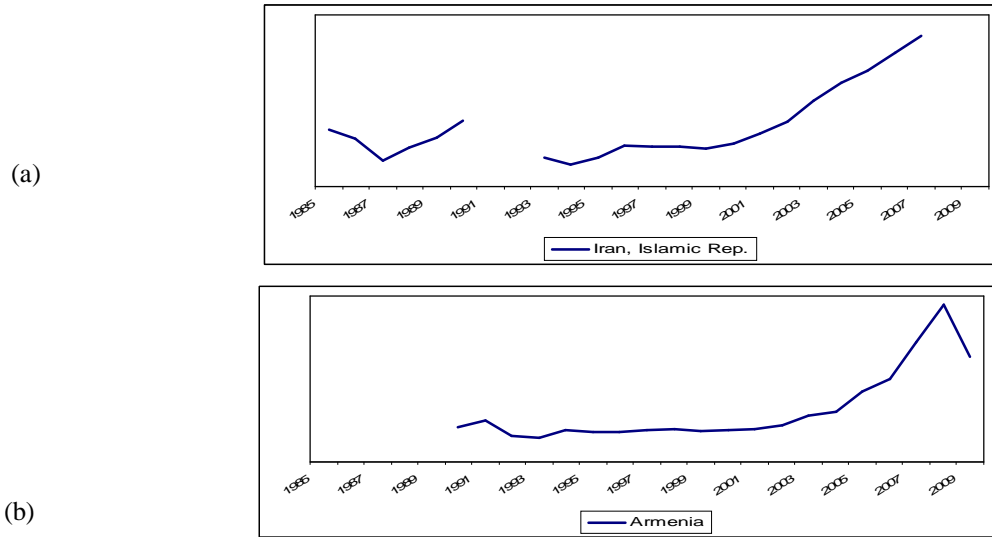


Figure 2. Import comparison of Iran and Armenia

2.1.3. Gross Domestic Product (GDP)

Gross domestic product (GDP) refers to the market value of all final goods and services produced in a country in a given period. GDP per capita is often considered an indicator of a country's standard of living . Gross domestic product is related to national accounts, a subject in macroeconomics.

GDP was first developed by Simon Kuznets for a US Congress report in 1934 , who immediately said not to use it as a measure for welfare.

As it is evident from Figure 3, Armenia GDP has been increasing from 1993 to 2008 while Iran GDP has dropped during the year 1996-1998.

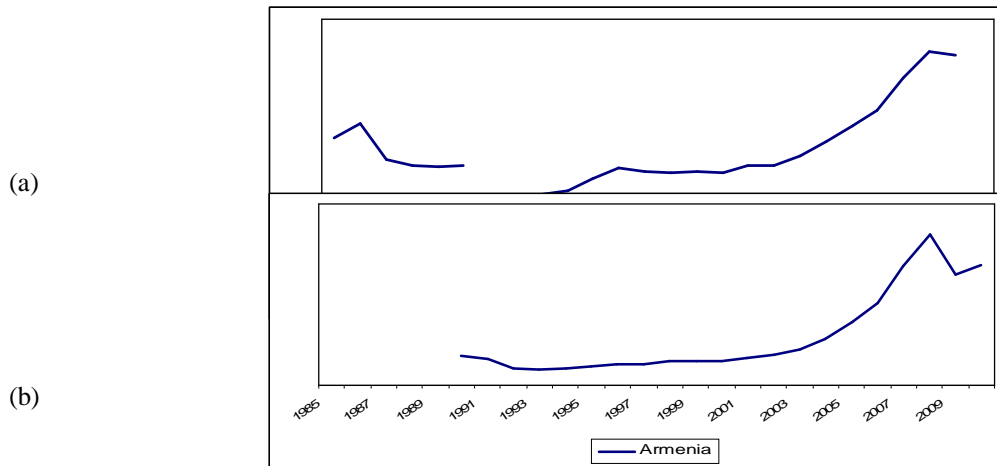


Figure 3. Gross domestic product comparison of Iran and Armenia.

2.1.4. Foreign Direct Investments (FDI)

Foreign direct investment (FDI) or foreign investment refers to the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. It usually involves participation in management, joint-venture, transfer of technology and expertise. There are two types of FDI: inward foreign direct investment and outward foreign direct investment, resulting in a net FDI inflow (positive or negative) and "stock of foreign direct

investment", which is the cumulative number for a given period. Direct investment excludes investment through purchase of shares. FDI is one example of international factor movements.

According to Figure 4, FDI has uptrend in Armenia while it has downtrend in Iran from 2002 to 2008.

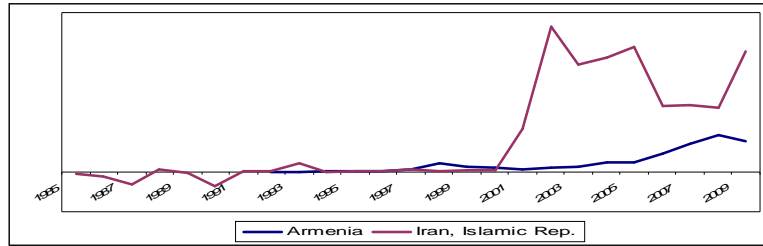


Figure 4. Foreign direct investment comparison of Iran and Armenia

2.2. Research Background

Regarding the studies done on this area, we can mention some of them as follow: First, in an article entitled “Evolution of Armenia's Foreign Policy”, (4) developed a foreign policy of Armenia of 1991. In this paper, the relations of Russia-Armenia, USA-Armenia, Turkey-Armenia, Iran-Armenia, Azerbaijan- Armenia, Georgia-Armenia, and Armenia's participation in the WTO criticism and has been investigated.

Second, (2) studied “Regional and international trade of Armenia: perspectives and potentials”, In general, by analyzing Armenian export potentials on total and on product groups, he pointed out a few moments. The main evidence is that the present geographical and product compositions of Armenian export are insufficient: trade relations with most of the leading trade partners, including two neighboring countries-Georgia and Iran, have no potential for developing. Among positive results, he noted that the most perspective directions of Armenia’s exports expansion are “Industrial supplies”, “Food and beverages” and “Consumer goods” product groups.

In another study, Meddi Hosseini studied Iran's trade relations with neighboring countries. He concluded that economic freedom is the fundamental right of every human to control his or her own labor and property. In an economically free society, individuals are free to work, produce, consume, and invest in any way they please, with that freedom both protected by the state and unconstrained by the state. In economically free societies, governments allow labor, capital and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself.

In addition, in a report, published by “Center for strategic and international studies (CSIS)” The influence of Iran and America to compete in Turkey and South Caucasus countries was discussed. The result was as follows: US and Iranian efforts to bolster their strategic ties to Turkey and the Caucasus are becoming a steadily more significant aspect of their confrontation. The region holds both immense attractions in both geopolitical and economic terms for the United States and Iran, but also complex challenges. Turkey’s primary political, economic, and security ties are with the West, although the ruling Justice and Development Party (AKP) has also sought to strengthen relations with its Middle Eastern and Central Asian neighbors. There is growing competition for influence in Ankara between the United States and Iran as it “looks East” in reaction to de facto rejection by EU, wrestles with tensions with US since invasion of Iraq, and deals with the Islamist versus secular struggle in Turkish politics.

2.3. Research Hypotheses

1. There is a significant relationship between grow rate of GDP and growth rate of export of Iran.
2. There is a significant relationship between grow rate of GDP and growth rate of export of Armenia.
3. There is a significant relationship between grow rate of FDI and growth rate of import of Iran.
4. There is a significant relationship between grow rate of GDP and growth rate of import of Armenia.
5. There is a significant relationship between grow rate of inflation and growth rate of import of Armenia.

3. The Model

As mentioned earlier in this paper the dependent variables in this study are Lnexports and Lnimports and the independent variables are LnFDI, LnGDP and Lninflation. In our research, we are trying to analyze the relationship between dependent and independent variables. Linear model for the two countries is as follows (Ln = Log):

$$LNEXPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION$$

$$LNIMPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION$$

4. Data analysis and Results

We used data from the World Bank in order to analyze the impact of FDI, GDP and inflation on exports and imports for the two countries of Iran and Armenia. Regression analysis was conducted in order to investigate the relationship between dependent and independent variables.

4.1. Iran

In the first model, the R^2 value is 0.70 using exports as the dependent variable. R square tells us how much variance in the dependent variable that is explained by the model. Our model explains 70% of the variance in the Lnexports. The results are summarized in Table 1. According to this table, we can conclude that there is a positive relationship between LnGDP and Lnexports.

Table 1. Iran’s Export

Dependent Variable: LNEXPORT				
Method: Least Squares				
Date: 09/01/11 Time: 23:32				
Sample (adjusted): 1988 2007				
Included observations: 16 after adjustments				
LNEXPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-2.849805	8.129094	-0.350569	0.7320
C(2)	1.010448	0.335668	3.010259	0.0109
C(3)	0.061709	0.070000	0.881553	0.3953
C(4)	-0.026513	0.354420	-0.074806	0.9416
R-squared	0.703171	Mean dependent var	24.03187	
Adjusted R-squared	0.628964	S.D. dependent var	0.630100	
S.E. of regression	0.383811	Akaike info criterion	1.134986	
Sum squared resid	1.767733	Schwarz criterion	1.328133	
Log likelihood	-5.079889	Hannan-Quinn criter.	1.144877	
F-statistic	9.475774	Durbin-Watson stat	0.490299	
Prob(F-statistic)	0.001731			

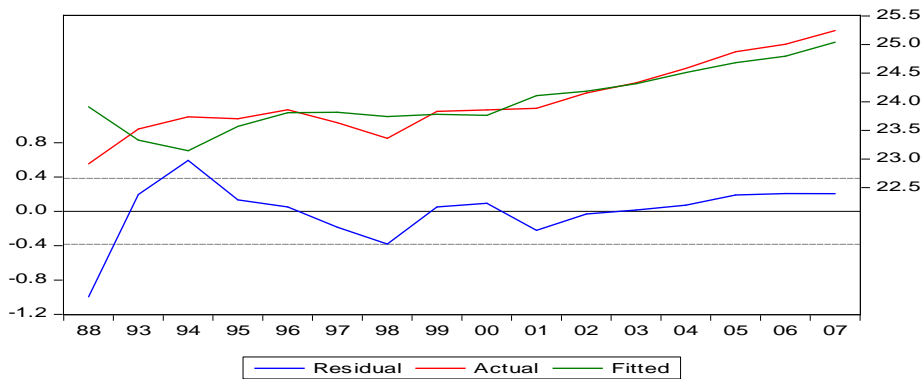
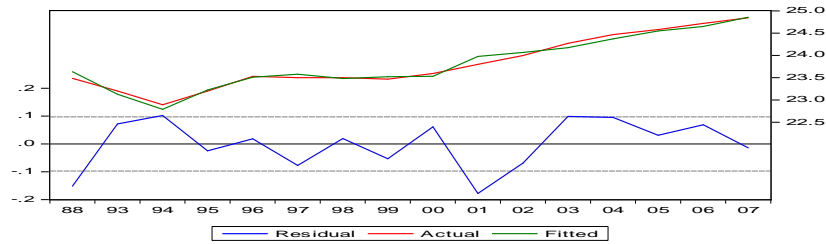


Figure 6. Iran’s export

In the second model, the R^2 value is 0.97 using imports as the dependent variable which means that 97% of the variance in the dependent variable is explained by the independent variables. The regression output given in Table 2 shows that there is a positive relationship between LnFDI and Lnimports.

Table 2. Iran's Import

Dependent Variable: LNIMPORT				
Method: Least Squares				
Date: 09/01/11 Time: 23:40				
Sample (adjusted): 1988 2007				
Included observations: 16 after adjustments				
LNIMPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-2.475103	2.060813	-1.201032	0.2529
C(2)	0.976850	0.085096	11.47945	0.0000
C(3)	0.087595	0.017746	4.936080	0.0003
C(4)	-0.103901	0.089849	-1.156391	0.2700
R-squared	0.978550	Mean dependent var		23.81619
Adjusted R-squared	0.973187	S.D. dependent var		0.594217
S.E. of regression	0.097300	Akaike info criterion		-1.609711
Sum squared resid	0.113608	Schwarz criterion		-1.416564
Log likelihood	16.87769	Hannan-Quinn criter.		-1.599821
F-statistic	182.4798	Durbin-Watson stat		1.554626
Prob(F-statistic)	0.000000			

**Figure 7.** Iran's Import

4.2. Armenia

In case of Armenia, while using Lnexports as dependent variable, we can observe that only GDP is significant ($p=0.000$). However, the model shows R^2 of 0.896 or 86.9% (Table 3).

Table 3. Armenia's Export

Dependent Variable: LNEXPORT				
Method: Least Squares				
Date: 09/01/11 Time: 23:49				
Sample (adjusted): 1994 2009				
Included observations: 15 after adjustments				
LNEXPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.231244	2.921632	0.079149	0.9383
C(2)	1.105308	0.235228	4.698877	0.0007
C(3)	-0.210617	0.145349	-1.449039	0.1752
C(4)	-0.030517	0.045196	-0.675215	0.5135
R-squared	0.869877	Mean dependent var		20.39261
Adjusted R-squared	0.834389	S.D. dependent var		0.626290
S.E. of regression	0.254870	Akaike info criterion		0.327056
Sum squared resid	0.714548	Schwarz criterion		0.515869
Log likelihood	1.547083	Hannan-Quinn criter.		0.325044
F-statistic	24.51188	Durbin-Watson stat		0.605942
Prob(F-statistic)	0.000036			

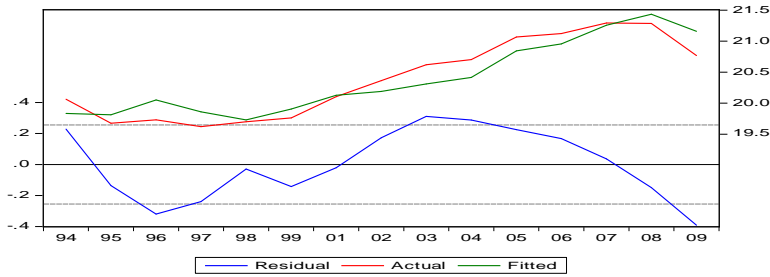


Figure 8. Export of Armenia

As it can be seen from Table 4, the model provides a relatively high R^2 of 0.992 or 99.2% when we measure the effects of independent variables on Lnimports. The impact of GDP on imports was highly significant at $p=0.000$. However, the effect of inflation on imports was less significant ($p=0.004$).

Table 4. Armenia's Import

Dependent Variable: LNIMPORT				
Method: Least Squares				
Date: 09/01/11 Time: 23:47				
Sample (adjusted): 1994 2009				
Included observations: 15 after adjustments				
LNIMPORT=C(1)+C(2)*LNGDP+C(3)*LNFDI+C(4)*LNINFLATION				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	2.880039	0.638018	4.514041	0.0009
C(2)	0.846823	0.051368	16.48527	0.0000
C(3)	-0.017855	0.031741	-0.562532	0.5850
C(4)	0.035291	0.009870	3.575670	0.0044
R-squared	0.992652	Mean dependent var		21.13131
Adjusted R-squared	0.990648	S.D. dependent var		0.575537
S.E. of regression	0.055658	Akaike info criterion		-2.716007
Sum squared resid	0.034076	Schwarz criterion		-2.527194
Log likelihood	24.37005	Hannan-Quinn criter.		-2.718018
F-statistic	495.3332	Durbin-Watson stat		2.641444
Prob(F-statistic)	0.000000			

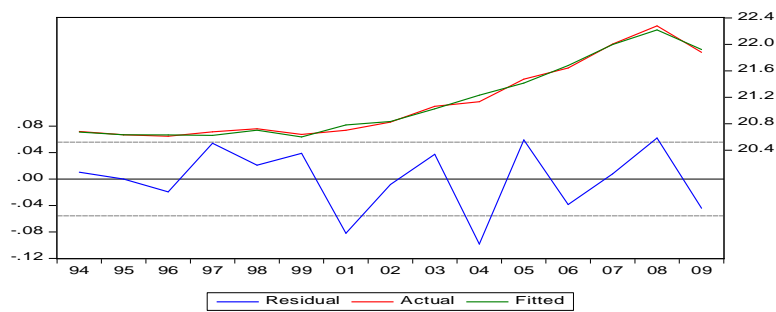


Figure 9. Armenia's Import

This model analyzes the relationship between Lnexports and Lnimports with variables at LnGDP (Gross domestic product), LnFDI (Foreign direct investments), and Lninflation in Iran and Armenia for period of 1985-2009 (Armenia data is for period of 1994-2009). The result showed that:

1. In Iran: since the coefficient of LnGDP is +1.01 with t value of 3.01 we can accept our first hypothesis that 90 percent confidence there is a positive and significant relationship between grow rate of GDP and growth rate of export of Iran.

2. In Armenia: since the coefficient of LnGDP is +1.10 with t value of 4.69 we can accept our second hypothesis that 90 percent confidence there is a positive and significant relationship between grow rate of GDP and growth rate of export of Armenia.

3. In Iran: since the coefficient of LnFDI is +0.08 with t value of 4.93 we can accept our third hypothesis that 90 percent confidence there is a positive and significant relationship between grow rate of FDI and growth rate of import of Iran.

4. In Armenia: since the coefficient of LnGDP is 0.84 with t value of 16.48 we can accept our fourth hypothesis that 90 percent confidence there is a positive and significant relationship between grow rate of GDP and growth rate of import of Armenia.

5. In Armenia: since the coefficient of Lninflation is 0.03 with t value of 3.57 we can accept our fifth hypothesis that 90 percent confidence there is a positive and significant relationship between grow rate of inflation and growth rate of import of Armenia.

5. DISCUSSION AND CONCLUSION

While the relations between Iran and Armenia expanded at the beginning rapidly, it had ups and downs. The relations between Armenia republic and Islamic republic of Iran did not have much expansion as a result of unsuitable position of external policy for overturning Russia and getting independence by governments beyond Russia Caucasia. On 25-Dec- 1991, three months after Armenia independence, Islamic republic of Iran recognized this country. Iran made a diplomatic relation with this country because of having border with Armenia and security and political benefits at the region and along with cultural, political and economic relations in 1992. The geographic position of Armenia for Iran for accessing to European countries and playing the effective role at southern Caucasia region on the one hand, and facts caused from Ghare-Bagh crisis, instability of Gorjestan, etc on the other hand, caused the relations of two countries expanded from the first during early years of 1990. Given special requirements and position of Armenia, Armenians call for its relation expansion with Iran.

In 1997–2000, the internal evolutions and external policy performance of Armenia influenced on the relations of two countries. At this time, we observed the decline in the economic cooperation level of two countries, especially trade relations. In general, we can mention the following effective factors on mutual relations in this period caused by diplomacy behavior of Armenia:

- To gradually ignore Iran's role and position at region problems
- To expand the cooperation with Nato

However, the relation of two countries has improved again with eliminating misunderstandings between two countries and the relation trend of two countries has also expanded. Two countries have focused on cooperating in the fields of energy, transportation, custom, environmental problems, cultural and scientific problems and etc, and have signed multiple agreements and contracts for their relation expansion.

In the negotiations performed on February 2006, two parties emphasized on neighborhood virtue and good relation between two countries. Iran increased its readiness for transmitting experience in the fields of energy, the establishment of refinery, power plant, railroad and telecommunication cooperation.

Armenia needs having the relations with Iran. The relations with Tehran had much importance for Iravan politicians from this respect that Armenia needs Iran in order to get the independency. This means that two countries have a strategic common benefit at some respects. Therefore, Armenian politicians take into consideration the strategic relations with Iran at the time of its state external policy formation. Among remarkable points of Armenia are factors like economic structure, aims of political, geographic and economic, religious principles, Iran strategic position at the region (link with Persian Gulf and free sea), historical background and civilization of country, cultural factors, Iran's defensive policies and its importance at making stability at the region, Iran's rich resources and its markets.

Further, Iran plays an important role for Armenia from political and economic view. Given the geographic position and wide connections, Iran has much economic and political benefits at Caucasia in general, and at Armenia in particular as one of the most important countries in the region. On the other hand, Iran is a link loop due to the connection with southern coasts of Caspian sea and northern coasts of Persian Gulf and Oman sea not only for countries with a common border but also for the regions of Caucasia, central Asia, Arab world and India peninsula. At present situations, Iran should play a more active role at the region given Soviet Union overturning and the lack of power at Caucasia and central Asia region.

In addition to these cases, the fact is that lack of land and tribal difference between two countries of Iran and Armenia is an important factor at expanding the relations. On the other hand, Armenia has a valuable position at Iran strategic and political geography programs. At the present situation, Iran national benefits are supplied at strengthening the independence of Armenia and the participation at the regional policy scope. It is interesting that it is not one-way need of Armenia that necessitate the expansion of bilateral relations, but it is two-way need of Iran to the facilities and geographic position of Armenia. In other words, Armenia has a position that can help Iran from point of view of transportation to Europe. The causes of the importance of Armenia for Iran are as follows:

- Geopolitic importance due to the connection of Iran with black sea, northern Caucasia and Europe and the use of inlet and outlet corridors and linking lines of Armenia
- Armenia strategic importance for confronting with the expansion request by Turkey at the region
- Cultural importance from the viewpoint of Armenians' minority presence at Iran
- Political importance from the exploitation possibility viewpoint because of Armenians powerful lobby at political and economic meetings

6. Recommendation and Suggestion

David Ricardo only asserted that specialization maximizes national income of each trading country, but did not explain how trading countries will find the equilibrium prices when they trade. Ricardo did not explain how equilibrium price is determined. For this purpose, we need offer curves.

The Heckscher-Ohlin model (H-O model) is a general equilibrium mathematical model of international trade, developed by Eli Heckscher and Bertil Ohlin at the Stockholm School of Economics. It builds on David Ricardo's theory of comparative advantage by predicting patterns of commerce and production based on the factor endowments of a trading region. The model essentially says that countries will export products that use their abundant and cheap factor(s) of production and import products that use the countries' scarce factor(s).

Under the assumptions of the specific factors model, production in each sector can be represented as depending on the amount of the variable, mobile factor capital. Given a fixed amount of the specific factor, this implies diminishing returns to capital. As already noted, this implies a standard textbook concave production possibility curve.

However, the most important theoretical construct or tool of the Specific Factors model is the mobile factor market diagram, which shows how capital is allocated between sectors for given technology and international prices (note that when labour is assumed to be the mobile factor, the diagram reflects labour market equilibrium and shows wage equalisation).

New Trade Theory tries to explain empirical elements of trade that comparative advantage-based models above have difficulty with. These include the fact that most trade is between countries with similar factor endowment and productivity levels, and the large amount of multinational production (i.e. foreign direct investment) which exists.

Gravity has long been one of the most successful empirical models in economics. Incorporating the theoretical foundations of gravity into recent practice has led to a richer and more accurate estimation and interpretation of the spatial relations described by gravity.

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