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**ECONOMIC INTEGRATION PROCESSES OF ISLAMIC  
REPUBLIC OF IRAN AND NORTHERN COUNTRIES (RA)**

**DISSERTATION**

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## INTRODUCTION

**Dissertation theme Modernity/Relevance:** Taking into consideration the potential and opportunities of the economy as well as the geographical location and strong willingness of the government of Iran to turn the country into the leader in the region as well as in the world market, the theme of the dissertation is in urgent need of not only for Iran but also for the other countries in the region as they would be the immediate carriers of any changes in the region.

The 21st century is characterized by the creation of new economic integrations with focus on the regions. The EU and NAFTA were two regional integrations that were mostly imitated by other countries, although none of them was 100 percent successful yet. Overall, the economic integration is considered as a regional process mainly covering economic, investments and trade issues.

There is strong confidence among many economists and politicians that Iran could be turned into the 5th pillar of the world economy in case of several improvements in the social-economic policies of the country, especially after removal of the sanctions against Iran by the Western countries turning Iran as an alternative powerful partner for its neighboring countries. Even in case of Russian's strong presence in the region, Iran, with targeted developed international economic policies, could take a leading role in economies of its neighboring countries leaving the political presence to Russia - without violating its major political alliance interests in the region at this time.

There is another important fact related to the possible interests of Iran in the region – the Caucasus is the crossroads between East and West and vs., on the other hands it is the Silk Road. Thus, after independence of the South Caucasus countries Iran forced by the economic interests of its country became very interested with this region as Russia, and Turkey. The situation is becoming even severer with the fact of oil and gas existence in the region with additional forces of international arena are becoming involved in the region's interests such as the USA, NATO and EU.

Today, Iran dose not openly yet define its goal and priorities in the region taking into consideration the strong political presence of Russia, USA and Turkey in these countries

with different levels in each country. As the region presenting countries have more or less their political alliances, within the suggested integration, the role of Iran was similar the role of Germany in the EU as the region is not economically well developed and needs strongly developed economic shelter- partner.

Coming to the issues of natural resources of each 5 countries, it could be stated that Armenia and Georgia are not rich with the natural resources, while Azerbaijan, Iran and Turkmenistan are rich of crude oil and natural gas. It could be stated that all 5 countries don't produce wheat. Thus, it would be the major product of imports for this regionalization. In Iran, the most developed sector of economy is industry with more than 60 percent of public ownership. The economy of Iran as well as of Azerbaijan and Turkmenistan is dependent on the oil and natural gas revenues. The sanctions against Iran pushed the country to establish productions in all fields of economy creating huge potential for further development. Iran's major trade partners in the region are Turkmenistan followed by Azerbaijan. On the third place is Armenia, then: Georgia. Revealed competitive advantages (RCA) of Iran are in the sectors such as fuels, chemicals and rubbery, metals and minerals as well as in vegetables, minerals and fuels. Intraregional Trade intensity Index (ITII) of Iran is high for all products goods with all countries of the region.

In Armenia, the major sector of economy is related to the services. The major export products are iron, unwrought copper, nonferrous metals, diamonds, mineral products, foodstuffs and energy, while the major imports products include natural gas, petroleum, tobacco products, foodstuffs, and diamond. In 2016, the major exports products of Armenia to Iran were: fuels, animals, wood, machines and skins. The major imports products for the same period included the minerals, plastics, fuels, metals, vegetables, animals and stone glasses. The RCAs of Armenia include food, metal, stone and glasses, animal and mineral productions. It has potential in clothing as well. There is not calculation (because of lack of statistics) for the sub-sectors of services. In case of calculation, Armenia also has strong RCAs in tourism and software development sectors too, taking into consideration the trends of these sectors' development, exports and FDIs attraction. Trade Intensity Index of Armenia is high with Georgia followed by Iran.

Like Iran, the major sector of the economy of Azerbaijan is industry, with almost one sector development, which is petroleum and petroleum products. Azerbaijan's imports from Iran include minerals, textile and clothing as well as plastics and rubbery, while its exports include the woods, food products, metals and textile and clothing. Azerbaijan has a competitive advantage mainly in the fuels within last 10 years, vegetables and food products. Trade Intensity Index of Azerbaijan with Georgia is high for all product groups, Iran is on the second place followed by Turkmenistan. It is zero for Armenia because of the established political situation.

Georgia's exports to Iran include the woods, plastic and rubber, food products and metals, while the major import-products are: the fuels, stones and glasses, plastic and rubbers. Georgia has advantages in the vegetables, food products, minerals, chemicals, metals and transportation. As in case of Iran Georgian Trade Intensity Index is high for all goods products with all countries. The highest index is with Armenia, followed by Azerbaijan, Iran and Turkmenistan correspondingly.

Coming to Turkmenistan, like Azerbaijan, its economy is dependent on natural gas and oil and like Iran the major investor in the economy is the Government. The advantages of Turkmenistan are in fuel and textile and these two products are the major export products of Turkmenistan since its independence. Thus, except Armenia and Georgia, all other three countries mainly have advantages in fuels and gas. Only Iran and Georgia has high trade intensity index with other countries in the region, which means that these countries will strongly benefit from free movements of the goods and services in the region.

In addition, it could be stated that the impacts of possible free trade agreements on the economies of Armenia, Azerbaijan, Georgia, Iran and Turkmenistan based on the SMART (software for market analysis and restrictions on trade) analysis are negative for the revenue effects because of reduction of tariff rates among the suggested countries; while they are positive for the welfare and for the total trade effects because of proposed free trade regime. They would be also positive for the trade diversion effects among themselves because of the same reasons, although with the rest of world it would be negative, if there would be protective trade policies against the third countries. Although

this issue could be solved through having normal quality infrastructure requirements (like the one that the EU has) instead of “artificial” restriction of foreign trade inflow.

The strongest obstacle for Iran is the fact that the region continues to remain of the great interests of Turkey, Russia and Iran. At the same time, the region is too sensitive for external influence with high possibilities of turning into armed conflict. The risk of the war in the region is too high about which also indicate foreign assessments too. The region remains one of the most complex territories in the post-Soviet area and comprises three heavily disputed areas – Abkhazia and South Ossetia in Georgia, and Nagorno-Karabakh in Azerbaijan. Therefore, competition for an influence among regional states, with its ideological, religious and political dimensions, lowers the threshold of the possible armed conflicts erupting in the region. In addition, Caucasus has always been in great interests of the West European states (which have never bordered the region) first of all because of its significant geopolitical location as well as by its prospects of wide energy corridor.

Assessing the country-country cooperation, it could be stated that with Armenia, Iran, first of all, is seeking its way out of isolation. Such convergence is not contrary to Russia’s strategy in the region that has become a significant obstacle for Turkish expansionism. As the largest foreign trade partner of Armenia and Azerbaijan, Iran is interested in the stability of their political systems in order to become long-term partners. Currently, many experts are sure that the goal of Iran in the Caucasus is to provide smooth transit of its oil and gas resources to the EU. With Azerbaijan, Iran is looking way-out to the Russian market, while with Turkmenistan, it is way out to Asian markets and having a partner in the region. Georgia is considered as a continuation of the strategy of way out of isolation to Armenia.

The fact is that the traditional ways of integration could not be efficient for the region taking into consideration the existence of the contradictory culture, history, territorial interests, religion and ordinary life. Only, in case of having efficient integration within the region, it could be possible to increase economic presence of Iran in the region without violation of the Russian presence. For this goal, first of all the Government of Iran had to clarify its role in the international economy. The possible roles are: to develop s its arm

forces led by the nuclear arm; or turning its country into strong economy; or development of nuclear arms and the development of the economy had to be done simultaneously; and or acting according to the demand of the world smoothly moving ahead or staying on the same position. As to be nuclear armed leader in the World Economy is too risky for Iran and the World economy, it is more logical to choose the role, which will lead to the economic leadership in the region and then in the world economy.

Thus, taking into consideration, the current instable situation of the world economy, two approaches were developed for the role of Iran in the regional integration. The first one, which is more foreseeable is to tighten economic and political relations with the Northern neighbor countries separately, while the second one is to create a Custom Union among the mentioned countries, which is difficult at current stage because of several strong objective and subjective hindering facts starting from the “non-declared war” between Armenia and Azerbaijan and ending with strong political interests of Russia in Armenia, Turkey in the Azerbaijan and the USA in Georgia.

Coming back to the term of integration, it should be mentioned that this term in its current meaning has come into turnover from 1930s by Eli Heckscher, Herbert Gaedicke and Gert von Eyern<sup>1</sup> related to the private companies alliances. Then the term has been evolved through other economists among who were Jacob Viner, Bela Balassa, Linder and later extended by Meade and Lipsey.

With the spread of integration in the world market, several models as well as indicators were developed to calculate the economic impacts of economic integrations on the economies of the integrated countries among which are gravity and partial equilibrium models and Intraregional Trade Intensity (ITI) and Revealed Comparative Advantage (RCA), which would be implemented to assess the possible outcomes of the economic integration between Iran and the northern neighboring countries within this thesis.

Today, there are more than 30 different economic integrations, which are on regional and global levels, where two most distinct key-stands are trade and investments. However,

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<sup>1</sup> Machlup, Fritz (1977). A History of Thought on Economic Integration. New York: Columbia University Press. ISBN 0-231-04298-1.

it re-emerged in 1980s turning into a multidimensional process, which focuses on economic but also on political, diplomatic, security and cultural aspects integration<sup>2</sup>. From the economic perspective, integration means moving from the national boundaries to a supranational and supra-regional institution - a process in which national borders becomes artificial among participant countries for the free movement of goods, capital and labor.

It has to be mentioned too, that although economic integration has a list of advantages, it has several strong disadvantages as well. The strongest ones among them are: the creation of trading blocs, trade diversion and last of them is the national sovereignty. Currently, the major economic integrations in the world include European Union; North American Free Trade Agreement; The Association of Southeast Asian Nations; Asia-Pacific Economic Cooperation; and The African Union.

Although the EU is the only model, where almost all stages of economic integration have been defined by Balassa based on 4 basic freedoms: free exchange of goods, services, capital and labour, the experiences of ASEAN and NAFTA are very instructive ones for our case as it shows on practice the possible outcomes of economic integration of Iran and its northern neighbor-countries.

With its positive and negative impacts, the economic integration continues to be one of the major topics of discussions and researches between the economists. At the same time, we have suggested the new way to define the economic integration term such as: “the major target of the economic integration is politics, which brings together different countries to protect the rights of member-countries’ citizens, producers as well as boarders, environment, the economy, etc.”

Thus, the possible economic integration of Iran with its northern border-neighbor countries is more than urgent for the economy of Iran.

**Research Goals and Objectives:** The research goal of the present dissertation is to develop a possible best alternative model for the economic integration of Iran and its

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<sup>2</sup> De Lombaerd Philippe and Luk Van Langenhove (2005), Indicators of Regional Integration :Conceptual and Methodological Issues, IIS Discussion paper No.64 pp. 1-35., [www.tcd.ie/iis/documents/discussion/pdfs/iisd64.pdf](http://www.tcd.ie/iis/documents/discussion/pdfs/iisd64.pdf)



northern border-countries, which would be based on non-violation of the political interests of the major powers in the region, but will increase the economic role of Iran in the region.

The key objectives of the research are:

- to assess the major theories related to the economic integration from the modern prospective for developing the best applicable theoretical background of the suggesting integration;
- to evaluate the most effective integrations model in the world market for developing the major procedures for the proposed case in our dissertation;
- to assess the RCAs of each countries for development of the possible framework of specialization among the integration model;
- to calculate the possible impacts/outcomes of the economic integration between Armenia, Azerbaijan, Georgia, Iran and Turkmenistan on their economy through partial equilibrium model (SMART) to have basic statistical forecast;
- to develop several models/cases for evaluating the possible outcomes and impacts of each on the economy and the role of Iran in the region;
- To develop and suggest the best alternatives for the economic role of Iran in the regional integration.

**Research Objective and subject:** *The* research objective is the possible economic integration in the region.

The research subject is development of the best alternative integration model for Armenia, Azerbaijan, Georgia and Turkmenistan with Iran that is the opportunities and the possible role of Iran in the region with major emphases on the impacts and outcomes.

**Research theoretical, methodological and information grounds:** The theoretical ground of the research was the thesis and researches of several world's well known economists who are professional in the issues related to the economic integration, economic unions and free trade agreements, among which are: Jacob Viner, Bela Balassa, Linder, Meade and Lipsey. The practical cases were based on the EU, NAFTA and ASEAN models.

The methodological ground was the partial equilibrium model related to the free foreign trade, particularly through the SMART model.

The information grounds were the national statistics services of Armenia, Azerbaijan, Georgia, Iran and Turkmenistan as well as statistics and assessments of the international organization with stress on UN COMTRADE.

**Research scientific innovation/new products:** Based on several definitions of economic integration, the following symbiotic definition is suggested for our case: *the economic integration is an economic procedure with political, economic and security targets between different states becoming closer through the reduction or elimination of tariff and non-tariff restrictions on the movements of goods, services, capital, people and factors of production as well as the cooperation in the fields of monetary, fiscal, foreign trade and investments policies.* The research innovation/new products are based on several economic and practical results, which were concluded in the last part of the research. The most important among which are:

- ❖ Calculation of the RCA (which shows comparative advantageous sector of each country in the world market) of Armenia, Azerbaijan, Georgia, Iran and Turkmenistan based on which the matrix of possible mutual beneficial economic cooperation was developed;
- ❖ Based on comparative, quantitative and qualitative analysis, a possible efficient and mutual beneficial economic integration model with its major actions for the Government of Iran were developed for the future case;
- ❖ First time through SMART (partial equilibrium model was selected as the general equilibrium model requires too much objective and subjective data to have realistic outcomes, which is not possible for our case, as we consider just free trade relations between the targeted countries) model there was made a calculation of possible impact of free trade on the economies of Armenia, Azerbaijan, Georgia, Turkmenistan and Iran. Based on the outcomes of the assessment, the possible clusters establishment directions were suggested for each country with Iran, which will turn the region into the

major producers of range of products in the world market to compete with China, Turkey, the EU, USA and Russia in the world economy.

**Research significance and practical application of results:** The theoretical and practical outcomes of the dissertation could become the guidelines for the Government of Iran for regional economic policy development with each country as well as for the region as a whole. At the same time, the calculated RCA could serve for each country's government for the establishment of mutual beneficial foreign trade with countries in the region.

**Dissertation results testing and publications:** The approaches and principles assessed during research were discussed in the International Economic Relation department of the Yerevan State University and in the International Economic faculty of the Shahid Bahonar University of Kerman (State university). Several suggestions were implemented by Tehran Chamber of Commerce, Industries, Mines & Agriculture (<http://en.tccim.ir/>) Iran-Armenian Chamber of commerce (<http://iranarmeniacc.org/>), Trade promotion Organization Of Iran (<http://eng.tpo.ir/>) and could be useful for the Chamber of Commerce and Industry of the Republic of Armenia (<http://www.armcci.am/>) and the Appropriate Ministries of each countries discussed in the dissertation. The major clauses of the dissertation were reflected in 6 publications of the author.

1. Trade Relations between Armenia and Iran. Finance and Economy - N11: 2011  
[http://www.fineco.am/pdfs/Mehdi\\_Hosseiny\\_Naveh\\_2.pdf](http://www.fineco.am/pdfs/Mehdi_Hosseiny_Naveh_2.pdf)
2. Trade Economic Relations between Iran and Neighbouring Countries. Finance and Economy - N11: 2011թ.:  
[http://www.fineco.am/pdfs/Mehdi\\_Hosseiny\\_Naveh\\_1.pdf](http://www.fineco.am/pdfs/Mehdi_Hosseiny_Naveh_1.pdf)
3. Regional Economic Integration and its Effects on Economic Growth and Economic Welfare. Co-author: Toros Torosyan and Seyed Abdolmajid Jalae. World Applied Sciences Journal – 2012:  
[https://www.idosi.org/wasj/wasj17\(10\)12/19.pdf](https://www.idosi.org/wasj/wasj17(10)12/19.pdf)

4. The Effect of Regional Economic Integration on the Economic Welfare of Iran and North Neighbouring. Mkhitar Gosh Scientific – Methodical Review– 4-6: 2012  
[http://www.mkhitargosh.com/2012%20\[4-6\].pdf](http://www.mkhitargosh.com/2012%20[4-6].pdf), 163-169 էջեր:
5. Iran and Armenia: Possible Potential of Economic Cooperation. Alternative – 2016, N 4. Yerevan, Armenia
6. Foreign trade potential of the Iranian Islamic Republic. Co-author: Toros Torosyan. Alternative– 2017, N-1. Yerevan, Armenia

**Dissertation structure and volume:** Dissertation structure covers Introduction, three chapters, conclusions and recommendations, as well as a bibliography. It contains 15 tables, 6 graphs, 1 matrix, 1 scheme and 2 annexes. The page numbers of the dissertation are 125 pages including references and annexes.

## **CHAPTER 1. THEORETICAL FRAMEWORK OF ECONOMIC REGIONAL INTEGRATION FROM MODERN PROSPECTIVE**

There are different approaches defining the Economic integration, stressing both the negative as well as the positive impacts of the process on the economies of participating countries. As discussed, in this paper, the Economic integration is an economic procedure between different states becoming closer through the reduction or elimination of tariff and non-tariff restrictions on movements of goods, services, factors of production as well as the cooperation in the fields of monetary and fiscal policies. Currently, there are more than 30 economic integrations, which are on regional and global levels and are on different stage of unifications. The most distinct two issues of the economic integration are: trade and investments.

There are several models and indicators also developed by the economists to calculate the economic impacts of economic integrations among which are gravity and partial equilibrium models and Intraregional Trade Intensity (ITI) and Revealed Comparative Advantage (RCA), which would be implemented to assess the possible outcomes of the economic integration between Iran and the northern neighboring countries within this thesis.

### **1.1 Ballasa's model implementation assessments from modern perspectives**

The economic integration is the regional process, which was mainly in the field of economic and trade, emerged after World War II. This term in its current meaning has come into turnover from 1930s by Eli Heckscher, Herbert Gaedicke and Gert von Eyern<sup>3</sup> as at the beginning it was related to the private companies' alliances. Then the term has been evolved through other economists among who were Jacob Viner, Bela Balassa, Linder and others.

However, it re-emerged in 1980s with the well-known wave of new regionalism. Thus, regional integration is considered a multidimensional process, which focuses not only on economic integration but also on political, diplomatic, security and cultural aspects,

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<sup>3</sup> Machlup, Fritz (1977). A History of Thought on Economic Integration. New York: Columbia University Press. ISBN 0-231-04298-1.

although the economic integration and trade are still the main and central aspect of integration project<sup>4</sup>.

From the economic perspective, integration means moving from national boundaries to a supranational and supra-regional institution - a process in which national borders becomes artificial among participant countries for the movement of goods, capital and labour.

It is well known fact that one of characteristics of globalization is regional integration and global trade integration in the form of international organizations and countries movement towards removing tariff and non-tariff obstacles. Technological progress has provided an opportunity to classify production processes into different steps in different places without declining profitability and efficiency. Therefore, growth of trade process and global production has provided a condition for different countries to access important technological data and to use technological spillovers of industrial and developed countries. Experience has also shown that the third world countries have trends to trade with developed countries due to their huge consumption markets. Owing to rules and regulations developed countries impose on third world countries, they decrease export. Thus, regional-economic integration seems to develop these countries and to reduce obstacles available in these countries.

Although, the meaning of economic integration was first used by Eli Heckscher, Herbert Gaedicke and Gert von Eyern, the theoretical bases were defined by Jacob Viner, Bela Ballasa and later extended by Meade and Lipsey. Different definitions have been presented for integration. As Johan Galtung (one of the most significant integration theorists) states that integration is a process, where two or some political actors change to a single political entity and thus integration trend completes.<sup>5</sup>

The Neoclassical school representatives were sure that free trade leads to welfare increase based on Riccardo's comparative advantage theory. Viner was among the first

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<sup>4</sup> De Lombaerd Philippe and Luk Van Langenhove (2005), Indicators of Regional Integration: Conceptual and Methodological Issues, IIS Discussion paper No.64 pp. 1-35.

<sup>5</sup> Mohammadi, Yadu'llah (2008), "Convergence and the course of evolution and its evolution", Journal Misbah, No. 1, pp. 58-73, 100p.

economists who assessed the trade flows of two countries before and after integration, which were compared also with the rest of the world. It shows that the free trade could have negative impacts on the welfare of the countries. Viner's assessment was based on the short-run outcomes, so ignoring the economies of scale and terms of trade effects.

The Viner's findings became the framework for the economic integration theory, which were related to the two basic concepts: 1. trade creation, in other words, welfare improving effect or change of less efficient domestic production with more efficient production of partner countries and 2. trade diversion, in other words, welfare deteriorating effect or change of more efficient production of non-partner countries' imports with less efficient productions of partner countries' imports.

Based on Viner's findings, the economic integration could lead on welfare improvement or welfare deterioration depending on characteristics of the each case<sup>6</sup>. Viner focused on the production effects of the economic integration.

Afterward, Meade and Lipsey expanded the Viner's model adding the consumption part as well<sup>7</sup>. Particularly, they used the concept of trade expansion as a factor of economic welfare, which is also known as the inter-commodity substitution effect<sup>8</sup>. Moreover, the Viner's model was based on one imported good, while Meade, Lipsey and later Wonnacott and Wonnacott approaches were based on many goods. So, the Viner's model considers partial equilibrium model, while the Meade-Lipsey considers general equilibrium model. Meade argues Viner's statement of trade diversion related to the misallocation of the world's resources as a result of the economic integration. For Meade, this could take place only in case of inelastic demand and completely elastic supply in the market. In other cases, the economic integration leads to increase of the volume of trade by Meade even though there is trade diversion, which he called "trade expansion softening the fact of trade diversion stated by the Viner.

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<sup>6</sup> Viner, Jacob (1950) *The Customs Union Issue*. Anderson Kramer Associates; Washington, DC, 1961 edition

<sup>7</sup> Meade, J.E. (1955) *The Theory of Customs Unions*. North-Holland Publishing Company; Amsterdam; 2nd printing, 1966

<sup>8</sup> Lipsey, Richard G. (1957) "The Theory of Customs Unions: Trade Diversion and Welfare"; *Economica* (NS).

Another economist Bela Balassa defined the possible development and more efficient stages of economic integration, which are seven:

1. **Preferential trading area or agreement** – during of which two or more countries decide to unite to give preferential access to certain products among each other through reduction of rate of tariffs.
2. **Free trade area** – at this stage two or more countries decide to have free trade between themselves, but with independent foreign trade policy with the third countries.
3. **Customs union** – at the third stage of economic integration, two or more countries decide to have free trade among each other with common foreign trade policy;
4. **Common market** – in this stage, the bases of free movement of capital and services are created;
5. **Economic Union** – this is the 5<sup>th</sup> stage of economic integration, when the participant countries have common policies related to the product regulation, freedom of movements of goods, services, capital and labour with common foreign trade policy, which means combination of the Customs Union with the Common Market;
6. **Economic and monetary union** – this is the economic union which has common currency too;
7. **Complete economic integration** – currently, this is the final stage of development of the economic integration, where the participant states have no control of economic policy. In modern world economy, there are not super-national organization reached into this stage, but they are states, particularly the USA, which could fit into this definition.

Moreover, Balassa considered the economic integration as a process and as a state of affairs, particularly “a process” considered as elimination of discrimination between economic units of different countries and “state of affairs” considered as the absence of discrimination between national economies<sup>9</sup>.

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<sup>9</sup> Balassa, B. (1961) “Theory of Economic Integration”; Richard D. Irwin, Inc.



Another approach of the economic integration is developed by Cantori and Spiegel<sup>10</sup>. Proposing three levels (international, regional and domestic systems), they regarded the region as a ring between two other levels and as an autonomous analytical unit with internal dynamics. Regarding four main variables (integration level, nature of connections, power level and structure of relations), they divided the integrated region into three main sections: first, central section which includes countries that have common sociopolitical fields or achieve common activities and organizational fields and have a kind of social, political, economic and organizational integration.<sup>11</sup> In this regard, different variables like level of interregional relations and type of relations affect weakness or strength of similarities.<sup>12</sup>

Second, peripheral countries; which have less integration, less connections, relatively proportional power levels and less stable relations and which mainly tend to move out of the region. These countries, however, may join the central section in future.

Third, the intervention section, which is out of the region and, is related to cross-regional powers. Any type of analysis about every region shows that it is not only region countries that play a role in this regard but in an international system, which has hierarchy of countries. The countries out of the region can also get involved in international policies of the regions.<sup>13</sup>

Although, the economic integration leads to too many advantages, it has several strong disadvantages as well. The strongest ones among them are: creation of trading blocs, trade diversion and lost of national sovereignty.

Coming to the assessments of impacts of the economic integration, it could be stated that on general there are two models for empirical analysis (general equilibrium and gravity models), and 2 trade specific major indicators (Intraregional Trade Intensity (ITI) and Revealed Comparative Advantage (RCA)).

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<sup>10</sup> Cantori, Luis J. & Spiegel, Steven L.(1970).The International politics of Regions. New Jersey: Prentice Hall, Englewood Cliffs.

<sup>11</sup> Ghasemi, F. (2006),” Principles of International Relations”, Tehran, Journal of Business Research. No. 67. Pages 12-23, 100p

<sup>12</sup> Valadan Jafari, A. (2010), G theory in an area studies', Economic and Political Information, No. 223 and 224, pp. 222-223., 300

<sup>13</sup> Bozorgi, and Abdullah Waheed Mir-Hosseini (2009), "Iran and regional partners together to form the core of the regional economy", Business Research, No. 23, pp. 37-120, 200p.

Intraregional Trade Intensity equals to  $(T_{ii}/T_{iw})/(T_{iw}/T_w)$  (where  $T_{ii}$  is exports of the country to the signature countries plus imports from the countries,  $T_{iw}$  is the exports and imports of the country to the world,  $T_w$  is total world exports plus total world imports). Next indicator is the Revealed Comparative Advantage, which is calculated as  $(X_{cg}/X_c)/(X_{wg}/X_w)$ .  $X_{cg}$  is exports of good  $g$  by country  $c$ ,  $X_c$  is total exports of country  $c$ ,  $X_{wg}$  is world exports of good  $g$  and  $X_w$  is total world exports.

The general equilibrium model is an ex-ante analysis, while the gravity model is a post-ante analysis of free trade among participant countries. Against the discussion of the pros and cons of these models, they assist to have tangible outcomes to be used by the policy makers. As the general equilibrium model requires too many data, which is impossible to have for all countries that are targeted within this thesis, the partial equilibrium model (which is also ex-ante analysis) would be considered through SMART (software for market analysis and restrictions on trade) model. It is widely used software for the free economic integration, which is used to assess the impact of tariff reduction/elimination among integrated countries on the revenue and welfare as well as trade creation and trade diversion of the latter<sup>14</sup>.

SMART requires the following data:

- (i) the import value from each foreign partner,
- (ii) the tariff faced by each foreign partner,
- (iii) the import demand elasticity for the commodity, (iv) the export supply elasticity for the commodity, and
- (iv) the substitution elasticity between varieties of the commodity<sup>15</sup>.

The gravity model drew of the economic integration is based on Newton's Law of Gravitation. Particularly, the developed model is used to predict trade flows among integrated countries based on their economic sizes (mostly GDP) and distance between

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<sup>14</sup> This model is a part of the World Integrated Trade Solution (WITS) trade database and software suite provided jointly by the World Bank and the United Nations Conference on Trade and Development.

<sup>15</sup> Note that SMART accepts just one import demand elasticity for the commodity, not one for each national variety. SMART also expects that the substitution elasticity is the same for any pair of varieties of the commodity.

the countries. From this point, the model was first implemented by Jan Tinbergen in 1962. The basic model for trade between two countries (i and j) takes the form of:

$$F_{ij} = G(M_i^{\beta_1} M_j^{\beta_2} / D_{ij}^{\beta_3}),$$

where F is the trade flow, M is the economic mass of each country, D is the distance and G is a constant.

More precisely, the gravity model could be presented by:

$$\ln X_{ij} = A + \delta_1 \ln(Y_i * Y_j) + \delta_2 \ln(N_i * N_j) + \delta_3 \ln D_{ij} + \delta_z \ln V_z + \ln e_{ij},$$

where  $X_{ij}$  is imports demand, A- intercept;  $\delta$  - coefficients of the explanatory variables,  $Y_i$  - income of the importing country,  $Y_j$  - income of exporting country,  $N_i$  - per capita income of the importing country,  $N_j$  - per capita income of exporting countries,  $D_{ij}$  - variable for distance between the importing and exporting countries,  $V_i$  - vector of additional variables, in case of requirements and  $\ln e_{ij}$  - lognormal error term. Based on this model, there are many economists who are sure that the positive impacts of economic integration on the economy are higher when the participant countries are close to each other geographically. This model has its imperfections as it is based on the Heckscher-Ohlin pure model and has been criticized by different economists. Among them are Santos Silva and Silvana Tenreyro, who estimated that the long-linearized equation by the least squares lead to the significant biases<sup>16</sup>. At the same time it is much macro-theory oriented model, while SMART outcomes are much tangible and presentable for better understanding of pros and cons of possible integration.

Linder suggests the one of the simplified example of gravity model. All economic activities is undertaken to satisfy demand, and hence development can be expected only if there is a market. In underdeveloped countries the domestic market is small, therefore economic development is most likely to be brought about through foreign trade. Trade in primary products is correctly explained by differences in factor endowments. As Linder is

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<sup>16</sup> J.M.C. Santos Silva & Silvana Tenreyro, 2008. "Trading Partners and Trading Volumes: Implementing the Helpman-Melitz-Rubinstein Model Empirically," Economics Discussion Papers 662, University of Essex, Department of Economics.

sure trade in manufactures is explained not mainly by differences in factors, but by similarity of demand patterns in the trading countries<sup>17</sup>.

Industries are developing in a country because of existence of potential home markets. An entrepreneur is more likely produce for the needs on home markets, which is relatively familiar to him, than one abroad. Only when the home market has permitted the industry attain a sufficiently large scale of operation, does it become competitive on world markets. The strongest foreign market is then found in countries where per capita income is at the same level and the composition of demand is about the same. A country's economic size has a relation with its import propensity. The larger is a country's total income, the more trading it does with itself internally and the less it does relatively with outside world<sup>18</sup>. The more pattern of demand in two countries are the same, potential trade between them is more intensive. Linder stressed the preference (or demand) side in explaining trade pattern and thus argued that trade occurs between countries with similar demand structure<sup>19</sup>.

Index of similarity of demand is their per capita income. When per capita income in a country increases, people demand better quality consumer goods<sup>20</sup>. Linder also noted the role of quality as a determinant of the direction of trade. He argued that richer countries spend a larger proportion of their income on high quality goods. He also argued that closeness of demand is a source of comparative advantage giving richer countries comparative advantage in the production of high quality goods, the goods that they demand. He then argued that similarity of production and consumption patterns lead countries with similar per capita income to trade more with each other. Linder hypothesis is the first theory explaining the effects of differences in quality on the direction of trade<sup>21</sup>.

Numerous empirical studies have revealed that Linder's theory is a good indicator of countries trade behavior, and that trade flow is bigger among countries with similar

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<sup>17</sup> M. Mcpherson, M-Redfearn and M. Tieslau, International Trade and Developing Countries, Applied Economics, 33, pp. 649-657, 2001, Applied Economics, 2001, 33, 2015p. <http://davinci.cascss.unt.edu/users/mcpherson/Papers/AE.2001.pdf>

<sup>18</sup> Book review of S.B. Linder, An Essay on Trade and Transformation, John Wiley, 1961, by: Frank Gehrels.

<sup>19</sup> C. Choi, Linder hypothesis revisited, Applied Economic Letters, 2002, 4, pp. 601- 605

<sup>20</sup> Gian Carlo Gondolfo. International Trade, Translated by M. Taghavi, T. Mohamadi, IRI, 2002.

<sup>21</sup> Iranian Custom Organization, Statistical Yearbook, from 1954 to 2002.

demand patterns. Bergstrand, Fortune<sup>22</sup>, Sailors et al<sup>23</sup>, Hirsch and Lev<sup>24</sup>, Thursby and Thursby<sup>25</sup>, Greytak and Tuchinda<sup>26</sup>, and Kohlhagen<sup>27</sup>, Scott<sup>28</sup>, Hummels and Klenow<sup>29</sup> and Hallak<sup>30</sup> presented reliable documents to support this pattern. After the role of geographic distances was considered an effective factor, studies of Hoftyzer<sup>31</sup>, Greytak, and McHugh<sup>32</sup> and Kennedy and McHugh<sup>33</sup> revealed that Linder's pattern needed new corrections.

For example, Bergstrand has played an important role in establishing a relationship between Linder's pattern and gravity pattern<sup>34</sup>; studies by Thursby and Thursby, Greytak and Tuchinda are considerable regarding Linder's theory in gravity pattern framework. Studying the structure of demand pattern and its concept deeply, Scott, Hummels and Klenow and Hallak examined Linder's theory and stated that this theory was suitable for explaining trade behaviors of countries.

The next distinct feature of economic integration is freedom in transfer of capital and direct investments between countries of trade bloc. It should be noted that attracting foreign investment has both benefits and shortcomings. There are quite distinct researches devoted to movements of the capital within integration process. Among which are the following ones, which are mirroring rather practical outcomes than theoretical ones:

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<sup>22</sup> Fortune, J. N. (1972), "Income distribution as a determinant of imports of manufactured consumer commodities", *Canadian Journal of Economics*, 5, pp. 257–267

<sup>23</sup> Sailors, J. W.; U. A. Qureshi and E. M. Cross (1973), "Empirical Verification of Linder's Trade Thesis," *Southern Economic Journal*, October, pp.262-68

<sup>24</sup> Hirsch, Z. and B. Lev (1973), "Trade and Per Capita Income Differentials: A Test of the Burenstam- Linder Hypothesis," *World Development*, September pp. 11-17.

<sup>25</sup> Thursby, J. G. and Thursby, M. C. (1987), "Bilateral Trade Flows, the Linder Hypothesis, and Exchange Risk," *Review of Economics and Statistics*, August, 488-95.

<sup>26</sup> Greytak, D. and U. Tuchinda (1990), "The Composition of Consumption and Trade Intensities: An Alternative Test of the Linder Hypothesis," *Weltwirtschaftliches-Archiv* 126, PP. 50 - 57.

<sup>27</sup> -Kohlhagen, S. W. (1977), "Income Distribution and 'Representative Demand' in International Trade Flows—An Empirical Test of Linder's Hypothesis," *Southern Economic Journal*, July, 167-72.

<sup>28</sup> Schott, P. (2004), "Across-Product versus Within-Product Specialization in International Trade," *The Quarterly Journal of Economics*, Vol. 119 pp. 646-677

<sup>29</sup> Hummels, D. and P. Klenow (2002), "The Variety and Quality of a Nation's Exports," available at: [www.klenow.com/HummelsandKlenow.pdf](http://www.klenow.com/HummelsandKlenow.pdf)

<sup>30</sup> Hallak, J. C. (2003), "The Effect of Cross-Country Differences in Product Quality on the Direction of International Trade", February, University of Michigan

<sup>31</sup> Hoftyzer, J. (1975), "Empirical Verification of Linder's Trade Thesis: Comment," *Southern Economic Journal*, April, 694-98.

<sup>32</sup> Greytak, D. and R. McHugh (1977), "Linder's Trade Thesis: An Empirical Examination," *Southern Economic Journal*, January, 1386-89.

<sup>33</sup> Kennedy, T. E. and R. McHugh (1983), "Taste Similarity and Trade Intensity: A Test of the Linder Hypothesis for U.S. Exports," *Weltwirtschaftliches-Archiv* 119, 84-96

<sup>34</sup> Bergstrand, J. H. (1990), "The Heckscher–Ohlin–Samuelson Model, the Linder Hypothesis and the Determinants of Bilateral Intra-Industry Trade", *The Economic Journal*, 100, pp. 1216–1229.

To study the effect of regional integration on attracting foreign capitals Najarzadeh and Shaghghi<sup>35</sup>, used generalized pattern of attraction for 8 members of MENA (Middle East and North Africa) during 1995-2000. Results showed that regional integration among Islamic countries of MENA will increase the volume of mutual foreign direct investments among the mentioned countries. This can be considered a cause for more cooperation among region countries. After reviewing theories and literature, Najarzadeh et al analyzed three issues of economy, foreign direct integration and investment in economic pattern, effects of economic and regional integration on foreign direct investment and economic growth of Islamic countries of MENA. According to these Results movement of MENA countries toward global markets and increased business and economic interactions among the countries have increased economic growth of these countries and resulted in increased growth of internal gross production. Foreign investments have some positive effects on economic growth of countries, which match the reality. Experience of countries show that entrance of foreign investments will result in technological progress and will improve economic growth of countries; also, economic freedom has positive effects on domestic gross production of countries. Generally, results show that movement toward regional integration among MENA countries will increase volume of mutual FDI in these countries. Relying on relative advantages and various economic abilities, MENA countries can obtain globalization conditions, improve their movement toward globalization and provide economic growth and welfare by increasing volume of business exchanges and attracting foreign capitals. On the other hand, economic freedom, removing economic obstacles and increasing FDI flows have positive effects on economic growth of MENA Countries.

Raymond Mac studied the relationship between business-regional agreement (e.g, AFTA) and direct foreign investments. He showed that business integration encourages and improve direct foreign investments flows<sup>36</sup>.

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<sup>35</sup> Najarzadeh, a. V. (2006). "Regional convergence and its impact on foreign direct investment (Case Study of the member countries of MENA)". Journal of Economic Research, No. 72, 362-337.

<sup>36</sup> Raymond Mac.(2006). "Regional trade agreement and foreign direct investment". North American Journal of Economics and finance Tehran Chamber of Commerce and Industries and Mines.pp.65-79

Raymond's study seems suitable in that it examined foreign investment and the relationship between regional agreements. On the other hand, one of the shortcomings of this study was that it didn't consider international and trade relations.

Chey worked on a paper named "The impact of affinity on world economic integration: The case of Japanese foreign direct investment" This paper finds that a country's affinity with a foreign country has a positive effect on foreign direct investment flows from it to that country, by analyzing Japanese foreign direct investment outflows during the period of 1995–2009. A rise in a country's affinity with a foreign country is thought to enhance its trust in that country and as a result lower the transaction costs of its economic activities with it, thereby helping to promote its foreign direct investment flows to the country. These findings imply that a rise in affinity among countries is likely to facilitate international economic integration<sup>37</sup>.

Bouët and et al worked on the paper named "Trade and investment in Latin America and Asia: Perspectives from further integration". This paper analyzes the potential impact of a free trade agreement (FTA) between countries of both regions, applying a world dynamic general equilibrium model (MIRAGE). An important feature of the model is that it includes a new way of modeling bilateral investment flows and bilateral investment agreements. This is especially important given that investment plays a major role in the economic relations of the two regions. Their results show that most countries will benefit from the agreement; nevertheless, the gains of Latin American countries will be higher, especially when all Asian countries participate. In addition, Latin America benefits from increased FDI inflows, mainly from developed Asian countries<sup>38</sup>.

Similarly, this study evaluates the existing potentials in creating trade agreements between Latin America and Asia using MIRAGE model; the obtained result shows the positive effect of foreign investment on integration. Thus, the effect of other economic factors is ignored. Chou and et al. worked on the paper called "The impact of third-country

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<sup>37</sup> Chey, H. (2012). "The impact of affinity on world economic integration: The case of Japanese foreign direct investment". <http://www.sciencedirect.com/science/journal/09221425> \o "Go to Japan and the World Economy on SciVerse ScienceDirect" Japan and the World Economy. Volume 24. Issue 1. Pages 57-63.

<sup>38</sup> Bouët, A. V, B- K. C, E. D, L.(2012)." Trade and investment in Latin America and Asia: Perspectives from further integration". Journal of Policy Modeling. Volume 34. Issue 2. Pages 193- 210.

effects and economic integration on China's outward FDI". The study employs a spatial econometric model to explore the impact of third-country effects and economic integration on China's outward FDI (OFDI). The results show that the pattern of China's OFDI tends toward a complex FDI without third-country effects. The degree of economic integration and host country's political risk both have a negative influence on China's OFDI. Furthermore, greater cultural proximity between China and the host country, as well as greater per capita income (market size); both have significant benefits to China's OFDI. The host country's market opportunity has a significant negative effect on China's OFDI<sup>39</sup>.

As the practice shows the economic integration created by the force end ups with collapse, while the economic integration driven by the economic interests has more opportunities to last. The example of first case is the USSR, which collapsed after 70 years, while the USA and the EU is in well form yet. Currently the latter is meeting some problem, but they have economic bases, while the USSR had political bases, which destroyed the system with getting freedom of speech and democracy.

One of the important issues is here that the economic integration had to lead to international specialization and consolidation of economic relations among the participant countries and private companies. With these, the economic integration will create the following advantages for the participant countries: the availability of cheaper, faster and diversified, goods, services, resources, facilities, ideas and knowledge as well as higher living standards. So, at the macro level, the intra-regional trade becomes more efficient because of reduced costs of production and marketing of goods and services. So, the economic integration leads to the trade creation, to the greater consensus, to the greater employment opportunities and political cooperation.

Currently, the major economic integrations in the international arenas are:

- European Union (EU);
- North American Free Trade Agreement (NAFTA);
- The Association of Southeast Asian Nations (ASEAN);

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<sup>39</sup> Chou Kuang- Hann.(2011). The Impact of third- country effects and economic Integration on China's outward FDI. Economic Modelling. Volume 28. Issue 5.p 2154- 2163.



- Asia-Pacific Economic Cooperation (APEC);
- The African Union.

Based on the above assessments, we would like to point out that the precondition of any integration is politics, which could be economic, social, environment, political, etc, which is created to protect the rights of consumers and producers of the integrated countries rights and borders In summary, economic integration.

In summary, emerging after the World War II, the economic integration is the regional process mainly in the field of economic and trade. The term was first used by Heckscher, Herbert Gaedicke and Gert von Eyern with its current meaning later on evolving by Viner, Balassa and Linder. After 1980s, the economic integration was turned into multidimensional process covering on political, diplomatic, security and cultural aspects too. From the economic perspective, integration means moving from national boundaries to a supranational and supra-regional institution - a process in which national borders becomes artificial among participant countries for the movement of goods, capital and labour. Currently, there are only one countries completely fitting to the economic integration perfect model, which is the USA. The assessments of the impacts of any economic integration on the participants economies are done mainly through two models for empirical analysis (general equilibrium and gravity models), and 2 trade specific major indicators and Revealed Comparative Advantage.

With its positive and negative impacts, the economic integration continues to be one of the major topics of discussions and researches between economists. At the same time, we have suggested to definition of economic integration term such as:

“the major target of the economic integration is politics, which brings together different countries to protect the rights of member-countries’ citizens, producers as well as boarders, environment, etc.

In the next chapter we will consider the three of these economic integration with their pros and cons, which could be educable and practicable for Iran and its northern neighbor countries based on the theoretical outcomes of this chapter.

## **1.2 Case analyze of economic regional integration in the world**

The second half of the twentieth century witnesses a discernible shift in the economic and political equation of the world. It could be characterized as an age of integration. Countries are coming together all over the world in Europe, America, Asia and Africa with the idea of defending themselves economically and politically, against the incursions of other blocs into their areas, and to increase their influence in their own areas as well as outside it. For the last 50 years, countries in almost all parts of the globe have had one form of economic integration or the other. All nations in Latin and North America, Africa, Pacific, South East Asia and most European countries are members of different integrated organization.

As there is already mentioned there are more than 30 economic integrations in the world. The number has increasing tendency, which could lead the world economy into multi-polars system. Before 1990s, the world was divided into two polars, while starting from 1990 till now, it was almost one polar. Currently, the high speed of technological growth creates a base for the world economy to turn into multi-polar based on several regional and transnational integration possibilities. Till now, only EU has a strong power in the international relations followed by NAFTA, about which would be talked within this chapter. At the same time, the EU is selected as it is the only organization where the economic integration passed all staged defined by Balassa as well as other economists. NAFTA is selected as a model for Iran and its northern neighboring countries economic integration as at first these countries need in opening borders first for goods, second for investments and the third, for the services and then to think about the Customs Union and Monetary Union. ASEAN is the youngest organization including quite different countries with their cultures, economies and religions, which will assist to polish the NAFTA outcomes for effective and efficient development of framework for Iran and its Northern Neighboring countries economic integration.

Thus, for having general picture from the all continents ECU, ASEAN and AU would be analyzed as well which would assist to have whole picture of the possible model for Iran and its Northern Neighbors.

**Assessment of EU integration on the member-countries' economy:** There are strong arguments among the international economists and politicians what was the driving power of the creation of the EU. The first group is sure that it was the economic, while the second part is sure that it was political motives.

The EU was created after II World War, when the Europe was looking for a model to come out from the war destructions. The first step was the establishment of the European Coal and Steel Community (ECSC) in 1951, consisting of the six founding members of the EU. In the next year, 1952 a treaty on the European Defense Community was signed, but the Parliament of France did not ratify. So, de jure the base of the EU was the economic community. From that time there is no direct route to political union related to common foreign and defense policies among the EU member-countries, although following this path of the EU integration stages, the political integration is inevitable.

According to many economists, the full integration of internal market of the EU finished in 1992 with 4 basic freedoms: free exchange of goods, services, capital and labour. At the same time free trade within the EU dose not lead to higher trade barriers toward the third countries, but the strong requirements of the quality infrastructure of the EU actually putted obstacles toward developing countries.

The next stage of integration of the EU was the monetary union. The idea of the common currency was strongly advocated after the crises of 1970s with implementation of European currency unit (ECU). With the introduction of common currency – euro, the EU moved into new level of integration process covering not only common rules, but also common policies and institutions. The introduction of euro into circulation, the politicians played great role, among which were the political leaders of Germany and France (Mr. Kohl and Mr. Mitterand). They were sure that monetary union of the EU would act as a strong instrument for the peace in the 21st century.

Following to common currency, the EU has started steps, which were more inclined to the politics rather than economy. 10 new members from the Eastern

Europe became members of the EU although the most of them did not meet the requirements of the EU of being a member. It created real economic problems for the member countries. As a result of this, the further enlargement has been stopped with Bulgaria and Romania. Larger market was in great profit of German economy being among 10 largest producers of the world.

At the same time many economists are sure that the EU integration is the best appropriate answer to the challenge of globalization as the European companies will only be able to compete with the US and China if they operate in a common market of 450 million consumers with a GDP of bln 12,800 USD.

It had to be mentioned that as the facts and various researches present, many of the EU policies are related to establishing and maintaining a single and effective market. Considerable efforts have been made to legislate standards so as to achieve economic benefits through the creation of larger and efficient markets. Overall, the principles of domestic and foreign policies of the EU are as follows:

***Domestic policies:***

- Free trade of goods and services between member countries;
- EU competition law which controls anti-competitive activities of companies through anti-trust law and integration, and which controls anti-competitive activities of member countries through state aid system;
- Schengen treaty eliminates supervision on domestic border and coordinates supervision on foreign borders among member countries. This treaty excluded England and Ireland which had a decline and included two non-member countries (Iceland and Norway). In 2005, Switzerland also accepted to be located in Schengen region;
- freedom of citizens of member countries to live and work with their families anywhere in the EU, providing that they are employees or students or have enough financial resources. However, in practice, even if none of these cases be met, they can continue living in the host country until they don't impose any

unjustified expenses to that country. (This is also the case in countries of the Europe economic region and Switzerland). This leads to great confusion because the benefits of social welfare related to family can be paid in employment place of the EU citizen, even when the family of employees of live elsewhere in the EU;

- free movement of capital among members (and other countries in Europe Economic Area).

***Foreign policies:***

- Common external tariff and a common position in international trade negotiations;
- Funding for programs of candidate countries and other European countries and helping many developing countries through programs such as ISPA, TACIS, Phare;
- Establishing a single market energy community through Treaty of Europe South-East energy community;
- Establishing a common Europe Airline area/airline area with the single market;
- Establishing Europe Defense Institution;
- Establishing Europe task force<sup>40</sup>.

Coming to the assessment of the EU integration through the gravity model, there are various researches among which are: Ildiko Virag-Neumann, Jesus Crespo Cuaresma, Mathias Moser and Anna Raggl, Simeon Coleman, Marie Stack and Dan Wheatley, Josh Durnel, etc.

For example Virag-Neumann's assessment showed that "the impacts of EU membership are all positively significant. In general, the intra-EU trade volumes were positively affected by the enlargement of the European Community. This clearly suggests that one of main factors behind the increasing importance of intra-EU trade

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<sup>40</sup> [www.europa.eu](http://www.europa.eu)

within the total EU trade is clearly the stronger link among member states over the last decade”.<sup>41</sup>

Josh Durnel also had the positive outcomes in his gravity model assessment concluding that “In this short empirical analyses trade between EMU countries has increased. This is because it has been cheaper when the trade barriers have been moved and all countries use the same currency. No transaction cost has effect on goods and services. The border effects within EU countries relatively close each other and the infrastructure of transportation is quite developed. It is also plausible that Sweden, Denmark and UK will also join the EU due to domino effect”.<sup>42</sup>

Stack<sup>43</sup> examined the trade prospects for the new European Union (EU) member states and the EU associated partner countries is an important issue in the context of European eastward enlargement and greater economic integration with its immediate neighbors. An out-of-sample approach to projecting trade volumes for twenty countries of interest is adopted using a gravity equation for a panel data set of bilateral export flows from twelve EU countries to twenty OECD trading partners over the 1992-2003 periods. The potential trade volumes were calculated from a gravity model of new trade theory (NTT) determinants. The selected twenty countries’ prospects for further trade integration vis-à-vis the EU can be gauged by expressing the trade volume projections as a ratio of actual trade volumes for each pair of countries. The projected trade ratios for the ten new member states are found to be multiples of actual 2003 levels, indicating that trade expansion looks set to continue. Near unity values, however, are more frequent among the Mediterranean countries, indicating fewer opportunities for further trade integration with the EU.

Coming to the direct investments trends within the EU, it could be stated that almost 45 percent of FDis went to the EU before the last World crises. The figure included the intra-union investments too<sup>44</sup>.

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<sup>41</sup> [http://www.deturope.eu/img/upload/content\\_07524532.pdf](http://www.deturope.eu/img/upload/content_07524532.pdf)

<sup>42</sup> [http://www.academia.edu/3013151/Trade\\_Effect\\_Gravity\\_Model](http://www.academia.edu/3013151/Trade_Effect_Gravity_Model)

<sup>43</sup> Stack, D. Eric, p. (2011). "A Gravity Model Approach To Estimating Prospective Trade Gains In The EU Accession And Associated Countries". Discussion papers in economics. Nottingham Trent University. UK.

<sup>44</sup> [http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/files/ecr2012\\_ch4\\_en.pdf](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/files/ecr2012_ch4_en.pdf)

Today, the EU is the only integrated body that went through all stages suggested by Balassa. Although it went even deeper having also de facto political integration too taking into consideration the engagement of this organization in different international political issues.

**Assessment of the North American Free Trade Agreements on the member-countries' economy:** In 1994 Canada, Mexico and the USA created trilateral rules based trade bloc with two supplements: the North American Agreement on Environmental Cooperation and the North American Agreement on Labor Cooperation. The major goal of NAFTA was to eliminate barriers to trade and investment between the signed three countries. It is one of the most wide and comprehensive multilateral trade agreements in the world. At the same time, many economists are sure that it is not only economic agreement, but also political one.

NAFTA is younger than the EU, which means the economic impacts are less tangible. But still NAFTA's effects, both positive and negative, have been quantified by several economists among whomes are Jean-Marc Turk; Daniel Lederman, William F. Maloney and Luis Servén; Levy-Yeyati, Stein, and Daude; Gary C. Hufbauer and Jeffrey J. Schott, etc.

Daniel Lederman, William F. Maloney and Luis Servén are sure that this agreement led the Mexican economy closer to the economies of Canada and USA. So, they made a conclusion that without the NAFTA Mexico's exports would be less by 50 percent, while FDIs would be less by 40 percent of today's reality. Moreover, Mexico got an easy access to the technological innovations of Canada and USA. At the same time, assessments of above mentioned economists has shown that trade, FDIs, real wage level, poverty rate and growth outcomes were improved as a consequence of NAFTA, although still Mexico has a huge gap between its economic development and other members of NAFTA<sup>45</sup>. The positive benefits of the USA and Canada is free access to the natural resources of Mexico as well as pool of cost-effective labour and the new market.

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<sup>45</sup> Daniel Lederman, William F. Maloney and Luis Servén. Lessons from NAFTA for Latin America and the Caribbean. WB. Washington, DC 20433. 2005

Coming on implementation of gravity model for the NAFTA, based on different assessments it would be stated that there was not registered any tangible trade diversion effects on signature countries' economy, while the trade within their countries increased. Moreover, as Levy-Yeyati, Eduardo, Ernesto Stein, and Christian Daude have shown there is positive impacts on FDI's increase among signature countries based on the gravity model assessments<sup>46</sup>.

As the economy of Mexico is small and underdeveloped compared to the Canadian and USA economies, Mexico gains more from the agreements as more than 75 perceon of its exports goes to these countries making the economy of Mexico to be dependent on Canada and the USA, which makes the Mexican economy to be ulnerable to any possible financial, economic and political crisis of the US and Canada. Another positive impact of the NAFTA is acceleration of democratization process in Mexico<sup>47</sup>.

Hufbauer and Schott assessed the overall economic impacts of the NAFTA on the economy of Canada, Mexico, and the USA too. They have registered positive movements in the sectors such as autos, agriculture, and energy; and the operation of the dispute settlement, labor, and environmental provisions. So, overall, NAFTA achieved the major goals for what it was created —promotion of trade and investment among signature countries with failures in fields such as softwood lumber, trucking, and sugar mar. The vivid outcome is the doubling of trade between the NAFTA signature countries after 10 years of establishment of it<sup>48</sup>.

As the NAFTA is still an agreement, it misses several promises of better integration and positive outcomes according to Hufbauer and Schott among which the most essential from our point of view are:

- ✓ adopt a NAFTA common external tariff;
- ✓ negotiate solutions to current trade disputes;
- ✓ strengthen energy security;

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<sup>46</sup> Levy-Yeyati, Eduardo, Ernesto Stein, and Christian Daude. Regional Integration and the Location of FDI. Inter American Development Bank, Washington, DC. Processed. 2002.

<sup>47</sup> Jean-Marc Turk. Economic Growth and the Political Spillover Author. McGill University. 2013

<sup>48</sup> Gary C. Hufbauer and Jeffrey J. Schott. NAFTA Revisited: Achievements and Challenges. Peterson Institute, Washington, DC. 2005



- ✓ forge common visa standards for non-NAFTA visitors and immigrants;
- ✓ the USA and Mexico need to devise new policies for improving the life chances of some 10 million illegal Mexican immigrants in the USA.

The fact is that NAFTA still is an agreement and not a union, which means that there are still not complete free movement of basic economic resources: natural, capital and human, forwarding goods and services, especially from the sectors which are more sensitive.

**Free Trade agreements in Asia:** Totally, there are 12 regional cooperation treaties established in Asia in different periods since 60s among which just two of them are related to regional treaty of east and south east of Asia namely ASEAN and East Asia Summit.

ASEAN is a political and economic organization of ten Southeast Asian countries, which was formed in 1967. The current member countries are Indonesia, Malaysia, Phillipines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar and Vietnam. The major goals of the ASEAN are:

- economic growth;
- social progress and sociocultural evolution;
- protection of regional peace and stability,
- opportunities for member countries to discuss differences peacefully.

In 1997, the leaders of ASEAN member states made principle decision on further integration in the region and ASEAN plus three was established with China, Japan and South Korea, which followed by East Asia Summit (EAS) including also India, Australia, New Zealand, the USA and Russia. The intend was creation of East Asia Summit in contract to the EU, but it is still on the stage of document.

There are various dedicated studies on the integration in Asian countries are as follows among which are.

- Wing Yu and et al<sup>49</sup>, in their paper provide a survey of high-frequency indicators to monitor the development of equity market integration in Asia. The results show that after slowing down between 2002 and 2006, the equity market integration process picked up

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<sup>49</sup> Wing Yu, I. Kang- por, F.C, S. (2010)." Assessing financial market integration in Asia – Equity markets".Journal of Banking & Finance. Volume 34. Issue 12. pages 2874- 2885.

again in 2007–08. Nevertheless, the process is not complete and the degrees of integration between mature and emerging equity markets are different. The divergence may be attributed to the difference in the political, economic and institutional aspects across jurisdictions in Asia.

- Minniti and Pierpaolo Parellob<sup>50</sup>, in their paper explore the relation between trade integration, economic growth and regional inequality in a two-region model of endogenous industry location and scale-invariant growth. They, depart from recent contributions of the New Economic Geography, do not exhibit the “strong” scale effect in R&D, which is inconsistent with time-series evidence from advanced OECD economies. In contrast with previous research, they find that, when R&D spillovers are localized, trade integration affects economic growth only in the short-run; the sign of this (temporary) effect depends on whether inter temporal knowledge spillovers in R&D are positive or negative. They show that this result has important implications for the relation between trade integration and regional income disparity.

The interesting point about this study is the impact of technology on integration and disparity in incomes among OECD countries. In other words, the effect of trade integration resulted from technological changes has been examined on economic growth. However, the effect of foreign investment on trade integration has not been observed.

En Bai and et al<sup>51</sup> (2012), in paper called “Spatial spillover and regional economic growth in China” investigate the spatial structure of the provincial economic growth and the spatial spillover in China from 1998 to 2008. First, they apply Moran's index<sup>52</sup> to detect the positive spatial autocorrelations across the provinces of China. Second, they build a new economic geography model and the role of market potential in promoting regional income growth is highlighted. Third, two measures of market potential are constructed and a spatial error model is adopted to obtain the estimations, considering spatial autocorrelation. Controlling for major inputs, such as labor, capital, and human capital, the

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<sup>50</sup> Minniti, A. Camelo, P (2011). " Trade integration and regional disparity in a model of scale-invariant growth". *Regional Science and Urban Economics*. Volume 41, Issue 1. Page 20-31.

<sup>51</sup> En Bai, C. H, M. W, P. (2012). " Spatial spillover and regional economic growth in China". *China Economic Review*, 23(4): pp. 982-990.

<sup>52</sup> It is a measure of spatial autocorrelation developed by Patrick Alfred Pierce Moran.

market potential continues to promote substantial regional growth. On average, an increase of 10 percentage points in the market potential increases the regional GDP per capita by 3–5 percentage points.

Paying attention to the effect of human capital on the economic growth is one of the interesting points mentioned in this study. Also, the author seeks to design a new geographical-economic model and to study the effect of market potentials on income growth of the studied countries. Besides factors like foreign investments, manpower productivity, free transmission of human capital and economic freedom, the effect of human capital must have been examined too.

Coming to the gravity model assessments of ASEAN, there are various works done so far, among which are: E. M. Ekanayake, Amit Mukherjee and Bala Veeramacheni;

E. M. Ekanayake, Amit Mukherjee and Bala Veeramacheni after implementation of gravity model with appropriate regression analysis are sure that the real GDP of both importers and exporters are positively influenced as a result of the bilateral trade. At the same time, distance is found to be negative and statistically significantly correlated with Asian exports, which consistent with other research outcomes related to the gravity model implementation. At the same time, they are sure that the rapid evolving economic and political environment provides opportunities for the investigation of the success of economic integration in Asia<sup>53</sup>.

Nguyen Trung Kien assessments had the following outcomes: 1. Exports increased with GDPs rate proportionately; 2. Trade was higher among the countries with the identical preferences than those of different ones, 3. free trade agreements produced only the trade creation among its members, and at the end, but not last, it is important to have trade facilitation policy to support the targets of FTA<sup>54</sup>.

The next researcher is David Cheong, who had the following outcome as a result of ASEAN: tangible trade creation effects, from which majority of member countries benefited and which led to the welfare increase.

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<sup>53</sup> <http://www.e-jei.org/upload/9180KU76078V3656.pdf>

<sup>54</sup> Nguyen Trung Kien. Gravity Model by Panel Data Approach: An Empirical Application with Implications for the ASEAN Free Trade Area. ASEAN Economic Bulletin Vol. 26/3. Dec 2009.

Overall the integration and regionalization is the trend of the world economy: no country could go on “alone” because of increasing consumption and limited resources for the production.

Based on the above assessment we can suggest:

- The second half of the twentieth century is characterized as an age of integration. Currently there are more than 30 economic integrations in the world. Although all integrations solve economic issues, the keystone of them continues to be politics. Best examples are historic development of the EU, NAFTA and ASEAN.
- The EU is the only model, where almost all stages of economic integration have been passed defined by Balassa with 4 basic freedoms: free exchange of goods, services, capital and labour. Moreover, currently, the EU turning into strong political player in the world economy, has started actively to participate in the assistance activities related to the developing and less-developed countries. Although, Balassa did not mentioned about possible stage of political integration, which is on the stage of the EU taking into consideration the active role of this organization in the political affairs.
- Almost for all economic integrations, which operate effectively, the empirical analysis and different economic and statistics assessments indicate mainly positive economic outcomes, especially for the long-run on the welfare of the participant countries. Thus, it is a strong argument for the Government of Iran to reshape its policy related to being economically presents in this region.
- Among 30 economic integrations, the most instructive and applicable are the experiences of ASEAN and NAFTA for the Government of Iran. Although these integration models needs improvements and localization for the region directed by the Government of Iran.

In the next chapter, to reach our research goal and to have full picture of possible regionalization of our case, we will assess the possible impacts of integration of Iran and its northern boarder neighbor-countries on their economies based on the theoretical integration model and EU, NAFTA and ASEAN experiences assessments and outcomes.

## **CHAPTER 2. BASES FOR POSSIBLE ECONOMIC INTEGRATION BETWEEN IRAN AND ITS NORTHERN NEIGHBORING COUNTRIES**

As it was already mentioned in the 1<sup>st</sup> part of the dissertation, the classical economic integration could not work for our case as too different culture and opposite economical-political interests exists from the first impression. For this reason, in this part we will figure out the specific aspects of each country, mutual beneficial economic and political interests and impacts of possible economic integrations among them.

Geographically, the northern boarding-neighbors of Iran are: Armenia, Azerbaijan and Turkmenistan. Within this paper the countries would be expanded including Georgia as well. Russia and Kazakhstan is not included although they have common boarder by Caspian See taking into consideration the fact that at this stage it is impossible because of several strong subjective and objective factors among which are: quite different, often contradicting and competing economic and political interests of these countries in the region as well as in the world economy. And this is already lasting centuries. Although, Russia and Iran is cooperating in the international arena, but because they have the same “enemy” in the face of the USA, their economic and political interests, taking separately, contradicting and they are competing countries in the region as well as in the world economy.

It should be stated that Iran for itself has not defined its goal and priorities of being a present in the region explained by the strong presence of Russia, USA and Turkey in these countries with different levels in each country, while these countries has strategically developed goals in the region. If the government of Iran seeks for being the leader in the region and one of the big powers in the world with possibilities of being 9<sup>th</sup> member of G8, then the possibilities of its tangible presence in these countries becoming more than urgent.

For this purpose, the competitive advantages as well as economic resources of each country would be assessed in this chapter as well as the impacts of possible regionalization among these countries could be assessed through SMART model. To understand the impact of regionalization between Iran and its northern neighboring

countries, it is better to start with an overview of trade and investment cooperation between these countries as well as the overall macroeconomic views of each country separately.

Once more, it had to be mentioned that to find out up-dating statistics for Iran and full statistics from Turkmenistan was difficult, in some cases impossible task as even their national statistical services were presenting old dates. For this purpose the figures for these two countries have been presented from the statistical services of Armenia, Georgia and Azerbaijan, while the relationship with the rest of the world will be presented using statistics from the international organization sources.

**Next obstacle is related to the fact that it is very difficult to frame Armenia and Azerbaijan under one union, but it is still could foreseeable, if there would be a strong economic and political leader within the union to force these two countries to act friendly, although not in the near future.** This strong leader had to be Iran taking into consideration its economic potential. From this point of view, we will start with the competitive advantages of the economy of Iran at first then we will move through alphabetical order.

## **2.1 Current stage of economic cooperation of Iran with its northern neighboring countries and the world**

The political system of Iran is based on the Constitution adopted in 1979 as a result of revolution. Since then the foreign relations of Iran have being based on two strategic principles: eliminating outside influences in the region and pursuing diplomatic relations with developing and non-aligned countries<sup>55</sup>. Overall, it could be stated that the second principle is done more effectively than the first one. In addition, the Khomeini government often emphasized the spread of Islamic revolution over state-to-state relations and/or the furtherance of trade under the umbrella of the "Council for the Islamic Revolution"<sup>56</sup>. Iran is one of the founders of the UN, NAM, OIC and OPEC.

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<sup>55</sup> Iran Country Study Guide Volume 1 Strategic Information and Developments, ISBN 1-4387-7462-1, p. 141.

<sup>56</sup> 11 February 1979, p.108 from Excerpts from Speeches and Messages of Imam Khomeini on the Unity of the Muslims, undated, distributed by the Ministry of Islamic Guidance, Tehran, (quoted in Wright, Robin, Sacred Rage (2001), p. 27.

Next ley-stone of the foreign relations of Iran is its opposite position related to Israel, considering the latter as an illegal country. The adversary position of Iran became vivid with the Israeli invasion of Lebanon. Since then, Iran was thought to be supporting the creation of the Hizballah organization as this country was also opposing the Arab–Israeli peace process, because it saw Israel as an illegal country.

The next “rival” country of Iran is considered Iraq based on the fact that the relation between these countries never historically characterizes as friendly. It tuned into the worse in 1980, when Iraq invaded Iran related to the waterway issues. Although, the roots of this rivalry are deeper as both of these countries used to interference in each other’s internal affairs many times through supporting separatist movements. After the end of Iran-Iraq war, Iran has started actively to cooperate with major countries of the EU (particularly Italy, France and Germany) as a major oil exporter. China and India have also turned to Iran as all these three countries are facing the similar challenges in the global economy. The next “non-friendly” countries of Iran are Saudi Arabia (SA), which is politically inclines to the USA and United Arabic Emirates (UAE), and there is territorial issues in the Persian Gulf (Iran possesses two islands in the Persian Gulf claimed by the UAE).

Besides rivalry between Iran, Iraq and Israel and because of its nuclear program, in 2005 Iran has met sanctions imposed by UN Security Council, which was continued till 2015, politically and economically isolating the country from the developed World. As a result, Iran started actively to cooperate with developing world. Moreover, the Government of Iran has stressed the development of domestic production including arm technology and equipment.

On July 14, 2015, the sanction against Iran came into the end based on the agreement between Tehran and the P5+1 (China, France, Russia, the United Kingdom, and the United States; plus Germany) as a result of demonstration of Iran that its peaceful nuclear research project meets International Atomic Energy Agency standards.

After break-up of the Soviet Union, the Caspian Sea borders between Azerbaijan, Iran and Turkmenistan are not determined. It is planed to solve peacefully in the coming years through negotiations. Currently, former USSR countries presented the statement to divide

the Caspian Sea in proportion to each country' shoreline in 2003, which is against the agreement between the Soviet Union and Iran reducing Iran's proportion by 13 percent. If it would be the case, Iran will claim all territories lost to USSR in 1920s. Proportional division of shoreline of the open waters is regulated by the international laws, but Iran does not recognize it as Caspian Sea is a lake and not the open water although Iran postponed this question yet as Iran heavily relies on Russian support in its nuclear-development.

Coming to the current and future role of Iran in the international arena, there are two opposite arguments among the political scientists:

1. Iran needs long time to become a supreme power in the global economy;
2. Iran is already an energy superpower and soon will become a superpower due to its ability to influence the international events. Thus, it is on its way to becoming an empire<sup>57</sup>. Leverett goes further stating that if the USA will not prevent Iran from nuclear advancing project then Iran would cease its nuclear activities in exchange for a guarantee of its borders by the USA<sup>58</sup>.

Coming to the cooperation of Iran and Armenia, it could be stated that despite religious and ideological differences, relations between these two countries remain warm. Armenia and Iran are mutual strategic partners in the region. This partnership is historical as they share to a great extent similar history and culture and have had relations for thousands of years. There are no border disputes between them, while the Christian Armenian minority of Iran enjoys official recognition in Iran. Moreover, the cooperation in the field of energy security lowers Armenia's dependence on Russia. In case of strong willingness of the Government of Armenia, Armenia has a great chance to become a transit country for Iranian gas to be exported to Europe. As Stepan Safarian wrote "Given this geopolitical environment, Armenia has the legitimate right to cooperate with Iran for ensuring its

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<sup>57</sup> Robert Baer (30 September 2008). *The Devil We Know: Dealing with the New Iranian Superpower*. Crown Publishing Group. ISBN 978-0-307-44978-8. Retrieved 14 August 2013.

<sup>58</sup> Flynt Leverett Hillary Mann (November 2012). "The mad mullah myth : the dangers of misunderstanding Iran's strategy". *Revision*. *Harper's Magazine*325 (1950): 53–55.



security...Besides, Armenia has an energy surplus and its only major export market at present is Iran...So there is also a lot of economic interest involved."<sup>59</sup>

Moreover, Iran economically (and not only) supported Armenia during Nagorno-Karabakh war despite the fact of sharing extremely much religious and ethnical ties with Azerbaijan.

Sanction lifting against Iran gives long-term opportunities to this country to become one of the world's top gas exporters. Iran has around 18 percent of all gas of the world<sup>60</sup>. Currently, Iran exports only to Turkey, Armenia and Azerbaijan and it has never been historically among major gas exporters in the world market.

Iran now is working on plans of building new pipelines to export gas to Europe through Turkey. Two others are Trans-Anatolian Ira-Natural Gas Pipeline for exports of Azeri gas via Turkey and Greece to Italy and Trans Adriatic Pipeline. The officials of the Governments of neighboring countries of Iran would be wise not to miss the opportunities to be involved in all these projects.

The major stress in Armenian-Iranian Relation is on the energy security. In addition to a pipeline that brings Iranian natural gas into Armenia, there are two hydro-electric plans on the Arax River and a third high-voltage transmission line to link power grids and dams. Moreover, in 2007, a memorandum was signed on feasibility studies on the ideas of building an Armenian-Iranian railway and a Russian-owned oil refinery to process Iranian crude. This is still on the process.

Armenian economy continues to remain a dependent on the economy of Russia. It is expected that the following year Armenia will suffer from downturn of Russian economy through decrease of remittances from Russia leading to weak demand (downturn of consumption) and FDIs. Almost 80 percent of all remittances and more than 20 percent of all exports of Armenia come from Russia.

Coming to the stage of official government level relations between Armenia and Iran, it could be stated that Iran officially recognized the independence of Armenia in December,

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<sup>59</sup> [http://research.omicsgroup.org/index.php/Armenia%E2%80%93Iran\\_relations](http://research.omicsgroup.org/index.php/Armenia%E2%80%93Iran_relations)

<sup>60</sup> [www.fitchratings.com/site/fitch-home/pressrelease?id=987711](http://www.fitchratings.com/site/fitch-home/pressrelease?id=987711)

1991 among the first countries in the world. The second declaration was on establishing diplomatic relations between Armenia and Iran, which was signed in Tehran on the 9th of February, 1992. On the same day, "The Declaration on Principles and Aims of Relations between the Republic of Armenia and the Islamic Republic of Iran " was signed too. Overall there were signed more than 60 different kinds of agreements almost in all area of cooperation between Armenia and Iran<sup>61</sup>. The most important once among them are:

- Agreement on Trade and Economic, Scientific and Technical Cooperation between Armenia and Iran
- Joint Declaration on Cooperation and Good-neighborhood between Armenia and Iran
- Agreement between the Government of Armenia and the Government Iran on International Transportation of Goods
- Agreement on Construction of Iran-Armenia Gas Pipeline
- Agreement on Construction of Iran-Armenia High Voltage Transmission Line
- Agreement on Meghri-Kajaran automobile tunnel
- Agreement on Cooperation in the Area of Certification and Standardization
- Agreement on Quotas and Privileges
- Agreement between the Government of Armenia and the Government of Iran on Cooperation in Construction and Operation of Run-of-River Power Plants on Araks River
- Memorandum of Understanding between the Ministry of Transport and Communication of Armenia and the Ministry of Roads and Transportation of Iran on Railway Cooperation and on Building a Direct Railway between the Republic of Armenia and the Islamic Republic of Iran
- Memorandum of Understanding between the Ministry of Economy of Armenia and the Ministry of Trade of Iran on Regime Definition of Free Trade.

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<sup>61</sup> [www.mfa.am](http://www.mfa.am)

Thus, after the independence Armenia gradually began to establish close and friendly relations with Iran in all spheres, especially in the fields of energy, sport, nature protection, health care, agriculture, education, science, culture as well as in the interprovincial relations. Moreover, there are also many intergovernmental and interdepartmental documents coordinating relations between the ministries and other state structures of Armenia and Iran. This year, the visa regime was removed too between these two countries.

Trend of exports/imports between Armenia and Iran overall is positive. Main import goods are animals, food, mineral raw materials, molybdenum, electrical energy, chemicals, goods of stone, gypsum and cement, nonprecious metals, automobiles, equipment, industrial goods, while the major export goods are mineral raw materials, wood, food and electrical energy as it have been already mentioned above.

In 2016 tourism from Iran into Armenia constituted more than 8.5 percent, although it decreased twice compared to 2014. FDIs from Iran to the economy of Armenia in 2015 constituted 0.7 percent of total FDIs. Last year the figure was equal to 0.6 percent. These figures state that Armenian government dose not take serious the possible strong possibilities of Iran's role in the region and its own economic development<sup>62</sup>.

Iran was among the first countries to establish full diplomatic relations with Azerbaijan too like with Armenia, Georgia and Turkmenistan. Many political analytics were sure that Iran considers Azerbaijan as a fertile arena for dissemination its Islamic Relation further, although the Government of Azerbaijan prefers tight relations with Turkey considering the latter as a strategic partner. At the same time, Government of Azerbaijan expressed its intention for greater Azerbaijan unifying current Azerbaijan's territory and the region of Azerbaijan, which is in the territory of Iran. At the same time, the owners of Azerbaijan's oil and gas company is Israeli companies, which was another factor of having non-friendly relation with Azerbaijan – Israel is a rival country for Iran as it already was mentioned. After the independence more than 40 percent of Azerbaijan's oil went to Israel<sup>63</sup>. When

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<sup>62</sup> [www.armstat.am](http://www.armstat.am)

<sup>63</sup> [www.stat.gov.az](http://www.stat.gov.az)

Iran mentions the close ties of Azerbaijan with Israel, Azerbaijan points the close relation of Iran with Armenia.

Thus, Azerbaijan is in interests of both Turkey and Iran. From ethno-linguistic and cultural side, Azerbaijan is more close to Turkey, while from religion side, Azerbaijan is more close to Iran as majority of the population of the both countries are Muslim Shiites. Moreover, the major part of current Azerbaijan territory was a part of Iran not far before of Bolshevik revolution.

As in the business, in the politics the interests changes everything. Exports of azeris gas decreased the Russian gas role in the Europe. As a result, Iran reshaped its international policy related to Azerbaijan looking new ways of cooperation.

The ice of Azerbaijan-Iran relation started to melt after Ilham Aliyev's statement that Azerbaijan would not give a place to the USA to attack against Iran. The next step was a signature of non-aggression pact, between Azerbaijan and Iran in May 2005. After these two main actions, the officials of Azerbaijan started to call the territory of Iran not a part of Azerbaijan, but Azerbaijanis living in Iran. It followed with an agreement to supply with gas from Iran to Azerbaijan's landlocked Nakhijevan. In 2009, the relations again worsen between Azerbaijan and Iran as during Eurovision Song Contest-2009 the Maqbaratoshoara, a famous monument and a symbol of Tabriz (Iran) was shown among the Azerbaijani national monuments, which was considered by the side of Iran as a violation of Iranian territorial integrity.

There is visa free regime between Azerbaijan and Iran, although at first it was given only by Iranian side and only after threatening of stopping to supply oil to Nakhichevan it was solved by Azerbaijan side too.

There was another action financed by Iran in Azerbaijan in 2012 against Israelis employed by the Jewish School of Baku. Moreover, On March 2012 the Government of Azerbaijan arrested Iranian 22 people accused for attacks on the U.S and Israeli embassies in Baku. Iran blamed Azerbaijan for hosting Israel's covert espionage activities against Iran, including the assassinations of M. A. Roshan (the nuclear scientist). At the end Iran claimed that Azerbaijan cooperates with Mossad<sup>64</sup>.

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<sup>64</sup> [http://www.jewishjournal.com/world/article/azerbaijan\\_israels\\_secret\\_muslim\\_friend](http://www.jewishjournal.com/world/article/azerbaijan_israels_secret_muslim_friend)

The relations became even more fragile, when Iran accused Azerbaijan of receiving Israel army techniques to be used against its country, which, of course, was refused by the officials of Azerbaijan. In reality it was used against Armenia.

It was forwarded by the Eurovision 2012 song contest in Baku, which was objected by Iranian officials stated that it would followed by gay parade. Although, the statement was again rejected by the Government of Azerbaijan, Iran recalled its ambassador from Baku. The Government of Azerbaijan advised the Government of Iran to stay out of Azerbaijan's international affairs and to apologized for the statement and recalled its ambassador too from Tehran.

With the new president of Iran Hassan Rouhani in late 2013, the relations between these two countries started to improve. As a result, in 2015 Iran and Azerbaijan expressed their willingness to establish a joint defense commission. It was followed by the State official of Iran's announcement that Iran was ready to support Azerbaijan at any time. The president of Azerbaijan in its turn stated that no any force is able to break Iranian-Azerbaijani friendship. Mr. Aliyev (senior) is sure that there are huge opportunities of cooperating in the field of oil and gas, and electric power engineering.

In 2014 FDIs in Azerbaijan reached to \$2.6 billion, 97 percent out of which went to the extractive industries mainly in hydrocarbons and petro-chemicals. The major investors in Azerbaijan are Great Britain, USA, and Turkey<sup>65</sup>.

Iranian Tourists is on the 4th place in Azerbaijan in the last few years. Iran is among top 5 investors of Azerbaijan, which means that the Government of Azerbaijan is more serious about the possible role of Iran in the region than Armenia, although Azerbaijan is a good tool for Turkey to impact on Iran on the invisible way.

Coming to the relation of Georgia and Iran, it could be stated that "diplomatically" it is very warm. After independence of the two nations have started to cooperate in many fields including energy, transport, trade, education, and science. The major reason of interest of Iran in Georgia is the ports of Georgia to export products of "Made in Iran". At the same time, Georgia is seeking a ways of being politically independent from Russia, thus looking

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<sup>65</sup> [www.stat.gov.az](http://www.stat.gov.az)

for the new partners for the import of gas and oil. Azerbaijan and Iran are excellent alternatives for Georgia. Moreover, Georgia and Iran agreed to transfer electricity through Armenian electricity network.

There are signed more than 47 bilateral documents, among which are:

1. Air Transport Agreement between the Government of Iran and the Government of Georgia;
2. Agreement on Reciprocal Promotion and Protection of Investments between the Government of Georgia and the Government of Iran;
3. Agreement between the Government of Georgia and the Government of Iran for the Avoidance of double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and on Capital;
4. Agreed Minutes on Economic, Trade, Scientific and Technical Cooperation between Georgia and Iran;
5. Agreement on Trade Cooperation between Georgia and the Government of Iran.

As both of these countries has strong interests in each other, they started to manipulate very professionally in their controversial interests, among which is close relationship of Georgia with Israel and the USA and at the same time close relationship of Iran with Russia, particularly:

- During the war between Russia and Georgia, Iran at first remained neutral not recognizing Abkhazia's and South Ossetia's independence, although stressed that the people of these two regions are free to choose their future announcing that Iran will assist Russia to develop these areas' economy.
- Georgia considered Iran only as a new source of energy, tourism and trade to diversify it and weaken its dependence from Russia;

Although two countries have close economic and political relations, Iran is not considered political and strategic partner of Georgia, which is not against the interests of Israel and the USA. Georgia is considered to be pro-USA country in the region, although incoming tourists, imports and FDs from Iran have growing trends with Turkey.

Thus, Georgia is among few countries in the World keeping strong relations with both Israel and Iran. Israel assisted much Georgia with military issues starting from training soldiers and selling arms, while Israel entice Russia not to sell arms to Iran. Israel stands for integrity of Georgia, although Israel was in good relation with Russia too, but Iran considered it as close relationship of Georgia with the West. Iran – a bumper country is the second choice for Georgia in case of the lost of interests of the USA in Georgia.

Currently, Georgia is more professionally playing among different sides of rival countries in the world economy compared to Armenia and Azerbaijan. The diplomacy of Georgia made its country in better position for the foreign direct investments and business.

The next Northern neighbor of Iran is Turkmenistan. The Border of Iran and Turkmenistan is expanded almost 1000 km. Both of them are considered isolated countries in the world economy: Iran is isolated by the USA as America is sure that increase of the role of Iran as economically developed country will make Iran the powerful force in the region, especially in the Persian Gulf, while Turkmenistan did it by itself to free the country from the international influence.

Turkmenistan is the next country among Iran's north neighbors maneuvering between the West (mainly the USA), Russia, Iran and Turkey in the region through using the conflicting interests of these regional powers. Turkmenistan as Armenia is landlocked country.

The main agreements (which are more than 160) signed between Iran and Turkmenistan are related to the sector of energy, developing gas fields in Turkmenistan, water and transportation. As many specialists are sure the new gas pipeline between Iran and Turkmenistan and Iran-Turkmenistan-Kazakhstan railways will lead to the "power" change in the region as it will be easy and cheap to exports of energetic resources to Europe from the Persian Gulf.

Iran and Turkmenistan are sure that the resources of the Caspian Sea had to be equally distributed among 5 countries as well both of them made joint declaration their territories will not be used by the third countries for an aggression or other military actions against the other parties.

Turkmenistan is one of the least populated countries in the world with low human development index. In 2014, the GDP was 48 million \$US<sup>66</sup>.

Turkmenistan's gas is imported to Iran for its north part, where the major population is concentrated, although Iran is the second countries with its gas reserves after Russia in the world, which is concentrated in the south part of the country. But after cut of gas supply in 2012 by the Ashgabat leadership, Iran started a construction of pipeline for the north part of its country to supply from domestic sources and to build to export it to China as well although 52 percent of Turkmen gas exports to this country and it is planed that Turkmenistan will supply of 40 percent of China's demand by 2020<sup>67</sup>. International experts are sure that Russia and Iran will not let so close relationship of Turkmenistan with China, and both of these countries started negotiations to become major suppliers for gas to Chine.

Although, this country still continues to keep its neutrality in the region, it has autocracy and one of the major countries for drug trafficking.

Iran understands the intends of the USA to have "New Silk Road" which includes Turkmenistan, Afghanistan, Pakistan, and India and seeks ways to get out of its isolation through becoming an energy corridor for the Central Asia. This issue much depends on the Europe and Russia. There is another pipeline project – Nabucco, which would be an alternative source for the Europe for gas import from Iraq, Egypt, Turkmenistan, and Azerbaijan. If the project will call into life, Turkmenistan, Azerbaijan and would become rivals in the region.

In 2014 FDIs in Turkmenistan reached to \$3.1 billion, 97 percent out of which went to the extractive industries mainly in hydrocarbons and petro-chemicals<sup>68</sup>. The major investors in Turkmenistan are China, Russia, Kazakhstan and Uzbekistan.

Thus, although there are strong obstacles for Iran both objective and subjective mainly related to politics to turn into a leader in the region, still there is a huge opportunity to be like that in case of strong willingness of the Government of Iran. Union of Azerbaijan,

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<sup>66</sup> [www.worldbank.org](http://www.worldbank.org)

<sup>67</sup> [www.stat.gov.tm](http://www.stat.gov.tm)

<sup>68</sup> see above



Turkmenistan and Iran will made them to dictate the world price of gas having influence on all major countries in the World.

## 2.2 Competitive advantages of Iran and its northern neighboring countries

Within the proposed integration institute, Iran would be in the leading position by the economic figures as well as by territory and population. Moreover, Iran would act the role of Germany within the EU as the other countries are in the transition period. Although Armenia is the smallest by absolute figures, comparatively the picture is little bit different. For example, all other countries have bigger territories and more populations, but GDP per capita is bigger less than its territories and populations compared to Armenia (see table 1).

**Table 1.**  
**General Statistics of Iran and its northern neighboring countries**

Country	Arm <sup>69</sup>	Az	Geo	Ir	Tu
Area	29,843	86,600	69,700	1,648,195	488,100
Population <sup>70</sup>	3,013,900	9,611,700	3,729,635	78,300,100	5,751,120
Religion	Christianity	Islam	Christianity	Islam	Islam
GDP, 2016 USD	26.56 billion <sup>71</sup>	167.9 billion <sup>72</sup>	37.38 billion <sup>73</sup>	1.459 trillion <sup>74</sup>	94.77 billion <sup>75</sup>
Unemployment <sup>76</sup>	16%	5.5%	14.3%	13.2%	10.7%
Inflation <sup>77</sup>	1.1%	12.4%	1.8%	9.2%	11%
Stock of FDIs inflow in USD	4.817 billion <sup>78</sup>	72.7 billion <sup>79</sup>	13.68 billion <sup>80</sup>	46.1 billion <sup>81</sup>	3.061 billion <sup>82</sup>

Coming to the issues of natural resources of each 5 countries, it could be stated that Armenia and Georgia is not rich with the natural resources, while Azerbaijan, Iran and

<sup>69</sup> Arm- Armenia, Az – Azerbaijan, Geo-Georgia, Ir – Iran, Tu - Turkmenistan

<sup>70</sup> source: National Statistics Services of each countries

<sup>71</sup> [www.cia.gov/library/publications/the-world-factbook/geos/am.html](http://www.cia.gov/library/publications/the-world-factbook/geos/am.html)

<sup>72</sup> [www.cia.gov/library/publications/the-world-factbook/geos/aj.html](http://www.cia.gov/library/publications/the-world-factbook/geos/aj.html)

<sup>73</sup> [www.cia.gov/library/publications/the-world-factbook/geos/gg.html](http://www.cia.gov/library/publications/the-world-factbook/geos/gg.html)

<sup>74</sup> [www.cia.gov/library/publications/the-world-factbook/geos/ir.html](http://www.cia.gov/library/publications/the-world-factbook/geos/ir.html)

<sup>75</sup> [www.cia.gov/library/publications/the-world-factbook/geos/tx.html](http://www.cia.gov/library/publications/the-world-factbook/geos/tx.html)

<sup>76</sup> source: National Statistics Services of each countries

<sup>77</sup> [www.tradingeconomics.com/](http://www.tradingeconomics.com/)

<sup>78</sup> [www.cia.gov/library/publications/the-world-factbook/geos/am.html](http://www.cia.gov/library/publications/the-world-factbook/geos/am.html)

<sup>79</sup> [www.cia.gov/library/publications/the-world-factbook/geos/aj.html](http://www.cia.gov/library/publications/the-world-factbook/geos/aj.html)

<sup>80</sup> [www.cia.gov/library/publications/the-world-factbook/geos/gg.html](http://www.cia.gov/library/publications/the-world-factbook/geos/gg.html)

<sup>81</sup> [www.cia.gov/library/publications/the-world-factbook/geos/ir.html](http://www.cia.gov/library/publications/the-world-factbook/geos/ir.html)

<sup>82</sup> [www.cia.gov/library/publications/the-world-factbook/geos/tx.html](http://www.cia.gov/library/publications/the-world-factbook/geos/tx.html)

Turkmenistan is rich of crude oil and natural gas. Overall, Armenia has the following resources: small deposits of gold, copper, molybdenum, zinc, bauxite and hydropower; Azerbaijan - petroleum, natural gas, iron ore, nonferrous metals and bauxite; Georgia - timber, hydropower, manganese deposits, iron ore, copper, minor coal and oil deposits; coastal climate and soils allow for important tea and citrus growth, Iran - petroleum, natural gas, coal, chromium, copper, iron ore, lead, manganese, zinc and sulfur; and Turkmenistan - petroleum, natural gas, sulfur and salt. But, it could be stated that all 5 countries are lack of wheat. It would be the major product of imports for this regionalization.

Although among these 5 countries, Armenia is the poorest country by its natural resources, it is the leading one by high technologies. Software sector is among the most developed and comparatively overwhelming by FDIs presents. For example, by the Global innovation index Armenia is heading other 5 countries ranking on 65, followed by Georgia (75), Azerbaijan (101) and Iran (120)<sup>83</sup>. Turkmenistan is out of ranking because of lack of statistics. Moreover, the share of Software sector in GDP in Armenia is among the highest among the region. It was almost 1.7 percent in 2015, while for Iran the figure was approximately 0.22 percent.

Having general overview for all countries, for full picture of the regionalization, it is meaningful to consider competitive advantages and structures of economy of each country.

Competitive Advantages of the Economy of Iran: Iran rates the second largest economy and second largest populated country in the Middle East and North Africa after Saudi Arabia and Egypt correspondingly. The main field of economy is a hydrocarbon sector with strong presence of state in the manufacturing and financial services. The economy heavenly depends on oil production. Currently, Iran ranks the second in the world with its natural gas and the fourth with its crude oil reserves. The composition of GDP of Iran is as following for 2016:

- agriculture: 9.1%

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<sup>83</sup> source: [innovationindex.org/content.aspx?page=data-analysis](http://innovationindex.org/content.aspx?page=data-analysis)

- industry: 39.9%
- services: 51%<sup>84</sup>.

Although the economy of Iran is in the transition period from centrally planned one into market oriented, more than 60 percent of the economy is public. The major sectors of the industry of Iran are:

- petroleum and petrochemicals;
- fertilizers and caustic soda;
- textiles;
- cement and other construction materials;
- food processing (particularly sugar refining and vegetable oil production);
- ferrous and non-ferrous metal fabrication;
- armaments.

The fact is that the economy of Iran depends on oil and natural gas revenues, where only oil industry accounts for 60 percent of the government's budget. The major natural resources are: petroleum, natural gas, coal, chromium, copper, iron ore, lead, manganese, zinc, sulfur. The major agricultural products are: wheat, rice, barley, potato, grains, sugar-beet, cotton, fresh & dried fruits, dates, pistachio, fruits, nuts, poultry, meat, dairy products, wool; caviar, flowers and medicinal plants.

The economy of Iran is in the new stage of development as a result of the Geneva agreement, signed in 2013, which has brought relief to a national economy suffocated by the sanctions and removed some obstacles to the FDI. The later has already pushed Chinese and Russian capital inflows to the economy, particularly in the natural gas sector.

For 2016, the major export products of Iran are: petroleum 80%, chemical and petrochemical products, fruits and nuts, carpets, cement, ore. The major export-partners of Iran are: China (22.2%), India (9.9%), Turkey (8.4%) and Japan (4.5%). The major import products are industrial supplies, capital goods, foodstuffs and other consumer goods,

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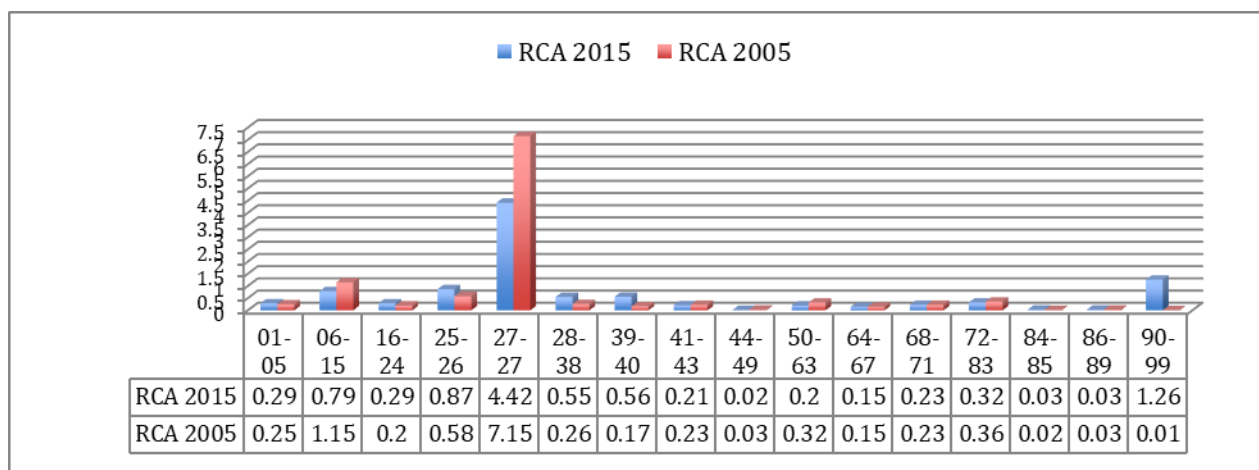
<sup>84</sup> source: CIA Factbook

technical services. The major import-partner of Iran are: UAE (39.6%), China (22.4%), South Korea (4.7%), and Turkey (4.6%)<sup>85</sup>.

Among Iran’s neighboring countries, the statistical figures for foreign trade turnover are big with Turkmenistan followed by Azerbaijan. On the third place is Armenia, followed by Georgia. Although, taking into consideration the size of the market of Armenia, it could be stated that comparatively, the biggest trade partner of Iran is Armenia. With all of them Iran’s trade balance is positive, which means that Iran is a net exporter to these countries and regionalization will make easy access to the markets of its northern neighboring countries.

The major export products of Iran into Armenia were: fuels, plastic and rubber, and chemicals. Much of Iran’s exports to Azerbaijan consist of minerals; plastic and rubber; and chemicals, while the major exporting products of Iran into Georgia are: fuels; stone and glasses; and plastic and rubbery. The exports to Turkmenistan mainly covered: foodstuffs, healthcare equipment, automobiles, and advanced technological goods.

Now, it is time to understand the RCA of Iran compared with the world based on formula presented above comparing 2015 with 2005. As graph 1 present, Iran has RCA mainly in fuels. Although there is a decrease of RCA in vegetable product group, while there is an increase of RCA in several product groups as well among which are minerals and plastic and rubber.



**Graph 1. Revealed Comparative Advantages of Iran<sup>86</sup>**

Source: the calculations have been done by the author based on the statistics for Iran taken from UN COMTRADE

<sup>85</sup> see above.

<sup>86</sup> List of HS Code products are given in the Annex 1.

Coming to the ITI, it is bigger than 1 almost for all product groups for Iran with all countries, which indicates that trade flow between countries/regions is larger than expected given their importance in world trade. The highest ITI with Armenia are products ranging from HS Code 41-49, with Azerbaijan, it is HS Code 64-67, with Georgia it is HS Code 68-71 and with Turkmenistan it is HS Code 44-67. Iran has high ITI with Turkmenistan followed by Armenia, Azerbaijan and Georgia consequently (see table 2).

**Table 2.**

**Intraregional Trade intensity Index of Iran for 2015 with Regional Countries**

Product	Trade Intensity Index 2014			
	Arm	Az	Geo	Tu
<b>Total</b>	583.11	458.83	109.99	956.70
<b>01-05</b>	248.47	1,592.45	26.54	5,860.14
<b>06-15</b>	1,238.45	2,769.40	105.24	6,535.39
<b>16-24</b>	396.28	992.08	207.18	4,315.71
<b>25-26</b>	4,678.12	7,647.38	51.98	10,100.71
<b>27-27</b>	932.68	386.41	45.64	1,020.24
<b>28-38</b>	2,537.26	646.89	178.89	3,311.16
<b>39-40</b>	4,998.21	2,930.87	417.11	5,099.98
<b>41-43</b>	13,970.27	4,236.01	541.52	2,463.25
<b>44-49</b>	15,103.89	1,116.30	1,600.08	17,480.23
<b>50-63</b>	1,871.43	2,781.87	1,141.96	18,332.03
<b>64-67</b>	675.99	17,072.29	1,318.40	33,008.38
<b>68-71</b>	2,483.75	3,122.54	2,393.01	11,287.55
<b>72-83</b>	3,218.69	618.49	116.54	1,981.84
<b>84-85</b>	2,009.12	1,191.14	1,435.67	3,823.35
<b>86-89</b>	338.42	223.82	-	4,524.45
<b>90-99</b>	2,494.58	2,785.85	1,876.63	4,891.03

Source: the calculations have been done by the author based on the statistics for Iran taken from UN COMTRADE

Competitive Advantages of the Economy of Armenia: Although Armenia is the smallest country among targeted 5 countries within this thesis not only by size but also by its

economy and by natural resources, it is the only country which does not contradict with the economic and political interests of Iran. Here, the only keystone contradiction could be religious difference of these two countries. Moreover, Iran is doing its best to become a leader in the region as well as one of the strongest countries in the international arena, the same is done by Turkey. This fact makes Iran and Turkey politically to be rivals in the region as well as in the world market, while it makes politically closer Armenia and Iran. Russia has the same interests, but political situation in the region forces Russia and Iran, at least in front of others, to act as allies, which “indirectly” pushes Armenia and Iran to continue to cooperate economically and politically closely then it would be preferred by Russia in other cases.

According to [www.CIA.Gov](http://www.CIA.Gov) the GDP composition of Armenia for 2016 looks as following:

- agriculture: 19.6%
- industry: 29.1%
- services: 51.3%,

where the major sectors of the industry are: diamond processing, metal-cutting machine tools, forging and pressing machines, electric motors, tires, knitted wear, hosiery, shoes, silk fabric, chemicals, trucks, instruments, microelectronics, jewelry, software, food processing, brandy, mining, while the major products of agriculture are: fruit (especially grapes), vegetables; livestock.

The export and import figures for 2016 have the following picture for Armenia according to the National Statistical Service of Armenia:

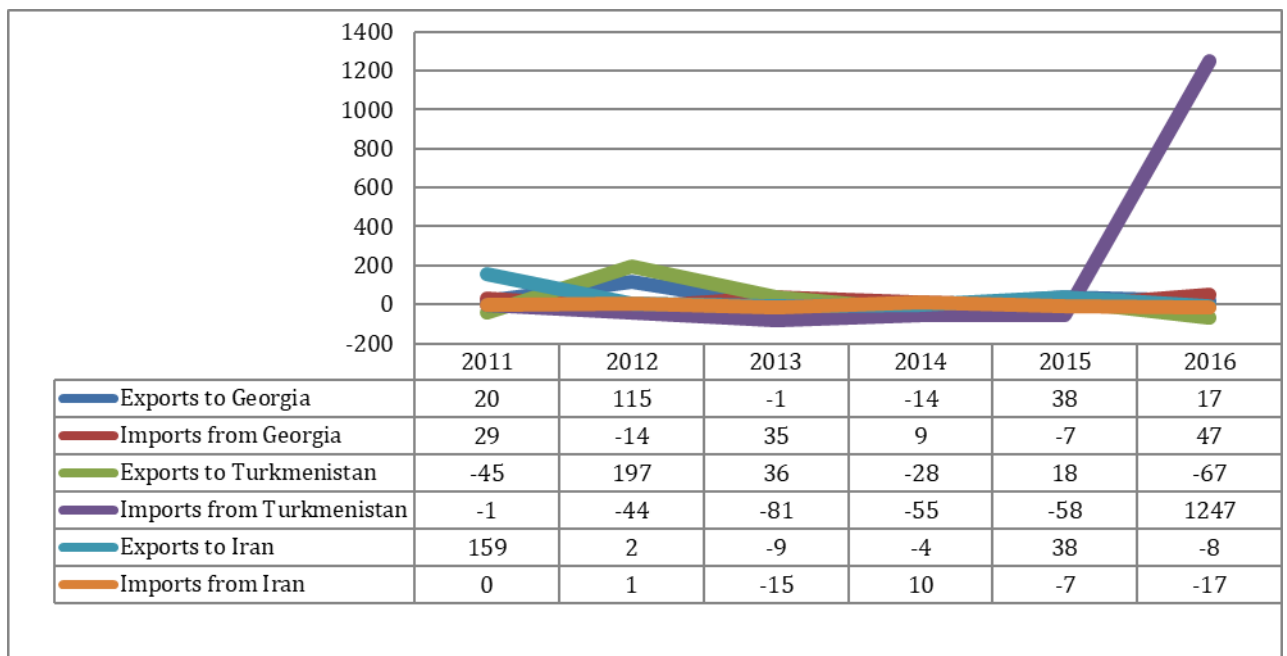
- the major export products are pig iron, unwrought copper, nonferrous metals, diamonds, mineral products, foodstuffs and energy;

- the major export countries are: Russia – 20.8% (compared to 16.5% in 2015), China – 5.4% (compared to 11.1% in 2015), Germany – 7.9% (compared to 9.4% in 2015), Iraq – 7.7% (compared to 8.8% in 2015), Georgia – 8.2% (compared to 8.4% in 2015), Canada – 7.8% (compared to 7.3% in 2015), Bulgaria – 8.5% (compared to 5.3% in 2015), and Iran – 4.2 percent (compared to 5.5% in 2015);

- The major import products are: natural gas, petroleum, tobacco products, foodstuffs, diamonds, pharmaceuticals, cars;

- the major import countries are: Russia – 30.3% (compared to 29.1% in 2015), China – 10.9% (compared to 9.7% in 2015), Germany 5.7% (compared to 6.2% in 2015), Iran – 5% (compared to 6.1% in 2015), Italy – 3.9 % (compared to 4.6% in 2015), Turkey - 5% (compared to 4.2% in 2015). Overall, it could be stated that Iran is among the top 5 trade partners of Armenia within last 25 years.

As it was mentioned above there is no relation between Armenia and Azerbaijan because of NK issue. Coming to the foreign trade between Armenia and other 3 countries, it had to be mentioned that on average of last 9 years, exports to Georgia increased by more than 15.6 percent, while imports increased by 11.9 percent. For the same period, on average the annual increase of exports to Turkmenistan was 41.7 percent and to Iran it was more than 33.8 percent, while the import was more than 4.9 percent for Turkmenistan and 6.9 percent for Iran. For all three countries trends of export and import of Armenia are almost the same (see graph 2) taking into consideration movements in the international markets.



**Graph 2. Trends of Exports/Imports of Armenia with Iran and other two countries for 2011-2016**

Source: the calculations have been done by the author based on the statistics for Armenia taken from UN COMTRADE

In 2016, the major exporting products of Armenia to Iran were: fuels, animals, wood, machines and skins. The major imports products were: minerals, plastics, fuels, metals, vegetables, animals and stone glasses (for details see table 3)<sup>87</sup>.

**Table 3.**

**Imports/exports of Armenia with Iran in 2016<sup>88</sup>**

<b>Product Groups</b>	<b>Export to Iran in thous USD</b>	<b>Share in Total</b>	<b>Import from Iran in thous USD</b>	<b>Share in Total</b>
<b>01-05_Animal</b>	9803.903	27.8	2420.549	2.6
<b>01-05_Animal</b>	35292.099		92894.965	
<b>06-15_Vegetable</b>	160.498	0.2	6965.049	3.4
<b>06-15_Vegetable</b>	65669.075		207038.974	
<b>16-24_FoodProd</b>	1099.049	0.3	1890.843	0.6
<b>16-24_FoodProd</b>	417273.953		328616.030	
<b>25-26_Minerals</b>	144.535	0.0	8494.160	56.6
<b>25-26_Minerals</b>	405494.988		14996.080	
<b>27-27_Fuels</b>	58252.703	96.0	76429.347	13.3
<b>27-27_Fuels</b>	60657.636		576143.074	
<b>28-38_Chemicals</b>	600.193	3.7	23948.528	7.3
<b>28-38_Chemicals</b>	16030.364		329344.536	
<b>39-40_PlastiRub</b>	38.243	0.5	18346.025	14.2
<b>39-40_PlastiRub</b>	7348.641		129638.832	
<b>44-49_Wood</b>	712.04	23.7	775.737	0.6
<b>44-49_Wood</b>	3001.530		119822.916	
<b>68-71_StoneGlas</b>	81.874	0.0	8474.361	3.8
<b>68-71_StoneGlas</b>	295568.442		225458.405	
<b>72-83_Metals</b>	639.877	0.3	13153.646	6.0
<b>72-83_Metals</b>	220503.021		219594.715	
<b>84-85_MachElec</b>	1312.176	7.2	1054.501	0.2
<b>84-85_MachElec</b>	18341.137		468917.985	
<b>86-89_Transport</b>	4.450	0.1	107.170	0.1
<b>86-89_Transport</b>	3655.944		106170.461	
<b>90-99_Miscellan</b>	170.641	1.0	477.247	0.4
<b>90-99_Miscellan</b>	16790.337		133328.504	

Source: the calculations have been done by the author based on the statistics for Armenia taken from UN COMTRADE

<sup>87</sup> [http://armstat.am/file/article/sv\\_12\\_16a\\_411.pdf](http://armstat.am/file/article/sv_12_16a_411.pdf)

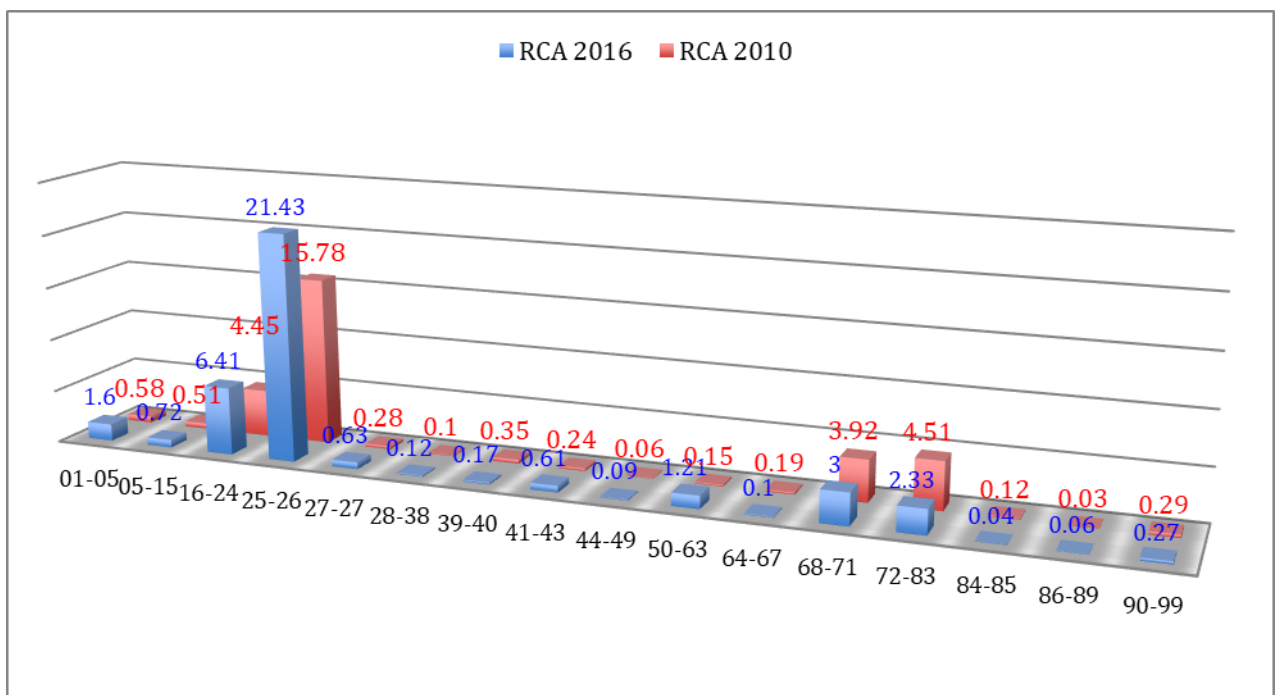
<sup>88</sup> National Statistical Service of Armenia has not yet published foreign trade statistics on the w-site.



Georgia is among 10 foreign trade partners of Armenia. The net trade balance of Armenia with Georgia is negative. The major products of export are: minerals (48 percent of total exports of Georgia), stone glasses (6 percent of total exports of Georgia), and foodstuff (7 percent of total exports of Georgia). The major import products are: chemicals, plastic and rubbers, stone glasses, and food products.

Visa Georgia, the exports and imports between Armenia and Turkmenistan are too small constituting approximately of 1 percent of total export and imports of Armenia. The major products of export were stone glasses, plastic and rubbery and clothing, while the major import products were textile. The fact is that during last 10 years, the foreign trade turnover between these two countries never was more than 1 percent of total exports ad imports of Armenia.

Coming to the RCA of Armenia it could be stated that Armenia has strong advantage in food, metal, stone and glasses, animal and mineral productions (see graph 3). It has potential in clothing as well. There is not calculation for the sub-sectors of services. In this case, all 5 countries with have the RCA for tourism sector based on their different cultural heritages. Armenia will have the RCA in software development sector too taking into consideration the FDIs level in this sector of Armenia and the number of operating companies compared with the number of populations of Armenia. As shows graph 3, Armenia has improvement of RCA almost in all products range.



**Graph 3. Revealed Comparative Advantages of Armenia 2016-2010**

Source: the calculations have been done by the author based on the statistics for Armenia taken from UN COMTRADE

Coming to the ITI of Armenia, as table 4 indicates it is greater from 1 for all products with Georgia, while for Iran some of them are 0 and with Turkmenistan just with few products it is higher than 1. In 2015, the situation is worsening with Turkmenistan, while it is improving with Iran compared. With Azerbaijan it is 0 for all products as there is no trade as has been already mentioned above.

**Table 4.**  
**Trade Intensity Index of Armenia (TII), Azerbaijan and Georgia for 2015**

Product	TII – Geo				TII – Az			TII – Arm		
	Arm	Az	Ir	Tu	Geo	Ir	Tu	Geo	Ir	Tu
<b>Total</b>	79,325	22,304	269	974	4519	166	221	7,566	1,533	1,717
<b>01-05</b>	7,849	57,563	0.1	1,144	8478	0	0	2,481	1,505	0
<b>06-15</b>	61,151	2,817	1	343	28898	0	4132	11,034	17	0
<b>16-24</b>	8,686	4,097	93	1,014	2734	423	8719	2,906	15	2,172
<b>25-26</b>	52,119	29,947	0	0	92530	0	1352	3,767	67	0
<b>27-27</b>	948,812	47,383	276	84	2027	411	0	4,513	117,558	0
<b>28-38</b>	83,602	23,034	280	1,009	7181	79	166	82,182	2,389	0
<b>39-40</b>	210,256	28,480	1,185	109	191	0	38.89	117,016	26	1,557
<b>41-43</b>	139,909	31,712	21	539	108	0	0	13,774	414	0
<b>44-49</b>	206,933	3,752	2,722	2,105	40569	2265	17370	65,956	412	0
<b>50-63</b>	31,945	5,138	78	21	11647	0	8	1,652	1	0.16
<b>64-67</b>	171,462	34,466	384	1,560	12651	0	527452	37,361	19	18,6294
<b>68-71</b>	76,595	6,624	0.45	69	232272	140	3311	15,665	7	13,454
<b>72-83</b>	10,250	10,571	56	131	1238	860	114	182	150	0
<b>84-85</b>	261,479	26,933	938	1,798	61644	184	11882	31,277	1,810	0
<b>86-89</b>	158,269	62,635	985	2,003	15105	1514	0	29,208	408	0
<b>90-99</b>	76,284	8,899	595	1,220	1430	221	23	20,752	619	3,025

Source: the calculations have been done by the author based on the statistics for Armenia, Azerbaijan and Georgia taken from UN COMTRADE

As the above table indicates, the trade intensity of Armenia is higher with Georgia followed by Iran and Turkmenistan correspondingly.

Competitive Advantages of the Economy of Azerbaijan: Oil remains the major product of the economy of Azerbaijan followed by cotton, natural gas and agriculture products.

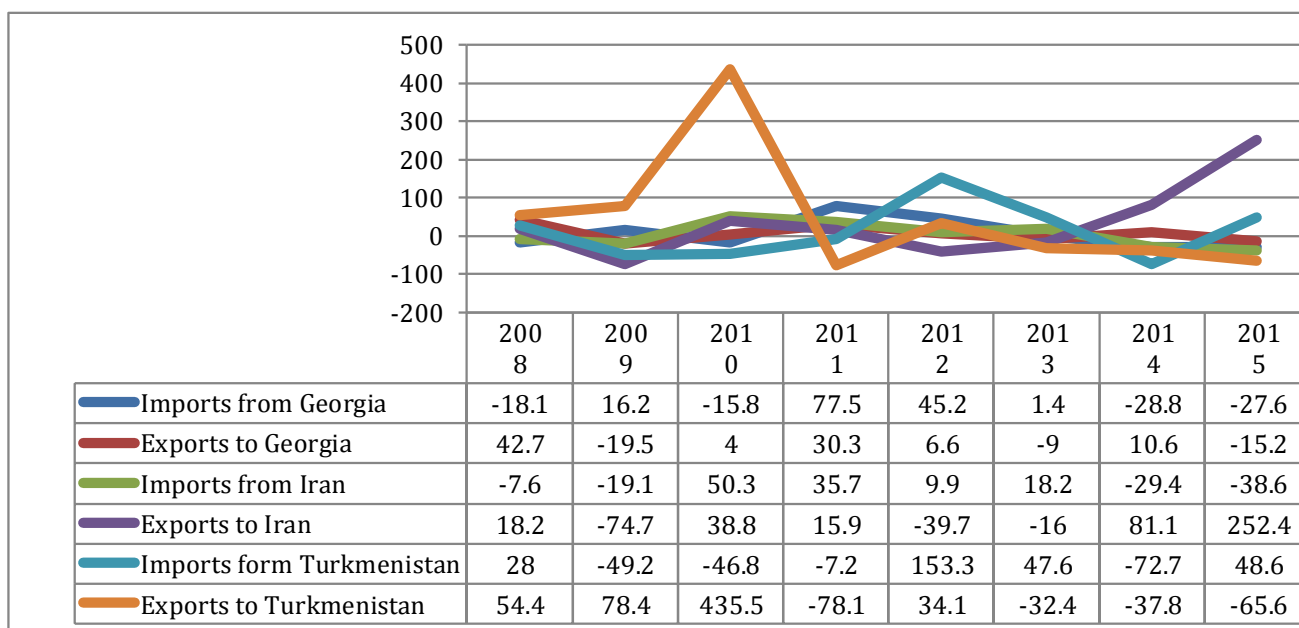
According to the [www.cia.org](http://www.cia.org) the composition of GDP of Azerbaijan was the following in 2016:

- agriculture: 6.4 %,
- industry: 61.1% and
- services: 32.5%,

where the major sectors of industry are: petroleum and petroleum products, natural gas, oilfield equipment; steel, iron ore; cement; chemicals and petrochemicals; textiles, while the major products of agriculture are: fruit, vegetables, grain, rice, grapes, tea, cotton, tobacco; cattle, pigs, sheep and goat. About 54,9 percent of Azerbaijan are agricultural lands.

For 2016 according to the same source, the major export countries of Azerbaijan were Italy (26.3%), Germany (13.3%), Indonesia (7%), France (6.9%), and Czech Republic (6%) with the following products: oil and gas (90% of all exports), machinery, foodstuffs and cotton. For the same year, the major import partners of Azerbaijan were: Russia (19.9%), Turkey (16.5%), UK (8.6%), Germany (6.6%), Italy (6.3%), USA (4.1%) with the following products: machinery and equipment, foodstuffs, metals and chemicals.

Although during last 7 years, the trade turnover of Azerbaijan with Georgia, Iran and Turkmenistan increased annually on average, the trends of it have decreasing characteristics against to the fact of increase of the economy of Azerbaijan (see graph 4).



**Graph 4. Trends of Exports/Imports of Azerbaijan with Iran and other two countries for 2008-2015**

Source: the calculations have been done by the author based on the statistics for Azerbaijan taken from UN COMTRADE

Coming to the trade relation with Iran, in 2015, the major import-products of Azerbaijan were: minerals, textile and clothing as well as plastics and rubbery, while the major products of export were woods, food products, metals and textile and clothing. In 2015 exports were 139 mln USD to Iran, while imports from Iran were 90 mln USD.

Foreign trade with Georgia had the following framework for 2015: the exports constituted more than 449 mln USD, while imports were 68 mln.. The major export products are: Fuels, vegetables, food products and machinery; while the major import products are: Animals, Chemicals, Food products, minerals and metals.

The trade turnover with Turkmenistan covers limited products. The major Turkmen products imported into Azerbaijan are: plastic and rubber and fuels. The major exported products are: foods, vegetables and machinery.

Azerbaijan has a comparative advantage only in fuels within last 10 years. It has been improved by 2.31 points reaching to 8.89 indicator. Based on our RCA calculation, we see potential to be grown only in products groups of vegetable, which was equal to 0.61, although the figure has not any change during last 5 years.

ITI is positive almost for all products with Georgia and it is improving almost for all products for 2015 (see table 4). The same, more or less, is with Turkmenistan, while ITI is worsening with Iran for the same period compared to 2012.

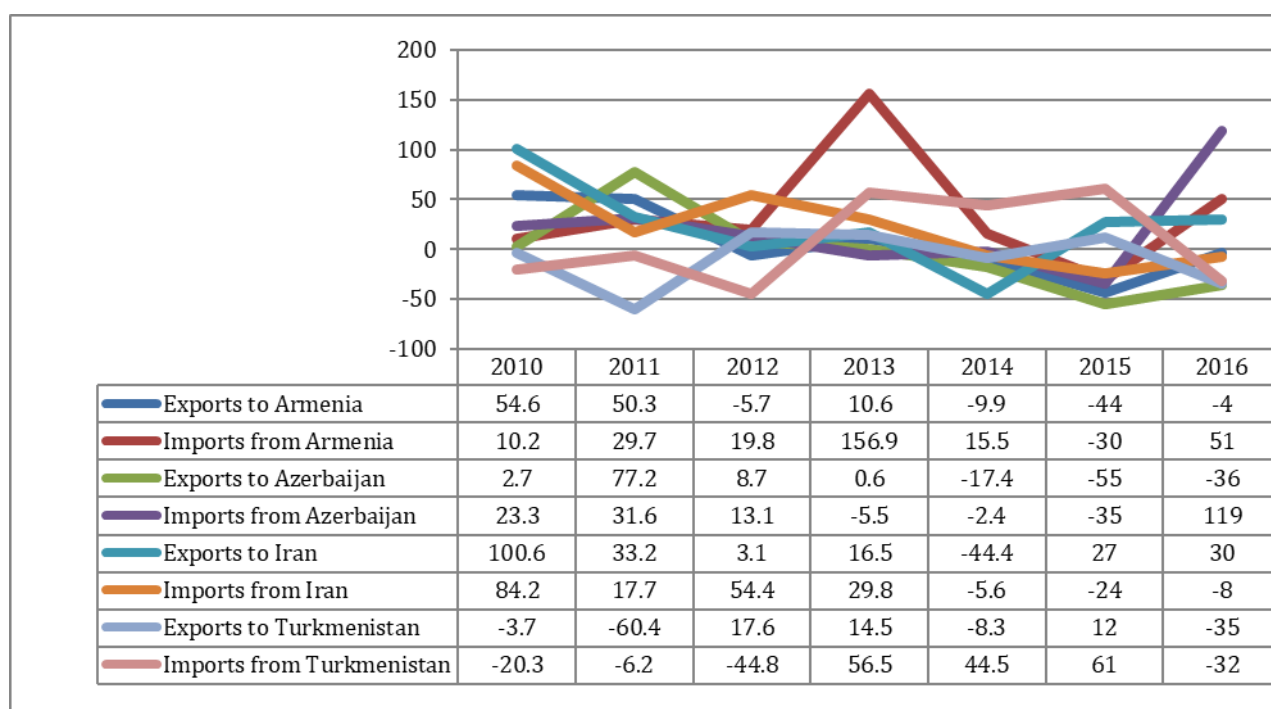
Competitive Advantages of the Economy of Georgia: The overall picture of the economy of Georgia covers mainly cultivation of grapes, citrus fruits, and hazelnuts; mining of manganese, copper, and gold; and producing alcoholic and nonalcoholic beverages. According to the [www.cia.org](http://www.cia.org) composition of the GDP of Georgia is:

- agriculture: 9.2%,
- industry: 21.6%,
- services: 68.3%,

where the major sectors of industry are: steel, machine tools, electrical appliances, mining (manganese, copper, gold), chemicals, wood products and wine production. The major products of agriculture are: citrus, grapes, tea, hazelnuts, vegetables and livestock.

According to the same source, for 2016, the basic-export partners of Georgia were: Azerbaijan (10.9%), Bulgaria (9.7%), Turkey (8.4%), Armenia (8.2%), Russia (7.4%), China (5.7%), US (4.7%), and Uzbekistan (4.4%), while the major import partners were: Turkey (17.2%), Russia (8.1%), China (7.6%), Azerbaijan (7%), Ireland (5.9%), Ukraine (5.9%) and Germany (5.6%). The major export-products are: vehicles (re-export), ferro-alloys, fertilizers, nuts, scrap metal, gold and copper ores. The major import products are: fuels, vehicles, machinery and parts, grain and other foods and pharmaceuticals.

The annual trends of the foreign trade turnover of Georgia with Iran and other northern neighboring countries for last 7 years on average were contradictory. There was increase of trade turnover between Armenia and Iran, while exports annual trends to Azerbaijan and Turkmenistan decreased by -1.5 percent and – 18 percent correspondingly on average for the same period, while import trends increased by 10 percent and 5 percent correspondingly (see graph 5).



**Graph 5. Trends of Exports/Imports of Georgia to Iran and Northern Neighbor Countries for 2010-2016**

Source: wits.worldbank.org, calculations have been made by the author

Coming to the exports/imports with Iran, it should be stated that for 2015 the major export-products were: woods, plastic and rubber, food products and metals, while the

major import-products were: fuels, stones and glasses, plastic and rubbers. The trade balance of Georgia with Iran is negative, mainly because of import of fuels, chemicals and metals. In 2015, the exports to Iran were more than 13 mln USD, while the imports constituted 94 mln USD based on data provided by UNCOMtrade. The share of exports and imports with Iran in total exports and imports of Georgia was 0.8 percent and 1.2 percent correspondingly.

The total exports to Armenia in 2016 were 69.7 mln USD more than 5 times higher than with Iran, while the imports for the same period were 143 mln USD according to the UN COMtrade source. The major export-products to Armenia for Georgia were: chemicals, food products, vegetables and wood. The major import products from Armenia were: minerals, food products and stone and glasses.

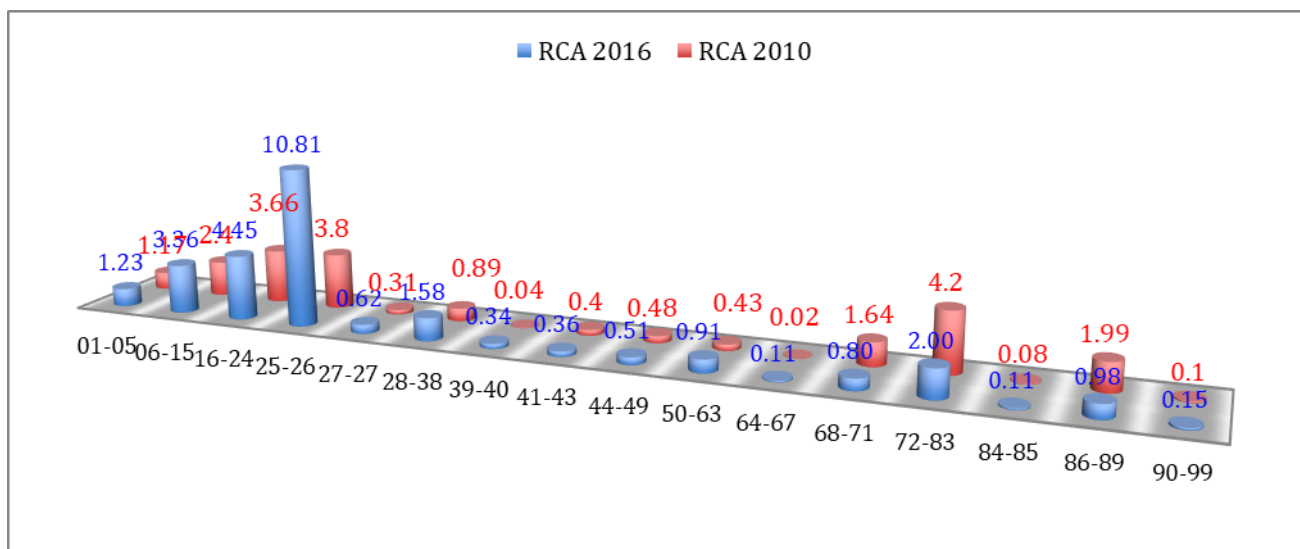
Trade balance of Georgia with Azerbaijan is negative: imports are almost 5 times more than exports. The major export-products to Azerbaijan for Georgia were: animals, foods and vegetables and metals and chemicals. The major import products from Azerbaijan were: fuels and minerals.

The total exports to Turkmenistan in 2016 were almost 2 mln USD, while the imports for the same period were 11 thousand USD. The major export-products to Turkmenistan for Georgia were: foods and vegetables, metals, chemicals and woods. The major import products from Turkmenistan were: fuels and minerals. The major product of imports is fuel. It constituted more than 95 percent of all imports from Turkmenistan to Georgia.

Currently, Georgia has a strong position with RCA in vegetables, food products, minerals, chemicals, metals and transportation. With the promotion of several sectors, animals and clothing sectors would be on advantage position as well (see graph 6). At the same time, as a graph shows, Georgia has improvements almost in all products groups of RCA in 2016 compared with 2010, except 72-83 and 86-89 products groups of the HS Code. Georgia will have higher RCA for tourism and transportation too taking into consideration that the major part of services sector is transportation.

ITI of Georgia is higher than one with almost all products with all countries. The highest index is with Armenia, followed with Azerbaijan, Iran and Turkmenistan

correspondingly (see table 4). The situation is improving for Turkmenistan, while with Armenia and Azerbaijan it is worsening for the major products as well as totally.



**Graph 6. Revealed Comparative Advantages of Georgia**

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

Competitive Advantages of the Economy of Turkmenistan: The assessment of impacts of regionalization of Turkmenistan with Iran and other northern countries is tough target as to find out economic figures about Turkmenistan was almost impossible. Thus, the assessments would be based on old statistical figures and in summarized trends by other authors rather than first hands information. Because of its strategic location, Turkmenistan is a corridor for several international transportation: TRACECA (the members of which are: Armenia, Azerbaijan, Bulgaria, Georgia, Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Ukraine and Uzbekistan), OSJD VI and X (the members of which are Azerbaijan, Belarus, Bulgaria, China, Czech Republic, Georgia, Estonia, Iran, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan and Vietnam, and Iran too), and CAREC II and III (Aghfanistan, Azerbaijan, China, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan).

According to the [www.cia.org](http://www.cia.org) the composition of GDP of Turkmenistan in 2016 had the following description:

- agriculture: 13.1%

- industry: 47.7%
- services: 39.2%,

where the major sectors of the industry are: natural gas, oil, petroleum products and textiles. Although Turkmenistan is a country with more than 80 percent of desert, the agriculture accounts more than 13 percent of GDP with two major crops: cotton and wheat. The major sectors of agriculture of Turkmenistan are: cotton, grain, melons and livestock.

For 2016, the major export-partners of Turkmenistan were: China (68.6%, mainly gas) and Turkey (4.9%) according to the same statistical source. The major products of export were: gas, crude oil, petrochemicals, textiles and cotton fiber. More than 90 percent of all exports of Turkmenistan were fuel and energy resources (mainly natural gas and oil) in during last decades. The next product of exports of Turkmenistan is cotton.

The wheat is mainly exported to Iran and Afghanistan<sup>89</sup>. The import-partners for the same year were Turkey (24.9%), Russia (12.3%), China (10.9%), UAE (9.1%), Kazakhstan (5.1%), Germany (4.6%) and Iran (4.4%). Turkmenistan imports almost all products. The major ones among them are: machinery and equipment, chemicals and foodstuffs. Based on different sources, Turkmenistan is mainly importing country. Last years there was a significant increase in the imports from European countries too.

The border of Iran and Turkmenistan is more than 1000 km. Iran was the first nation to recognize the independency of Turkmenistan from the Soviet Union. The relationship is tight and strong according to the fact that Iran is among top 5 trade partners of Turkmenistan, although politically they have some “misunderstanding” mentioned in above paragraphs.

As the statistics on exports and imports are missing for Turkmenistan, then the statistics of Armenia, Azerbaijan, Georgia and Iran would be taken into consideration related to Turkmenistan. So, the exports and imports of Turkmenistan with 4 countries are presented above.

The RCA of Turkmenistan is in fuel and textile. As these two products are the major export products of Turkmenistan since its independence (even in the Soviet time), then it

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<sup>89</sup> <http://www.timesca.com/news/14882-over-90-of-turkmenistan-s-export-is-fuel-and-energy-resources>



could be stated that these two products are still the comparative advantage one for this country, although to calculate RCA was impossible for 2015, as there are official statistics for exports and imports only for 2000 given by Turkmenistan, where  $RCA=8.6$  for fuels and  $RCA=2.63$  for the textile, which would be taken as required figures for cooperation matrix as there was no any significant changes in Turkmenistan foreign trade as it was already mentioned.

As in Iran, in Turkmenistan the largest domestic investor is the Government. Currently, Turkmenistan has bilateral investment agreements with Armenia, Georgia, and Iran.

Taking into consideration that there is no exports/imports figure for Turkmenistan then ITI would be taken out from the tables above for ITI. ITI of Turkmenistan is tangibly worsening with Armenia, while with Georgia is bettering-off. With Azerbaijan it is more or less the same, while with Iran it is positive with almost all products.

Overall it could be assumed that except Armenia and Georgia, all other three countries mainly has the RCA in fuels and gas. Only Iran has ITI higher than one for all products with all countries, which means that this country will strongly benefit from free movements of the goods and services. Taking into consideration that Iran has more or less developed other sectors of economy except fuels and gas, it could be assumed that this country will act the role of Germany.

### **2.3 Assessment of the impacts of possible free trade agreements between Iran and its northern neighboring countries**

As it as mentioned in the 1<sup>st</sup> paragraph, the impacts of possible free trade agreements Iran and its northern neighboring countries would be assessed through the SMART model, because of lack of many statistical figures for Turkmenistan and up-to-date statistics for Iran for other models. For this purpose, the supply elasticity will be taken 99, while the substitution elasticity - 1.5 based on SMART model suggestions. The product-listing is based on Harmonization System Codes 2007 (with two digits). Foreign trade policy of Armenia is based on the one before becoming a member of the EEU.

The keystones of the SMART are trade creation, trade diversion and trade effects as a result of the free trade agreements. Trade creation within SMART model is defined as the direct increase of imports as a result of the elimination of tariff among two or more agreement signed countries. Trade diversion is the substitution of imports from the third countries with the country/countries signed free trade agreements. Total trade effect is made of trade diversion and trade creation.

Impact of possible free trade agreements on the economy of Armenia with Azerbaijan, Georgia, Iran and Turkmenistan. Armenia conducted a free trade policy before a membership of the EEU: the import tariff rates were 0 percent and 10 percent. It is to simplified as used only on ad valorem. There was no export tariff. Armenia is a member of the WTO since 2003, which means that Armenian foreign trade policy is acceptably improved since its independence. That is why the impacts of the possible free trade agreements between Georgia and Turkmenistan have no any tangible effect at this point. As there was no figure for trade between Armenia and Azerbaijan, it could be stated that what kind of positive/negative outputs would be for Georgia, the same could be proposed for Armenia (for the case of Armenia) and for Azerbaijan (for the case of Azerbaijan) in case of openness of the border. The VAT rate is 20 percent.

The major the RCA of Armenia based on the foreign trade statistics of 2016 are: minerals, food products, stones and glasses followed by metals and animals. The potential fields could be clothing, energy resources and vegetables. Although the high figure stands for fuels, but it is more related to energy resources for the case of Armenia and/or as a transition country from Iran to Georgia and nearest regions of Russia (see table 5).

The RCA is not calculated for the service sector of the economy, because of lack of statistical specific models as well as statistics. But taking into consideration the rate of growing of the software sector of Armenia, it could be stated that this sector is among the RCA one for the country. With the free trade among these countries, Armenian software products could be easily presented and the economy would gain much closing the gap of being the natural resource poorest country among them. For the next service field such as tourism, taking into consideration the existence of wide cultural differences among Iran

and its neighboring countries, it could be concluded that all of them has the RCA for tourism development among themselves as it could have more than 100 million potential tourists.

The revenue effect is negative almost for 42 products among the HS Code 97 products. For the 55 products the revenue effect is 0 (see table 12). The most effected products are Glass and glassware (70), Edible fruit and nuts (8), Plastics and articles thereof (39) and Edible Vegetables (7). Among the RCA products, the most vulnerable is stone and glasses as table 12 indicates. Moreover, as a result of the possible free trade agreement Armenia would have welfare and trade total effects related with 41 products (see table 5). The trade total effect is directly related to the free access to Iranian market and it would be more related to Azerbaijan issue.

**Table 5.**

**Revenue (RE) and Total Trade Effects (TTE) and Welfare (W) in 1000 USD for Armenia by HS Code two digit products**

Code	TTE	W	RE
3	222	12	-6
4	57	2	-68
6	23	2	-25
7	1524	54	-324
8	507	30	-578
15	122	5	-139
17	2	0	-2
18	2	0	-2
19	27	1	-36
20	196	13	-61
21	8	0	-13
25	31	2	-47
39	273	20	-370
40	18	1	-22
42	1	0	-1
43	4	0	-5
48	4	0	-4
57	126	9	-48
61	2	0	-2
62	0	0	-1
63	14	1	-22
64	6	1	-9
66	1	0	-1
67	1	0	-1
68	153	14	-63
69	159	15	-188
70	1097	66	-648
73	22	2	-22
82	3	0	-4
83	0	0	-1
84	33	3	-32
85	6	0	-9
87	24	2	-13
91	3	0	-2
94	23	2	-32
95	6	1	-7
96	3	0	-3

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

As it was already mentioned Armenia has comparatively free trade regime with the world. Thus there would not be any trade creation effects related to Georgia and

Turkmenistan, while the positive effects would be with Iran and Azerbaijan. With Azerbaijan it was not calculated because of no trade yet between these two countries. The most effected products of trade creation are glass and glassware and vegetables (See Annex 2.1).

The trade diversion of Armenia after having possible free trade agreement with other 4 countries would be positive only with Iran and presumably with Azerbaijan, while the rest of world it would be negative covering almost 11 HS code two digit products (see table 6).

**Table 6.**

**Trade Diversion Effect in 1000 USD – Case of Armenia**

Partner	Code	TDE	Iran	20	40.292	Turkey	70	-45.735
Iran	39	326.668	Iran	94	36.102	China	39	-47.208
Iran	70	279.376	UAE	39	-25.9	Greece	8	-51.385
Iran	69	212.794	Russia	39	-27.027	Belgium	15	-51.91
Iran	15	167.179	Ukraine	7	-29.766	Spain	69	-65.477
Iran	8	151.277	Russia	19	-31.799	Ukraine	15	-65.649
Iran	7	137.562	Russia	15	-31.801	Georgia	7	-71.641
Iran	4	70.483	Ukraine	4	-33.208	China	69	-76.86
Iran	68	66.439	Turkey	69	-40.857	Turkey	39	-92.417
Iran	19	41.669	Turkey	8	-44.845	China	70	-133.641

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

As a result of trade creation and trade diversion effects of Armenia from the possible free trade agreements with other 4 countries, the trade total positive effect is related to Iran (covering 41 one products of HS Code two digit) and it could possibly related to Azerbaijan as well, because here there would be opening of the closed boarder not only for trade, but also economically and politically.

Impact of possible free trade agreements on the economy of Azerbaijan with Armenia, Georgia, Iran and Turkmenistan. Azerbaijan has positive trade balance because of exports of crude oil. This is made the economy of Azerbaijan to vulnerable and dependent on the world economy. The foreign trade policy of Azerbaijan is comparatively free: it is not still a member of the WTO, but it is in the process (the status is observer); Import duties rates are 0.5, 5, 10 and 15% a accordingly the Customs Tariff schedule of the Azerbaijan; there

are several barriers to trade too; export/import of the following goods also require government approval: wild animals and plants, and raw materials from them; information on the location of natural resources and thermal energy; works of art and antiques; results of scientific and other research, inventions; controlled psychotropic substances; medical equipment; insecticides; and veterinary drugs and substances. The VAT rate is 18 percent.

In Azerbaijan three types of customs duties are applied: ad valorem (to be calculated by percent of commodities for their customs value); specific (to be calculated by a determined value for a commodity unit); and composite (to be calculated by joining of both types). In summary the foreign trade policy is little bit complicated compared to the foreign policy of Armenia, although it has free economy relation with Georgia.

The possible economic impacts of free trade agreements of Azerbaijan with other 4 countries are more or less similar with the case of Armenia. It means, that positive effects are mostly related to Iran and it could be possibly related to Armenia as a result of opening borders between these countries. Azerbaijan has the RCA only in the product of fuels. It was 8.89 for 2015 with increase of 2.31 point within 5 years. The next product could be vegetable, but taking into consideration that there was no any change registered last 5 years, it could be stated that Azerbaijan continues to build its economy on the fuels making it vulnerable to the changes of the world economy. Now the economy of Azerbaijan could be in the advantages position taking into consideration the sanctions against Russia forcing the Europe demand more fuel from this country, but it is temporary and with giving more freedom to Iran the Azerbaijan could face serious economic and social problems and for long time.

Coming back to the outcomes of SMART assessment, as it was already mentioned the basic impacts are related to Iran and possible to Armenia because of easing trade relations with Iran and starting trade with Armenia. The revenue effect is negative covering 64 products of HS Code two digit products and the top 5 products are: salt, sulphur, earth and stone, lime and cement (25), edible vegetables (7), man-made filaments (54), ceramic products (69), and edible fruit and nuts (8) (for details see table 15). The trade total effect is positive for the 64 products as the table 22 indicates. Top 5 products are: salt, sulphur, earth and stone, lime and cement (25), iron and steel (72), edible vegetables (7), man-made filaments (54), and ceramic products (69) (for details see table 7) and it is mostly related to the trade with Iran. The trade total effect of Azerbaijan is negative mostly with

Turkey and Russia as these two countries are major trade partners of Azerbaijan already 20 years. The most effected product is salt, sulphur, earth and stone, lime and cement (25). The trade total effect and welfare related to 64 products of HS Code two digit products. It is mostly related to the free access to Iranian Market. The figures would be higher because of the possible trade with Armenia, with which there is not trade as it was mentioned several times above.

**Table 7.**

**Revenue (RE) and Trade Total Effect (TTE) and Welfare (W) in 1000 USD of Azerbaijan by HS Code two digit products**

Code	RE	TTE	W
3	-2	1	0
4	-13	20	1
6	-63	54	8
7	-1936	1531	110
8	-725	568	42
9	-63	60	3
10	-1	0	0
11	-50	28	1
15	-7	6	0
17	-225	188	13
19	-146	114	6
20	-87	70	8
21	-5	3	0
22	-11	6	1
23	-3	8	1
24	-17	12	2
25	-8881	16935	1167
26	-2	31	0
27	-50	83	7
28	-130	512	24
29	-11	9	0
32	-80	70	9
34	-84	12	2
35	-10	7	1
38	-20	50	6
39	-559	468	34
40	-327	126	15
42	-2	1	0
44	-3	3	0
46	-1	3	0
48	-77	67	7
51	-2	1	0
53	-3	2	0
54	-848	760	57
55	-5	4	0
56	-67	52	6
57	-507	601	45
59	-1	1	0
60	-2	1	0
61	-7	3	0
62	-1	1	0
63	-62	54	6
64	-24	20	2
68	-384	512	66
69	-749	655	70
70	-541	420	38
72	-483	5004	125
73	-167	162	16
74	-1	0	0
76	-14	7	1
82	-1	1	0
83	-8	7	1
84	-123	113	6
85	-454	400	35
87	-44	28	2
90	-5	5	0
94	-22	14	2
95	-2	1	0
96	-1	1	0

Source: the calculations have been done by the author based on the statistics for Azerbaijan taken from UN COMTRADE

With trade creation effect, the case of Azerbaijan is the same as in the case of Armenia, as it is mainly related with Iran as Annex 2.2 indicates. Azerbaijan will have trade creation effect with Armenia too, especially with the products, which are of comparative advantage for Armenia against Azerbaijani economy.

Trade Diversion Effect is positive only with Iran (presumably with Armenia too), while the most negatively effected countries are Turkey and Russia as the trade total effect is negative mainly with these two major trade partners-countries (see table 8).

**Table 8.**

**Trade Diversion Effect (TDE) in 1000 USD**

Partner	Code	TDE						
Iran	25	2345.0	Iran	20	67.662	Ukraine	69	-73.269
Iran	69	718.83	Iran	8	61.794	Turkey	34	-81.118
Iran	39	586.42	Iran	56	56.973	Turkey	73	-89.913
Iran	85	510.18	Iran	63	53.048	Spain	69	-104.23
Iran	68	395.09	Iran	87	51.424	Turkey	25	-117.81
Iran	40	325.32	Iran	27	48.351	Finland	85	-126.81
Iran	17	296.88	Iran	48	45.255	Russia	7	-135.78
Iran	70	208.81	Russia	19	-42.327	Ukraine	72	-139.47
Iran	7	201.31	Russia	69	-49.031	China	69	-139.67
Iran	72	198.26	China	40	-49.176	Turkey	40	-147.38
Iran	73	194.74	Turkey	56	-52.066	Turkey	70	-163.43
Iran	19	170.47	Italy	69	-53.979	China	85	-188.04
Iran	84	150.52	Germany	39	-58.062	Turkey	69	-204.01
Iran	34	96.677	Sri Lanka	9	-59.32	Turkey	68	-204.68
Iran	32	81.986	Ukraine	19	-64.878	Brazil	17	-283.16
Iran	9	77.148	China	68	-65.874	Turkey	39	-294.52
Iran	6	68.047	Turkey	32	-65.905	Russia	25	-741.01
			Turkey	85	-69.391	Georgia	25	-1424.1

Source: the calculations have been done by the author based on the statistics for Azerbaijan taken from UN COMTRADE

In summary, Azerbaijan based on SMART analyze will have also overall economic positive impacts on its economy.

Impact of possible free trade agreements on the economy of Georgia with Armenia, Azerbaijan, Iran and Turkmenistan. Georgia is among the countries with free trade regime. It is a member of the WTO since 2000. Currently it has three bands duty rates; 0 percent, 5 percent, and 12 percent, but almost 90 percent of goods benefit from a zero rate of duty. The high import duties are executed on the products that are produced in Georgia such as agricultural goods, food products, clothes, construction materials, wood and wood products, plastics, wire and cable, iron, steel, soap, organic surface-active agents, washing preparations. VAT is 18 percent on the imported goods.

At the same time, as Armenia it has no/or limited stores of natural resources without energetic resources. After the presumed regionalization, the country would have negative revenue effect related to 24 products groups, although, trade total effect is positive (for details see table 9) for all these products group.

**Table 9.**

**Revenue (RE) and Trade Total Effects (TTE) and Welfare (W) in 1000 USD of Georgia by HS Code two digit products**

Code	RE	TTE	W	9	-67	53	4
11	-1	1	0	20	-82	96	8
18	-2	2	0	7	-94	138	2
21	-4	3	0	73	-130	172	11
69	-4	1	0	68	-172	290	18
22	-7	4	0	34	-335	230	4
4	-24	13	0	39	-460	378	12
17	-25	18	1	8	-644	479	29
19	-35	27	1	25	-792	676	10
44	-54	155	10				

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

As in the case of Armenia and Azerbaijan, because of Georgian's free trade regime, the trade creation effect will be higher than 1 only with Iran. The most affected covered products are: salt, sulphur, earth and stone, lime and cement (25), edible fruit and nuts; peel of citrus fruits or melons (HS Code 08), and plastics and articles thereof (39) (for details see table 10).



Trade diversion effect is positive only with Iran and presumably with Turkmenistan. As the figures for Turkmenistan for the assessed period missed and this country has a closed trade regime as the case of Iran. The most negatively effected country is Turkey. With the case of Georgia, as the table 20 indicates, Armenia (HS Code 25, 39) and Azerbaijan (HS Code 09, 19, 25, 68,) are negatively effected as well.

**Table 10.**

**Trade Creation Effect (TCE) in 1000 USD of Georgia**

Partner	Code	TCE	World	20	95.661	World	69	0.93
Iran	25	675.64	Iran	20	95.661	World	11	0.591
World	25	675.64	World	9	52.952	Iran	11	0.591
World	8	479.22	Iran	9	52.952	World	71	0.281
Iran	8	479.22	World	19	27.343	Iran	71	0.281
Iran	39	377.84	Iran	19	27.343	Iran	24	0.189
World	39	377.84	World	17	18.456	World	24	0.189
Iran	68	289.65	Iran	17	18.456	World	16	0.162
World	68	289.65	World	4	13.031	Iran	16	0.162
Iran	34	230.07	Iran	4	13.031	Iran	33	0.153
World	34	230.07	Iran	22	3.708	World	33	0.153
World	73	172.25	World	22	3.708	World	85	0.029
Iran	73	172.25	World	21	3.352	Iran	85	0.029
Iran	44	155.14	Iran	21	3.352	World	15	0.001
World	44	155.14	World	18	1.733	Iran	15	0.001
World	7	137.70	Iran	18	1.733			
Iran	7	137.73	Iran	69	0.93			

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

Welfare of Georgia after the possible free trade agreement will be positive related to 23 products of HS Code two digit products (see table 11). For other 74 products it would be 0. Overall, Georgia is less in privileged position than Armenia and Azerbaijan, but still it is gaining from the possible free trade agreement.

Table 11.

## Trade Diversion Effect (TDE) in 1000 USD of Georgia

Partner	Code	TDE	Partner	Code	TDE	Partner	Code	TDE
Iran	85	0.067	Iran	39	543.73	Az	19	-12.358
Turkey	73	-53.824	Turkey	34	-283.97	Iran	19	45.595
China	73	-45.219	Russia	34	-72.75	Iran	18	2.864
Egypt	73	-13.188	Ukraine	34	-13.799	Turkey	17	-14.37
Iran	73	159.85	Bulgaria	34	-13.33	Iran	17	31.796
Iran	71	0.183	Israel	34	-10.989	Iran	16	0.234
Iran	69	5.291	Iran	34	427.91	Iran	15	0.002
Turkey	68	-92.454	Iran	33	0.457	Iran	11	1.343
China	68	-25.749	Turkey	25	-495.12	Sri Lanka	9	-26.791
Italy	68	-21.807	Arm	25	-235.7	Az	9	-23.058
Az	68	-16.34	Ukraine	25	-105.2	Iran	9	75.085
Greece	68	-10.969	Az	25	-23.49	Turkey	8	-117.43
Iran	68	196.88	Croatia	25	-11.06	Netherlands	8	-62.81
Iran	44	18.93	Germany	25	-10.455	Chile	8	-14.98
Turkey	39	-330.91	Iran	25	900.80	Iran	8	226.44
China	39	-52.53	Iran	24	0.067	Turkey	7	-86.164
Ukraine	39	-22.497	Iran	22	8.692	China	7	-21.886
Arm	39	-17.732	Iran	21	5.352	Ukraine	7	-11.283
Germany	39	-16.547	Italy	20	-53.104	Iran	7	124.61
Russia	39	-16.511	Turkey	20	-18.37	Iran	4	32.116
Poland	39	-11.493	Iran	20	94.467			
			Turkey	19	-15.273			

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

Impact of possible free trade agreements on the economy of Iran with Armenia, Azerbaijan, Georgia and Turkmenistan. Iran is considered to be a closed economy. The situation is deteriorated with the fact of isolation from the Western countries, because of the international political situation built not for Iran. Thus having free trade with its northern neighbors will create more benefits than losses. It is not a member of the WTO,

but it is on the process and currently Iran has an observer status. Tariff rates of Iran are 10, 15, 25 and 100 percent. The major rates for different products are: chemical products, ordinary metals, measurement instruments and medical equipment are taxed by 10 percent; food industry, mining raw production, leather industry, paper and wood fabrics, and mechanical machinery are taxed by 15 percent; agricultural raw production and electric machinery are taxed by 25 percent; and automotive vehicles are taxed by 100 percent. Moreover, Iran has passed a law that bans the import of foreign goods and services when similar products or capacities already exist in the country. So, Iran has the most closed economy among 5 possible partner-countries.

**Table 12.**  
**Revenue (RE) and Trade Total Effects (TTE) and Welfare (W) in 1000 USD of Iran by HS Code two digit products**

Code	TTE	W	RE
1	644	16	-852
7	4	4	-24
9	11	3	-19
10	34	1	-50
12	184	9	-90
14	37	1	-79
15	24	0	-35
20	30	12	-112
22	10	6	-16
23	8426	218	-962
25	12	1	-22
26	138	3	-1
27	19014	2038	-4894
28	67	2	-82
29	36	6	-91
31	1	0	0
34	5	0	-6
38	285	25	-104
39	108	20	-88
40	4	0	-5
41	2647	766	-106
44	1802	206	-991
48	365	134	-25
50	57	16	-156
52	835	247	-659
55	6	2	-11
61	0	0	-1
64	1	1	-3
68	10	5	-11
70	34	4	-14
72	1097	125	-1254
73	639	131	-550
74	46	2	-38
76	318	47	-161
82	0	0	-1
83	2822	671	-42
84	2930	298	-648
85	515	78	-630
86	43	2	-8
87	163	91	-135
90	20	7	-72
92	6	5	-17
94	5	2	-13

Source: the calculations have been done by the author based on the statistics for Iran taken from UN COMTRADE

The major competitive products of Iran in the world market are fuels, the other potential products could be minerals, vegetables, plastic and rubbers and chemicals. The last three are directly related with the RCA product of Iran calculated above. Related to these 5 products there would not be any decrease of revenue as results of the free trade agreement except 27, which would have more than -4894.249 revenue effect as table 35 indicates (other 48 products revenue effect was 0) (see table 12).

The calculation through SMART indicated that Trade total effect would have 0 value again for 52 products, which are erased from the table 21. The most impacted 10 products are fuels (27), Residues and waste from the food industries (23), Machinery (84), Raw hides and skins (41), Wood and Articles of wood (44), Iron and steel (72), Cotton (52), Live animals (01) and Articles of iron or steel (73). Based on that there would be positive welfare for 45 products. As Annex 2.3 indicates trade creation effect is almost positive at least with majority of products with its northern neighboring countries. As a result, it is positive for these products for the world as well.

Trade diversion effect for Iran as a result of free trade agreements with its northern neighbor countries, is negative for the third countries, being positive with Armenia, Azerbaijan, Georgia and Turkmenistan in different degree for different. As table 13 indicates the most influenced product continues to be fuel. The most influenced country is UAE, Turkey and Turkmenistan, the first two negatively, while the third one positively.

Thus, overall, the economy of Iran is in better-off position. Moreover, Iran is in better-off position politically as well, about which from economic prospects would be stated in the next chapter.

Impact of possible free trade agreements on the economy of Turkmenistan with Armenia, Azerbaijan, Georgia and Iran. One of the major distinguished features for Turkmenistan within this regionalization is opening the borders with Armenia, Azerbaijan, Georgia and Iran for more consumer's products for its citizens. For Iran it is not so strong as this country has more or less developed productions in different fields of economic activities, while for the case of Turkmenistan the fields of economic activities are strictly limited.

Table 13.

## Trade Diversion Effect (TDE) in 1000 USD of Iran

Partner	Code	TDE	UAE	85	-100.89	Geo	44	71.661
Singapore	27	-1457.4	Netherlands	85	-100.20	Az	20	73.676
UAE	27	-1061.9	China	85	-100.17	Tu	28	76.571
Russia	44	-720.2	UAE	73	-98.388	Geo	29	86.829
UAE	72	-632.46	Pakistan	52	-95.21	Tu	38	88.178
Kazakhstan	23	-443.77	Italy	84	-86.616	Arm	72	92.062
Turkey	27	-318.12	Korea	72	-73.155	Tu	84	104.63
Free Zones	44	-288.73	Malaysia	27	-72.05	Az	84	134.92
Korea	27	-287.04	Germany	84	-70.43	Az	23	154.79
Taiwan, China	27	-223.37	Turkey	85	-66.693	Arm	76	154.82
Germany	27	-208.25	Tajikistan	52	-61.729	Arm	73	169.93
India	27	-193.36	Turkey	84	-57.986	Geo	84	184.14
Turkey	72	-190.93	Turkey	41	-57.66	Arm	85	229.23
China	73	-182.99	Russia	27	-57.321	Tu	52	229.67
UAE	84	-175.63	Spain	27	-56.806	Arm	84	285.1
Korea	85	-153.31	France	27	-50.697	Az	73	304.56
Free Zones	72	-150.6	Geo	1	51.288	Tu	23	344.82
Iraq	27	-131.86	Arm	90	54.151	Geo	85	397.68
China	84	-126.93	Geo	73	56.473	Geo	72	436.79
Sweden	27	-116.52	Az	41	57.66	Az	72	796.38
Iraq	76	-109.95	Az	10	59.823	Aze	44	1019.351
Ukraine	72	-109.13	Tu	14	66.269	Tu	27	4488.22 5

Source: the calculations have been done by the author based on the statistics for Iran taken from UN COMTRADE

Although Turkmenistan does not apply tariffs per se on imported goods, currently in practice the government levies customs duties and higher excise taxes on imports. Currently, There are customs duties ranging from 5 percent to 100 percent for 49 types of merchandise. Moreover, the importers also pay small administrative fees to the Customs Service. Turkmenistan is not a member of the WTO, even more it is not an observer still to

this organization. The exports/imports procedures take long time and overburdened. So, Turkmenistan is the next closed economy after Iran within this possible free trade agreement.

For 26 products of HS Code there would be registered negative effects, although as a trade total effect there would be registered positive trends. The most possible vulnerable products would be Tobacco and manufactured tobacco substitutes (24) and Edible fruit and nuts; peel of citrus fruits or melons (8) (for details see table 14). For the same products there would be positive welfare, for other welfare is equal to 0.

**Table 14.**

**Revenue Effect (TE), Trade Total Effect (TTE) and Welfare (W) in 1000 USD of Turkmenistan by HS Code two digit products**

Code	RE	W	TTE
4	-166.225	5.725	92.606
7	-53.963	8.212	60.848
8	-3456.914	751.614	1819.589
15	-201.702	11.494	183.566
16	-1.393	0.215	1.031
17	-199.376	13.803	160.522
19	-323.593	24.09	43.855
20	-180.004	15.072	73.797
21	-326.801	40.799	126.082
22	-159.341	29.074	71.905
24	-4253.951	1769.157	1440.965
25	-58.164	8.197	10.296
27	-64.817	3.662	24.365
28	-223.465	22.081	198.449
34	-89.252	20.503	48.089
56	-92.863	7.873	77.453
57	-131.318	66.825	182.573
61	-9.681	0.71	3.505
62	-45.384	12.714	40.328
63	-126.317	10.219	75.729
64	-9.831	1.449	5.03
68	-323.77	23.208	300.36
71	-184.002	35.895	334.774
84	-0.901	0.1	1
85	-288.311	23.525	222.308
87	-167.316	20.775	204.412

Source: the calculations have been done by the author based on the statistics for Turkmenistan taken from UN COMTRADE

As Annex 2.4 indicates Turkmenistan would be in better of position related to the trade creation effect with all other 4 countries – in different degrees depending on the products, although with Iran it is wider as both countries has closed free trade regime.

Although the table 15 below indicates general picture of this effect. It is positive with Armenia, Azerbaijan, Georgia and Iran. The most negatively effected countries are Turkey, Russian and Uzbekistan.

The next most benefiting country from the suggested free trade agreement is Turkmenistan. It would be better-off from trade as well as from the diversification of consumer products within the country.

**Table 15.**

**Trade Diversion Effect (TDE) in 1000 USD Of Turkmenistan**

Partner	Co de	TDE	Partner	Co de	TDE	Partner	Co de	TDE
Geo	24	1087.374	Arm	22	40.292	Turkey	20	-42.369
Iran	68	241.088	Az	28	31.239	Turkey	57	-48.096
Iran	85	239.178	Iran	62	30.422	Turkey	34	-54.712
Iran	24	185.93	Iran	25	25.272	USA	71	-57.748
Iran	17	157.905	Iran	22	22.379	Turkey	15	-59.603
Iran	21	123.778	Hungary	20	-20.463	Russia	21	-77.492
Arm	71	119.731	Uzbekistan	22	-22.513	Ukraine	17	-84.668
Iran	19	110.026	Ukraine	24	-25.399	Turkey	19	-101.172
Iran	87	95.856	Turkey	22	-26.854	Bulgaria	24	-105.274
Iran	15	78.227	Turkey	85	-33.077	Turkey	68	-150.317
Iran	57	68.228	Turkey	21	-35.404	UAE	85	-221.775
Iran	20	67.137	Italy	68	-37.848	Uzbekistan	24	-272.782
Iran	34	59.292	Russia	87	-38.054	UAE	24	-764.077
Arm	85	43.554	Russia	17	-38.417			
Iran	63	43.135	Turkey	24	-39.956			
			Uzbekistan	71	-42.129			

Source: the calculations have been done by the author based on the statistics for Turkmenistan taken from UN COMTRADE

In summary, the most increased welfare would be in Azerbaijan by the coverage of product range – almost 64 HS Code two digit products, followed by Iran (45 products), Armenia (41 products), Turkmenistan (26 products) and at the end – Georgia. All countries would have positive trade creation and diversion as a result of possible regionalization

among themselves: Armenia and Azerbaijan from Iran and among themselves, Georgia from Iran, Iran and Turkmenistan from other 4 countries appropriately.

After above assessment the followings could be suggested as an innovation:

- Iran has all precondition to turn into the 9<sup>th</sup> power of the World economy, for which increasing its presence in the region is more than urgent. Currently, Iran is an energy superpower;
- The conflict between Armenian and Azerbaijan could be solved bringing them into the umbrella of the same union starting from the trade, then economic and only in the last stage political cooperation. The best example of it could be increase of economic and trade partner role of Iran in these countries removing Turkey and Russia from this position;
- Iran has non-friendly relation with several countries in the Middle East including Iraq, Saudi Arabia, Israel and territorial claim with UAE. This is another leverage to make the Government of Iran to be strongly interested in increasing its leadership position among these 4 countries;
- Iran – Armenia: Iran could be turned the best alternative for Armenia to be energetically and economically independent from Russia and v.s, although it dose not mean that Iran should not consider the fact that Russia is its main partner in the world political economy. Moreover, despite religion differences, both countries are strong political and economic allies. Trends in all spheres of mutual cooperation are positive.
- Iran – Azerbaijan: Iran has opportunities to “divide” Turkey from Azerbaijan as it has boarder with it, which Turkey has not. Currently, political relations between Iran and Azerbaijan became more friendly, although several years ago it was cold and Azerbaijan had territorial claim toward Iran. At the same time, Azerbaijan has strong relation with Israel, which makes Iran-Azerbaijan relation non-friendly. As in case of Armenia, the chances of Iran to establish its strong political presence in this country without any tangible suggestions is almost impossible, while economic ways are more or less open as Azerbaijan also needs in strong economic partner. Moreover,



Azerbaijan, Iran and Turkmenistan has a big issue related to the use of Caspian Sea resources including Kazakhstan and Russia too.

- Iran – Georgia: despite the cases of Armenia and Azerbaijan, Georgia is more easy to start economically as energetically this country is much dependent from Azerbaijan, which is not a big rival for Iran in the region.
- Iran – Turkmenistan: Relation between these two countries could not be considered warm, although they have same religion. The major consideration of Iran with this country should be on mutual beneficial use of resources for the increase of welfare of their citizens. Moreover, Turkmenistan has much social, traffic problems and better to be considered to be united into the proposed integration model on the last stage, when it would make several changes in its social, political and legislation aspects.
- Each country has RCA in the sectors which could be supplemented each other leading to the creation of clusters to turn into the major producers of range of products in the world market and compete with China, Turkey, the EU, USA and Russia.
- Impact of possible free trade agreements on the economies of all countries are more or less positive. The most increased welfare would be in Azerbaijan followed by Iran, Armenia, Turkmenistan and Georgia. All countries would have positive trade creation and diversion as a result of possible regionalization among themselves: Armenia and Azerbaijan from Iran and among themselves, Georgia from Iran, Iran and Turkmenistan from other 4 countries appropriately. This positive could be increased within 5 to 10 years in case of strong political and economic willingness of all participant countries as all of them have all vital resources required for economic high growth rate in the world market.

The most difficult part of realization of these economic positive outcomes are political willingness of the official of each member states.

### **CHAPTER 3. FUTURE OF ECONOMIC REGIONALIZATION OF IRAN AND ITS NORTHERN NEIGHBORING COUNTRIES**

Taking into consideration the huge economic potential of Iran in the World Economy based on abandoned natural and human resources, there is strong confidence among many economists and politicians that Iran could be turned into the 5th pillar of the world economy after USA, Russia, EU and China in case of several improvements in the social-economic policies of the country especially after weakening or lifting sanctions against Iran by the Western countries. Iran could be considered as an alternative powerful partner for its neighboring countries. Iran has to be “ready” to take a leading role in the region as it would be easier for this country rather than for Turkey, although Turkey is taking all necessary actions to take this role. Even in case of Russian presence in the region, Iran with well-developed international economic policies could take a leading role in economies of its neighboring countries leaving the political interests in the region to Russia in the short-run.

Iran strong presence in the Caucasus since ancient years is lasted until the early XIX century leaving the room was given for the Russian Empire. During the Soviet period it even weakened mediating through Kremlin. After the collapse of the Soviet Empire, the opportunities of becoming economic and political leader in the region re-established for the Government of Iran.

There is another important fact related to the possible interests of Iran in the region – the Caucasus is the crossroads between East and West and vs. This is historically well-known fact as the Silk Road was going through this territory. The situation is becoming even severe with the fact of oil and gas existence in the region as additional forces of international arena becoming involving in the region’s interests such as the USA, NATO and EU besides Russia and Turkey.

Last ten years Iran worked on the idea of creating the regional security system between Azerbaijan, Armenia, Georgia from one side and Russia, Turkey, Iran from the other side. This approach was not welcomed by Armenia, Azerbaijan and Georgia, while

taking into consideration the backsides of these three countries, it could be concluded that it was not welcomed by the Russia, Turkey and the USA. This idea was failed as the Iranian diplomats did not take into consideration the regional interests of Russia, Turkey and the USA before developing their regional security system.

Thus, bellow, the possible mutual economically beneficial cases would be developed for Iran and its northern neighboring countries based on assessments and analysis made above. The developed cases/models will direct to develop the possible model of integration in the region.

### **3.1 possible models of economic integration of Iran in the region**

Based on assessments above, it could be stated that the region continues to remain of great economic and political interests of Turkey, Russia, USA and Iran being too sensitive for external influence with high possibilities of turning into armed conflict. The risk of the war in the region is too high about which indicates also foreign assessments too. For example Turkey has 4 grade for war risk, Iran has 7 grade, Armenia has 5 grade, Turkmenistan has 4 grade, Azerbaijan has 4 grade, Georgia has 5 grade and Russia has grade 4 according to the Belgium risk assessing company: Delcredere | Ducroire<sup>90</sup>.

Security dimension connected to development of the region's energy potential should not be underestimated. As it was already mentioned, the long-overdue resolution of Nagorno-Karabakh, Abkhazia and South Ossetia and unresolved Chechen conflict made the region unfavorable to foreign investment plans posing security risks to all players. At the same time, these conflicts leave small room for the hopes of regional economic development, prosperity and integration, if no country will take a role of leader in the region as well as in the world arena on behalf of the region to bring peace order in the region. Iran with its resources can take this role, if well developed long term strategy will be implemented. At the same time, Iran is the only country that is interested in the stability of political systems in the region to become long-term partners because of (first) - its economic (for oil and gas transit) and (second) – it is in its political interests (for way out of

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<sup>90</sup> [www.delcrederecroire.be/en/country-risks/](http://www.delcrederecroire.be/en/country-risks/)

current and possible isolation), almost with all neighbor countries it has real conflicts as was presented in the 2.1 paragraph.

At the same time assessments of current economic integration theories and cases of other countries integration states that non-of-them could be effective for our case as too many contradicting realities existed in the region among which are:

1. Strong interests of major powers in the region, for whom the region plays buffer zones;
2. Although, economically all countries are more or less on the same level, their economic, foreign and political interests are contradicting;
3. Rivalry from the side of Turkey with Iran to play a leading role in the region, although Russia is present;
4. Presence of different religions in the region;
5. Existence of different state structures and regulations based on strong cultural backgrounds of each countries;
6. Existence of fighting countries; and the last but not the least
7. Absence of common interests bringing all countries under the one umbrella.

Thus, it could be stated that the classical model of integration and cooperation between Iran and its northern neighboring countries could not be implemented and based on the outcomes of above assessment a new direction should be developed for our case.

Currently there are two possible cases for the economic integration of Iran with its neighboring countries:

- a. Making tighter economic cooperation with each neighbor countries individually, the possibility of which is more realistic and high;
- b. Brining all neighbor countries into one umbrella – creation of customs union among them, which is non-realistic in the nearest future because of above mentioned factors.

For both cases, the major goal of the Government of Iran is to clarify its role in the region and thus international economy. There are 4 possible roles for Iran in the region and logically in the international economy, which are:

- First, it is to turn into one of major political players in the world arena (a case of Russia after the collapse of the USSR) – it foresees that Iran had to continue development of its arm forces led by the nuclear arm, which was launched in the 1950s firstly with strong assistance of the USA and Western Europe then after 1979 Iranian revolution with the USSR followed by Russia after collapse of the Soviet Union. Although Iran declares that its nuclear interests is only on peaceful purposes, but in case of turning it into arm purposes, Iran could become the only country in the region with the nuclear weapon, which would be against of interests of Russia, Turkey, USA and EU. The outcomes from SMART analysis almost is impossible to be implemented for this case, as it would be political enforcement and not free economic cooperation between countries.

For this goal, the major actions of Iran are to continue:

- investments in the arm and nuclear weapons sector of the economy;
- increasing arm forces as well as expenditure in the arm forces;
- “forcing” by arms all neighbor countries to cooperate with Iran in unilateral beneficial conditions;
- lining with possible partners in the region as well as in the world which are against of current political leaders in the world arena.

What could be the possible outcomes of this goal and forward actions? First of all, the rivalry with the USA and the Western Europe would be increased, while Russia would rather be turned into new “enemy” not only in the region, but also in the world arena. Trade and other economic relations would be possible only with the third countries and it would be continued to be very protected as today. The most probable outcomes would be very slow growth of the economy and life standards of Iran as well as closed economy. This strategy will last till medium-run as in most cases, to be a political leader means to have strong economy. Excellent example is the North Korea. Thus in the long-run, the weak economy will force to weaken the army sector too turning the country into underdeveloped dictatorship with all possible regional problems as a consequence. Currently, to be a political leader in the long run, the strong economy is a “must” precondition. Overall this case’s effects could be summarized into following stages:

**Possible major effects/outcomes from Political Leader are:**

- Short Run effects: successful with stress of fear because of nuclear weapons. The neighbor countries will either unite to Iran or find another third powerful countries to stand against the possible forced army power of Iran;
- Medium Run effect: stagnating with weakening of role of nuclear weapons in the world economy. The neighboring countries will seek for the new partners although out of the region (possible Turkey, USA and Russia). The best example of this case is USSR and Eastern European countries before 1990s.
- Long Run Effects: Loosing the position in the region as well as in the world because of underdeveloped economy. The neighbor countries will cooperate economically and politically with other countries (possible with Turkey and Russia). Again, the best example is the case of USSR and Eastern European countries, the resonance of which still continues as Ukraine, Belarus, etc. turned or starting to turn to the economic cooperation with the EU as economically Russia is not developing as fast as by arm forces.

- *Second, it is to turn into the country with strong economy in the world economy (a case of the Chine in the world economy);*

Iran had to turn into country with strong economy. The outcomes of SMART model analysis could be implemented for this case as discussed in 2.3 paragraph with all its positive impacts such as increase of welfare, trade creation and diversion of all cooperating countries as a result of possible regionalization among each country. This case foresees the following major actions:

- opening its economy for the foreign investments in all sectors of economy with stress on the competitive production sectors instead of exploiting natural resources of the country;
- starting free economic cooperation with its northern neighboring countries based on the possible comparative advantages of each countries;
- moving from centrally planned economy into free economy;

- using profits from gas and oil production for the development of transportation infrastructure among its northern neighboring countries;
- moving major part of the state budget's expenditure from security sector into the infrastructure development sector;
- turning from regional way of management into multi-regional one;
- investing in the high-sector development in the country as well as in the region;
- implementing internationally excepting quality infrastructure;
- freeing the financial sector, etc.

Taking into consideration the mutual political interests of Iran and Armenia, it would be much effective to start actions from Armenia. When Armenia would be turned into close trade partner of Iran with well-developed transportation infrastructure with Iran, Turkey would consider to do the same in the region with Georgia and Azerbaijan, but the economy of Turkey has no strong potential for development as, Iran because of the lack of energetic resources in Turkey. Armenia could be “a pilot project” for Iran in the region to better understand its pros and cons to turn into economic leader in the region. If it would work, then Iran should slowly to move to Turkmenistan then Georgia and in the end to Azerbaijan, although it dose not mean that starting with Armenia means leaving all others aside. Thus, if Iran would be conducted targeted and continuous policy, in very short time could remove Turkey's presence in the region as the development process is the most attractive factor of promoting other countries to be under your umbrella. All actions of Iran had to be transparent with stress of weakening security expenditure, which dose not mean weakening security system of the country as there are several strong pre-conditions that neighbor developing countries could “think” about the war with Iran to gain the mining of the latter and/or lands (see paragraph 2.1).

The strong economy of Iran will have its positive impacts on Russian relations as well, because the region would be divided not by political powers, but by economic impacts, while developed economy would increase mutual dependence of the businessmen and producers in the region, which would have its positive impacts on the political relations as well in the region. Economic unification will bring economically to be closer Iran and

Russia too, while now because of political conditions in the international arena they are politically close. The start point of regional integration, as it was mentioned had to be RCA of each countries as it would not violate the “economic internal interests” of each countries at this stage. For this purpose, a Matrix of RCAs of each country are presented bellow(see Matrix 1):

**Matrix 1.**

**Matrix of RCA of region for cooperation**

Product	Arm –RCA	Az -RCA	Geo -RCA	Iran – RCA	Turk –RCA
01-05_Animal	1.6		1.23		
06-15_Vegetable			3.36		
16-24_FoodProd	6.41		4.45		
25-26_Minerals	21.43		10.81		
27-27_Fuels		8.89		4.42	8.64
28-38_Chemicals			1.58		
50-63_TextCloth	1.21				2.63
68-71_StoneGlas	3				
72-83_Metals	2.33		2		
86-89_Transport					

More the economic of country is open, it has RCAs in wider range of products. Armenia and Georgia are considered to have an open economy, thus they have RCA in 7 groups of products. While other three countries have only in two or one products. The Matrix 1 is a good direction for the professionals working on the regional integration in this area, as at current stage, Georgia could be an excellent (cost-effective) gate to export of products “made in the region” as well as oil and gas into the Europe. Other natural resources had to be used within the region to boost domestic productions making the final products cheaper compared with other producers in the international market, because of lower transportation costs. For example:

Clothing sector: Turkmenistan and Iran have more or less established production of textiles, while Armenia and Georgia have established clothing sector. Armenia, Azerbaijan



and Iran have developed sector of carpet production. The textile produced in the regional two other countries to be moved into Armenia and Georgia to be turned into finished products and to be exported to Russian and EU markets. Free trade regime among these 4 regional countries will make the final product costly competitive in the targeted markets compared to Turkish and Chinese products. Carpet sector is more complicated because of smaller consumption market, although Armenia, Azerbaijan and Iran have been specialized in different types of carpet production. The approach is the same – to use domestically produced fabrics for the production of carpet to be exported all over the world.

Fruit/Vegetable and meat processing sector: This sector could be mutually divided between Armenia, Azerbaijan, Georgia and Iran based on specific climatic conditions of each country such as apricot is mainly growing in Armenia, lemon only in Georgia, etc. The only problem is wheat, which had to be imported as the region is not self-sufficient by this strategic product.

Services sector: At this stage, taking into consideration the accumulated huge foreign currency of Iran, this country had to turn into financial center in the region, Armenia had to turn into silicon valley because of its current trends of IT sector development, Georgia had to concentrate into the transportation sector as currently this country acts as a gateway in the region as well as Turkmenistan, which is the gateway to Asian region, while all countries had to concentrate on tourism sector development. The sector specialization dose not exclude others to be specialized in other and/or same sectors in the medium and long run. This is just a stand-point for fast and effective integration in the region to turn into dictating power in the world economy.

**Major effects/outcomes from Economic Leader of this case are:**

- Short Run effects: slow growth of the economy with development and implementation of new rules and regulations. Iran will slowly tighten its economic relations with neighboring countries;

- Medium Run effect: high economic growth followed with high rate of investments, foreign trade within the region as well as outside of it. Establishing processing sector for gas and oil development, the products of which would be firstly sold in the region.

- Long Run Effects: tangible economic impacts in the region and increasing it in the world arena. The economic cooperation between neighboring countries had to be based on the mutual beneficial conditions with stress of comparative advantages of each countries, which will make them interdependent weakening political presence of other countries in the region. The strong economic presence of Iran based on mutual beneficial conditions stressing the comparative advantages of each countries in the region will autonomically strengthen the political presence too.

This case will require more time although the results would be much effective with long run prospective. The excellent example of it is Germany with the EU (excluding the fact of last year's migration).

- *Third, it is to turn into one of the major political player with strong economy in **the** world arena (a case of the USA within NAFTA);*

It is the most difficult and proactive one demanding by the Government of Iran too many energy mixing diplomatic, political and economic ones, although the most preferable one. The keystones of it are: the development of nuclear arms and security sectors and strengthening the economy simultaneously.

This strategy requires all actions presented in the in the economic leadership case followed with increasing of the expenditure in the security sector, while stressing the high tech in it. This strategy is the most frightening one too for the other superpowers in the region. Iran has all preconditions for it. The stress had to be on development of stronger economy based on comparative advantages in the neighboring countries, which will protect the economic interests of each country in the region. If the business would be overdeveloped: all political issues would be solved much easily they it could be foreseen within underdeveloped environment.

### **Major effects/outcomes from Economic and Political Leader**

- Short-run effects: slow growth of the economy with development and implementation of new rules and regulations. Iran will be slowly tighten its economic relations with neighboring countries. The expenditure in the security and army sector will be on the same level;

- Medium Run effect: high economic growth followed with high rate of investments, foreign trade within the region as well as outside of it. Establishing processing sector for gas and oil development, the products of which would be firstly sold in the region. The expenditure in the security and army sector will be increased with stressing the high tech use in it;

- Long Run Effects: tangible economic impacts in the region and increasing it in the world arena. The economic cooperation between neighboring countries had to be based on the mutual beneficial conditions with stress of comparative advantages of each countries, which will make them interdependent weakening political presence of other countries in the region. The strong economic presence of Iran based on mutual beneficial conditions stressing the comparative advantages of each countries in the region will autonomically strengthen the political presence too. It would be followed by the strong and developed security and army sectors turning Iran into economic and political superpower not only in the region, but also in the world.

The excellent example of it is the USA, although it took almost several centuries to come to the excellent model of economic and political integration.

*- Fourth, it is to leave the situation to be developed under its own way acting depending on the requirements of the situations*

It proposes passive actions of the Government of Iran with frequent changes of development strategy upon request of the world political and economic changes. This strategy dose not require much energy and everyone will stay on its place as it is now with rivalry between Turkey, Russia, USA and EU for the region. The economy of Iran will continue strongly to be dependent on the exploitation of natural resources.

**Major effects/outcomes from this kind of policy are:**

- Short Run effects: comparatively stability leaving a big room for the third countries to stress their interests in the region. The neighbor countries will look for the third strong countries in the region and rivalry will continue with increasing trends. The economic ties with Iran and neighboring countries will weaken from year to year framing only within energetic resources.

- Medium Run effect: stagnating with loosing role of Iran in the region as well as in the world economy.

- Long Run Effects: Completely loosing the position in the region as well as in the world because of underdeveloped economy. The neighbor countries will cooperate economically and politically with other countries (possible with Turkey and Russia). Iran would turn into natural resources exploiting country under the dictation of other superpowers in the world.

Overall it could be once more stated that the region for several centuries continues to be in interest of Turkey, Russia, Iran, later on the UK and not the USA and in case of any political “serious” mistake this interest could turn into the multilateral armed conflicts. To understand the proposed actions of the Government of Iran, it is important to assess it through the suggested possible goals of Iran in the region.

In summary, Iran has all preconditions to become an economic and political leader in the region, where all neighboring countries are not strong enough to go ahead alones inclining to different superpowers outside of region. Thus, Iran had to be pro-active economically and turn into market-based system to take leadership in the region leaving outside Turkey, Russia and USA. The proactive strategy should not stress to overcome the political presence of these three countries, but rather to overcome the economic presence, which would make all regional countries interdependent, so stronger, which in its turn will lead to increase of power of Iran in the region as well as in the world.

### **3.2 Possible economic cooperation model for Iran and its northern neighboring countries**

As it was already mentioned the integration of Iran with its Northern Neighboring countries could not go in a classical way based on several strong objective and subjective political and economic conditions existing in the region, among which the strongest is that too many economic and political powers are interested in the region. Taking into consideration definition used within the dissertation - “the Economic integration is an economic procedure between different states becoming closer through the reduction or elimination of tariff and non-tariff restrictions on movements of goods, services, factors of

production as well as the cooperation in the fields of monetary and fiscal policies” (page 9, 1<sup>st</sup> paragraph), as well as assessments made above the proposed model would be developed based on economic leadership of Iran in the region. Thus, among assessed possible goals of Iran in the region, the stressed one is to become an economic leader in the region. As calculation made above presented, the free trade among Iran and its northern neighbor countries will lead to the welfare increase as were sure the Neoclassical school representatives (Viner’s findings), which had to be based on Riccardo’s comparative advantage theory. The economic leadership case was developed based on Riccardo’s theory – on the calculated RCA of each country. **Although it must be stress once more that the RCA presents the current privileges of each countries – thus it is start point of mutual beneficial cooperation.** At the same time the RCA is not calculated for the sectors of services like tourism, IT, financial and banking, etc, because of lack of reliable statistics. But taking into consideration the trends of world tourism turnover it could be stated that this region is one of the interested one, thus it could be stated that all countries have the RCA in tourism with their specific culture and architecture. Leaving the internal tourism among the suggested integration member-states, the external tourism would be in great demand too in case of suggestion of tour packaging involving all countries covering Christian and Muslims society in turns. As it was also mentioned, at current stage Armenia has the RCA in IT to be suggested within the suggested integration market as well as for export into the third countries, while Iran has the RCA in the financial and banking taking into consideration the Iranian frozen foreign currencies in the Western Countries.

Moreover, taking into consideration the trends in the Global economy as well as experiences of the EU, NAFTA and EAEU, it is strongly advisable to omit several stages of integration proposed by Balassa, among which is **Preferential trading area or agreement.** This proposed newly created integration had to start from free trade agreement after careful examination of other unions’ experiences to omit all possible failures followed by other stages like the common market and economic union. The last two stages of integration suggested by Balassa (economic and monetary union; and

Complete economic integration) should be left for the future as the current experiences of these stages have not complete version and have high risks of failure within today's global international financial system. The best example of which is the EU with its current economic, social and political obstacles. At the same time, this region is more conflicting one with Armenia and Azerbaijan having no diplomatic relations at all.

As it was mentioned above, there are two possible ways of integration for Iran: 1. Creating a union with all northern-border-neighbour countries, which is at this stage almost impossible, because of the conflict between Armenia and Azerbaijan; and 2. To work on economic integration with its northern-neighbor-countries separately, case-by case, which is more realistic at this stage.

But for the first, the Government of Iran had to clarify its role in the region as well as in the world economy. As assessments in the above paragraph states, the most advisable goal is to take economic leader role in the region, which dose not violate any political interest of other countries in the region at this stage. After which, the Government of Iran has "hard-work" to be done. This country had to be pro-active in the region with solid investments in the regional infrastructure. In Other words, Iran had to make the neighbor countries to be economically dependent from its economy. For this purpose, Iran had to work on creation of regional business clusters operating effectively in the world market covering sectors like pharmaceuticals, chemicals, high-tech, textile and clothing, foodstuff and electronics, for which the development potential exists in the face of resources in the region as well as RCA.

To start economic integration simultaneously with all countries it is almost hard tasks. Even the EU started with several countries then slowly moved into 28 member-countries. Although, the last decades the enlargement of the EU was too fast by political reasons, which was wrong as it has created several strong challenges for the organization. Thus, it is strongly advisable for the Government of Iran to start from one country and then move with improving the actions into other countries. This dose not mean that starting with the one, the normal relationship with others had to be stopped (see Scheme 1).

Taking into consideration that Armenia is not a competitor country for Iran in the region in all sense (by quantity and by petroleum and gasoline) and could be the best alternative for “Made in Iran” products exports to Russia and the EU, it is strongly advisable to start the integration pilot project with Armenia and slowly move to other northern neighbor countries. What had to be done? As the goal of Iran to turn into the economic leader in the region, the following actions are must for the Government of Iran:

- assessment of experiences of other Unions like the EU, NAFTA and USSR to figure out the major obstacles for efficient economic integration and escape from meeting the same problems met by these Unions;
- Assess the RCA of each countries within sub-sectors levels;
- Free the Economy of Iran for the trade especially with the Northern Neighbor countries;
- Free the Economic for the FDIs;
- Development and signing Free trade agreement with the targeted countries (at first stage with Armenia);
- Assist in FDIs attraction process of proposed countries' economy (starting from Armenia) based on each countries' sub-sectors RCA within possible liabilities of Iran;
- Decreasing tariff rates for the third countries, but making strict the quality infrastructure requirements;
- Use profits from gas and oil production for the development of transportation infrastructure among its northern neighboring countries;
- Move major part of expenditure from security sector into the production sector;
- Slowly turn from regional way of management into multi-regional one;
- Free the financial sector, etc.

If Iran would be conducted targeted and continuous policy, in very short time could remove Turkey's presence in the region as the development process is the most attractive factor of promoting other countries to be under your umbrella. All actions of Iran had to be

transparent with stress of weakening security expenditure, which does not mean weakening security system of the country as there are several strong pre-conditions that neighboring developing countries could “think” about the war with Iran to gain the mining of the latter and/or lands.

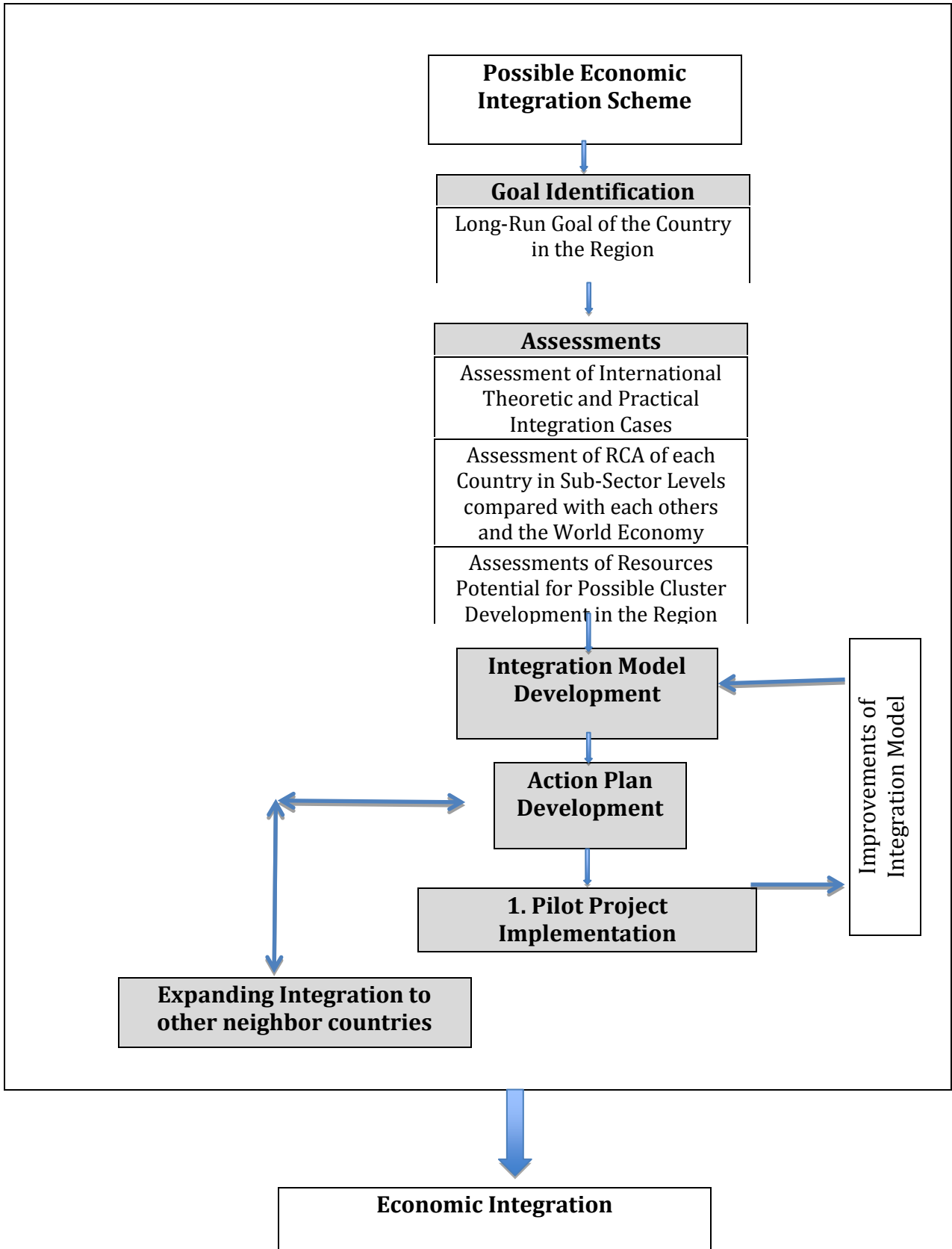
Taking into consideration the mutual political interests of Iran and Armenia, it would be much effective to start pilot actions from Armenia as already economic relations of Armenia with Iran are comparably stable without almost the same political interests. At the same time with increase of the economic presents in Armenia, the Government of Iran can much easily spread on the other Northern neighbor countries as in the other case, a strong political presence of Russia in Armenia will never allow the increase of the presence of Iran in the region. While in case of decrease of the economic presence of Russia in Armenia, automatically will increase presence of the USA in the country and already in the region overall.

Although RCA of Armenia for Iran are 01 – 05 animals and 27 fuels products groups of HS Code, but if it would be taken into consideration that RCA is based on the current status of exports and imports, while Iranian market is the closed one than it could be stated that the production sector of Armenia has more expanding spectrum of RCA like agro-products, clothing and software programming.

The strong economy of Iran will have its positive impacts on Russian relations as well, because the region would be divided not by political powers, but by economic impacts, while developed economy would increase mutual dependence of the businessmen and producers in the region, which would have its positive impacts on the political relations as well in the region. The major steps of Economic integration of Armenia and Iran is presented in the Scheme 1.

The start point of regional integration, as it was mentioned had to be RCA of each countries – Armenia: Food processing and Software development, Azerbaijan: fuels, Georgia – Food processing and vegetables, Iran: Fuels and Turkmenistan: fuels and textile. Minerals and Metals of the Union had to be assessed in the way to be used for the industry development within each member-states as close geographical location will make it cheaper to trade within the proposed organization.





**Scheme 1. Possible Suggested Integration Model for Iran and its northern Neighbors**

There are surely specific sub-sectors too to be developed. For example: carpet production in Iran and Armenia based on historical as well existing capacities within these countries, clothing production in Armenia and Georgia based on current trends of these countries and existing exports to the EU and Russia, shoes production in Armenia based on historical and current capacities as well as export trends to the CIS market, etc., which requires micro and mezzo assessments, while this topic is more related to macro assessment.

**Economic Integration Case by Case: Iran – Armenia Economic Integration.** This case is the easiest one compared with other northern-neighbor countries of Iran, taking into consideration the above assessed factors including

- no political disagreement;
- Armenia is a small economy to be considered economically competitor for Iran;
- Armenia has RCA in the sectors, which are not coincide with the RCAs of Iran;
- Currently Armenia is considered as a transiting country for Iran into Western Countries and Russia, etc.

Thus for the suggested integration, Armenian case could be considered as a pilot project for Iran, after which the economic integration could be continued with other 3 countries.

Taking into consideration the current economic potential of Armenia and demand of Iranian market, at first stage of economic integration Armenia could suggest to Iran:

- foodstuff;
- clothing made on Iranian textile;
- shoes;
- software products;
- tourism services;
- minerals;
- window to the EAEU markets for those Iranian products that could be produced in Armenia and exported to the EAEU markets, especially taking into consideration the fact that after lifting Iranian sanction by the Western countries, frozen dollar

accounts of Iran are now reachable and Iranian business will need in fields of investments not only in Iran but also outside of it.

What can be suggested by Iran to Armenian economy for the first stage of economic integration?

- energy alternative through joint projects;
- agro products through joint ventures and establishment of representatives;
- textiles through joint ventures and establishment of representatives;
- Iranian Investments generation into Armenian economy;
- Tourism services through creation tour packages especially for third countries' tourists as different culture could be presented within one tour.

The mentioned sectors are only for the first stage of economic integration. Before going to deeper integration, Iran needs to free its economy for the products "made in Armenia" – this is the only way of making economically and mutually beneficial interdependent these two countries. Free trade had to be started in the sectors which will create clusters with it among Armenia and Iran. The possible fields of cluster creation based on RCA of each countries are:

- Textile "Made in Iran" could be imported in Armenia and turned into finished products "Made in Armenia" and exported to Iran, the EU under GSP+ regime and EAEU;

- Armenian pharmaceuticals companies (2 of 17 operating companies have GMP standards, which allows to exports to the EU and USA) could cooperate with the Iranian pharmaceutical companies for joint products to be realized in Armenia, Iran, EAEU countries, Georgia and Ukraine (countries where already specific Armenian pharmaceuticals are exported);

- beauty products made on natural ingredients of both countries could be developed. This sector is newly developing one in Armenia, while in Iran there are several companies operating in that. The mutually created products could be again exported in the above-mentioned markets (to EU and USA it would be much difficult as there are strong quality requirements for them).

- high tech sectors – Armenia has well developed software development sector, while Iran is on its start of development high tech sectors in the economy. Cooperation in this field is mutually beneficial.

- production of herbs and spices, as both countries have climatic conditions to growth almost naturally these products and exports all over the world.

- tourism sector suggesting tour packages for Asian, European and American tourists into Armenia and Iran within one visits, thus the foreign tourists could see contrasts of culture, religion, foods and music in one region within one tour.

- education exchange programmes within young generation.

The possible ways of economic integration could be establishment of joint ventures (which are the best direction for the cluster creation), of private banks' representatives of each country in another one, and of free movement of the capital including investments.

After having registered success the Government of Iran had to move into expanded economic integration with Armenia. On this goal, the Government of Iran had to work continuously.

#### **Economic Integration Case by Case: Iran – Azerbaijan Economic Integration.**

The economic integration of Iran with this country is much difficult then in case of Armenia as Azerbaijan is always considered itself “a small brother” of Turkey. But taking into consideration that there are too many azeris live in Iran, then this channel could be used as a base for the smoother economic integration.

The fact that both countries have RCA in fuels had to be used jointly to impact the prices in the world economy for negotiation of better access to the third countries' markets for another domestically produced goods. There are several other possible sectors of mutual beneficial cooperation, which are:

- agro-sector through establishment of joint ventures, representatives and direct investments,
- tourism sector with major stress of creation of tour packages especially for the third countries' tourists,
- production of spices and herbs again through establishment of joint ventures, representatives and direct investments,

- promoting Iranian Investments into the economy of Azerbaijan.

As in the case of Armenia, Iran needs to free the sectors, which are of both business interests to create clusters among them for decreasing costs of production and to be able to compete in the world market.

**Economic Integration Case by Case: Iran – Georgia Economic Integration.** The economic integration of Iran with this country is much difficult then in case of Armenia and Azerbaijan as Georgia is considered to incline to the USA, although Turkey's capital is strong enough and have no direct boarder with Iran. Thus the case of Georgia should be left as a continuation of economic integration with Armenia and/or with Azerbaijan. The major sectors of cooperation for the first stage of economic integration are, which could be done in the same way as in the case of Armenia:

- clothing sector;
- tourism sector;
- minerals;
- agro industry;
- production of spices and herbs.

Again, the Government of Iran needs to start to free the sectors which are included in the first stage of economic integration between Iran and Georgia and smoothly to move to other sectors.

**Economic Integration Case by Case: Iran – Turkmenistan Economic Integration.** As it already have been mentioned these two countries have huge volume of gasoline. Economic integration of them will have serous impact on the world market of gasoline. Although both countries have the same religion, almost 25 years they could not have settled friendly economic and political relation yet as it was mentioned above.

At this stage, the fields of cooperation between these two countries are supplying fuels in the boarder regions, textile and tourism sectors, while Iranian capital could be invested in the key sectors of the economy of Turkmenistan. The case of economic integration with Turkmenistan is similar to the case of Azerbaijan.

In summary, regionalization is the current movement in the world economy: countries united to have more economic capacity and powers leading into powerful political "teller"

the key country/countries within the Union. Caucasian region as well as the Middle Asia is not excluded from this processes. Till 1920, this region was ruled by Russia from political side and the UK from resources side. During the Soviet Era it was ruled by Kremlin. Now, although it continues to stay under the control of Moscow, but economically it needs in strong economic leadership as the economies of the countries of these regions stacked in serious problems.

Thus, the Government Iran should start from the economic improvements within its economy and region, if chooses the path of economic leadership in the World Economy the –precondition of which the country has. The precondition of Iranian “wakening” had to be economic and trade openness. To start with political leadership will turn “friendly” Russia into the “additional strong enemy” besides Israel and the USA, while leaving as it was, will move Iran from the international relation issues and it will stay among less developed countries giving current opportunities to Turkey, which Turkey wants and started to do, although little bit harrying starting to use its political pressure from Georgia and Azerbaijan.

Overall the major suggestions and innovation from this chapter of the dissertation are:

- SMART analysis outcomes could be implemented only in case of economic leadership case;
- Economic leadership case is the only way to not violate the presence of other superpowers presence in the region.
- The integration process has to be stage by stage where Iran had to develop model to be based on each countries advantages and suggesting appropriate resources for the latters for further processing. But this resource export based cooperation should not be directed into weakening of production capacity of Iran;
- Political leadership case is full of political and economic risks not only from the side of major powers of the world economy, but also by Armenia, Azerbaijan, Georgia and Turkmenistan.

## CONCLUSIONS AND SUGGESTIONS

The second half of the twentieth century witnessed discernible shifts in the economic and political equivalence of the world. It is characterized as an age of integration. Countries are coming together all over the world in Europe, America, Asia and Africa with the idea of defending themselves economically and politically, against the incursions of other blocs into their areas, and to increase their influence on their own areas as well as outside it. For the last 50 years, countries in almost all parts of the world have had one form of economic integration or the other.

Taking into consideration the huge economic potential of Iran in the World Economy based on abandoned natural and human resources as well as last changes in the global economy, there is strong confidence among many economists and politicians that Iran could be turned into the 5th pillar of the world economy after USA, Russia, EU and China in case of several improvements in the social-economic policies of the country, especially. Iran has also big potential to turn into a leader in the region. Iran has to be “ready” to take a leading role in the region as it would be easier for this country rather than for Turkey, although Turkey is taking all necessary actions for that. Even in case of Russian political strong presence in the region, Iran with well-developed international economic policies could take a leading role in the economies of its neighboring countries leaving without violating political interests of Russia in the short and middle runs. Moreover, the current political and economic power divisions in the world economy have created favorable environment to strengthen its position for any country– it is choice of country to become a leader or not.

Iran’s strong presence in the region was lasted until the early 21th century after which the room was given for the Russian Empire than for the Soviet Union. During the Soviet period it even weakened mediating through Kremlin. After the collapse of the Soviet Empire, the opportunities of becoming economic and political leader in the region were re-established for the Government of Iran.

There is another important fact related to the possible interests of Iran in the region – the Caucasus is the crossroads between East and West and vs. This is historically well-

known fact as the Silk Road was going through this territory. The situation is becoming even severe with the fact of oil and gas existence in the region as additional forces of international arena becoming involved in the region such as the USA, NATO and EU besides Russia and Turkey. Currently, the region has more than 25 percent of all world gas reserve.

Although, last ten years Iran has started to work on the idea of creating the regional security system between Azerbaijan, Armenia, Georgia from one side and Russia, Turkey and Iran from the other side, it was not welcomed by Armenia, Azerbaijan and Georgia. Taking into consideration the backsides of these three countries, it could be concluded that it was not welcomed by the Russia, Turkey and the USA. This idea was failed as the Iranian diplomats did not take into consideration the regional interests of Russia, Turkey and the USA before developing their regional security system.

Coming back to “the economic integration” term, it continues to be one of the major topics of discussions and researches among economists. The term of the Economic integration is most defined one in the international economics too taking into consideration the positive and negative impacts of this movement in the national and world economy. It is defined as moving from national boundaries to a supranational and supra-regional institution - a process in which national borders becomes artificial among the participant countries for the movement of goods, capital and labor. This economic process was emerged after World War II through replacing beforehand political unions, the main stress of which was to exploit the natural resources of colonial countries by the Western ones. It little bit calm down between 70-80s of last century explained by bi-polarities of the world economy. The term of the economic integration re-emerged again in the late of 1980s with the new regionalism, this time included the political, diplomatic, security and cultural aspects too.

The most distinct two issues of the economic integration continue to be: trade and investments. In the last decade, technological progress became the next and most impacted force to foster the economic integration processes and to bring countries closer.



The current meaning of Economic integration was first discussed by Eli Heckscher, Herbert Gaedicke and Gert von Eyern in 1930s, although it was related to the private companies alliances. Then the term has been evolved through other economists among who were Jacob Viner, Bela Balassa, Linder, Meade and Lipsey who also gave the economic base of this process. All of them were sure that the economic integration leads to better and free trade with welfare increase for all member countries. Most of globalists and economists are sure of the positive impacts of the economic integration, but there are also economists and anti-globalists who assure that the economic integration leads to trading blocs, trade diversion, lost of national sovereignty, deregulation, social dumping, and the protection of economic interests.

Although, the world economy and theories are evolving, the division of stages of integration suggested by Bela Balassa are still up-to-date, which are: **Preferential trading area or agreement; Free trade area; Customs union; Common market; Economic Union; Economic and monetary union and Complete economic integration.** In modern world economy, there are not super-national organization reached into this stage, but they are states, particularly the USA, which could fit into this definition.

Based on our above made assessment, we can state that the economic integration created by the force end ups with collapse, while the economic integration driven by the economic interests has better opportunities to last. The example of first case is the USSR, which collapsed after 70 years, while the USA and the EU are in well form yet.

One of the important issues in the economic integration is that it had to lead to international specialization and consolidation of economic relations among the participant countries and private companies. With these, the economic integration will create the following advantages for the participant countries: the availability of cheaper, faster and diversified goods, services, resources, facilities, ideas and knowledge as well as higher living standards. Although this concept was within the USSR, but too many political issues were forced into silence. The EU has not any forced political issues, but it has not currently reached to full specialization among its member- countries, that is why it has met several challenges in nowadays as the stand-point of the establishment of the EU was protection

of economic interests of member-states. If the EU will not work on this issue, the collapse could be seen in the near future as it also considers political power in the world economy. Other regional unions are just economic unions with no political impacts.

At the macro level, the intra-regional trade becomes more efficient because of reduced costs of production and marketing of goods and services, leading to the trade creation, to the greater consensus, to the greater employment opportunities and political cooperation.

There are more than 30 economic integrations in the world. The number of these countries is growing, which could lead the world economy into multi-polar system. Before 1990s, the world was divided into two poles, while starting from 1990 till now, it was almost one polar. The high speed of technological growth creates a base for the world economy to turn into multi-polar based on several regional and transnational integration possibilities. Currently, the major economic integrations in the international arenas are: European Union (EU); North American Free Trade Agreement (NAFTA); The Association of Southeast Asian Nations (ASEAN); Asia-Pacific Economic Cooperation (APEC); and The African Union.

Among these Unions, as our assessment concluded, only EU has a strong power in the international relations followed by NAFTA. NAFTA is the base for our dissertation theme as it is more applicable for our case. ASEAN is the youngest organization including the different countries with their own cultures, economies and religions, which assisted to polish the NAFTA outcomes for effective and efficient development of framework for Iran and its Northern Neighboring countries economic integration.

Thus, what had to be done by Iran having all pre-conditions to take a leading role in the region based on our above made assessments and discussions. Geographically, the northern border-neighbors of Iran are: Armenia, Azerbaijan and Turkmenistan Including Georgia too as it is part of the South Caucasus. If the government of Iran seeks for being the leader in the region and one of the big powers in the world with possibilities of being 9th member of G8, then the possibilities of its tangible presence in these countries becoming more than urgent. Although there are strong obstacles for Iran both objectively and subjectively mainly related to politics to turn into a leader in the region, still there is a

huge opportunity to be like that in case of strong willingness of the Government of Iran. Economic union of Azerbaijan, Turkmenistan and Iran will made them to dictate the world price of gas having influence on all major countries in the World as they would have more than 25 percent of all world gas reserves.

Since 1979 as a result of revolution the foreign relations of Iran have being based on two strategic principles: eliminating outside influences in the region and pursuing diplomatic relations with developing and non-aligned countries<sup>91</sup>. Overall, it could be stated that the second principle is done more effectively than the first one.

Next key-stone of the foreign relations of Iran is its opposite position related to Israel, United Arabic Emirates and Saudi Arabia. It means that in the near future, the chances of turning a leader within the Middle East are almost impossible or too costly to reach the goal. Besides rivalry between Iran and Israel and because of its nuclear program, in 2005 Iran has met sanctions imposed by UN Security Council, which was continued till 2015, politically and economically isolating the country from the developed world. It pushed Iran to start actively to cooperate with developing world. Moreover, the Government of Iran has stressed the development of domestic production including army technology and equipment.

Currently, it could be stated that Iran is in the leading position by the economic figures as well as by territory and population, while although Armenia is the smallest by absolute figures, comparative figures for this country are little bit different.

The impacts of possible free trade agreements of Iran and its northern neighboring countries through SMART model have reassured the proposed expectation of above-discussed approaches of famous economists: increase of welfare – for Azerbaijan by the coverage of product range – almost 64 HS Code two digit products, followed by Iran (45 products), Armenia (41 products), Turkmenistan (26 products) and at the end – Georgia. All countries would have the positive trade creation and diversion as a result of possible regionalization among themselves: Armenia and Azerbaijan from Iran and among

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<sup>91</sup> Iran Country Study Guide Vol. 1 Strategic Information and Developments, ISBN 1-4387-7462-1, p. 141.

themselves, Georgia from Iran, Iran and Turkmenistan from other 4 countries appropriately.

As it was assessed above, Iran has all preconditions to become an economic and political leader in the region, where all neighboring countries are not strong enough to go ahead alone inclining to different super powers outside of region. Thus, Iran had to be pro-active economically and turn into market based system to take leadership in the region leaving outside Turkey, Russia and USA. The proactive strategy should not stress to overcome the political presence of these three countries (as above it was mentioned the security union did not welcome by other super-powers presented in the region), but rather to overcome the economic presence, which would make all regional countries interdependent, which in its turn will lead to increase of power of Iran in the region as well as in the world because of ownership of key natural resources.

This integration could not do through a classical way based on several strong objective and subjective political and economic conditions existing in the region discussed within this dissertation. That is why different cases were developed to better assess the possibilities of Iran to turn into the leader in the region and the ways of coming to this target in the near future. Among assessed cases, the stressed one is to become an economic leader in the region and “the pilot project” for the economic integration should be started with Armenia, because of the facts presented above.

As calculation made above presented that the free trade among Iran and its northern neighbor countries will lead to the welfare increase as were sure the Neoclassical school representatives (Viner’s findings), which had to be based on Riccardo’s competitive advantage theory. The start point of regional integration, as it was mentioned had to be RCA of each countries – Armenia: Food processing and Software development, Azerbaijan: fuels, Georgia – Food processing and vegetables, Iran: Fuels and Turkmenistan: fuels and textile. Minerals and Metals of the Union had to be assessed in the way to be used for the industry development within each member- states as close geographical location will make it cheaper to trade within the proposed organization.

Thus based on our assessments, we suggest the following definition of the Economic integration term:

- **it is an economic procedure with political, economic and security targets between different states becoming closer through the reduction or elimination of tariff and non-tariff restrictions on movements of goods, services, capital, people and factors of production as well as the cooperation in the fields of monetary, fiscal, foreign trade and investments policies.**

While for increase of role of Iran in the region we suggest the following innovations:

- Iran has all preconditions to turn into the 9<sup>th</sup> power of the World economy, for which increasing its presence in the region is more than urgent. Currently, Iran is an energy superpower after Russia;
- The conflict between Armenian and Azerbaijan could be solved bringing them into the umbrella of the same union starting from the trade, then economic and only in the last stage political cooperation. The best way of it could be increase of economic and trade partner role of Iran in these countries removing Turkey and Russia from this position. Iran had to start to be trade intermediary between Armenia and Azerbaijan, although this is not for the close future, but for long-run prospective;
- Iran has non-friendly relationships with several countries including, Saudi Arabia, Israel and territorial claim with UAE, which isolates Iran from this region. This is another leverage to make the Government of Iran to be strongly interested in increasing of its leadership position among these 4 countries;
- The major interests of northern boarding-neighbor countries are:
  - Iran – Armenia: Iran could be turned the best alternative for Armenia to be energetically and economically independent from Russia and vs., although it dose not mean that Iran should not consider the fact that Russia is its main partner of Armenia and Iran. Moreover, despite religion differences, both countries – Armenia and Iran are strong political and economic allies. Trends in all spheres of mutual cooperation are positive too. Major sectors of cooperation at the first stage for intensified sponsorship of Iran's Government had to be Agro-

Industry and foodstuff, tourism, Software development, minerals, textile and clothing, production of herbs and spices. Moreover, Armenia could be an excellent window for Iranian brands produced in Armenia based on Iranian resources to enter the EAEU huge market. The economic potential of Armenia, by volume, is not a competitor for Iran in the region as well as in the world economy, compared with Azerbaijan and Turkmenistan. Armenian production is rather “supplement” for the Iranian production, and not competitor;

- Iran – Azerbaijan: Iran has opportunities to “divide” Turkey from Azerbaijan as it has boarder with it, which Turkey has not. Currently, political relations between Iran and Azerbaijan became friendlier, although several years ago it was cold and Azerbaijan had territorial claim toward Iran. At the same time, Azerbaijan has strong relationships with Israel, which makes Iran-Azerbaijan relation non-friendly. As in case of Armenia, the chances of Iran to establish its strong political presence in this country without any tangible suggestions is almost impossible, while economic ways are more or less open as Azerbaijan also needs in strong economic partner. Moreover, Azerbaijan, Iran and Turkmenistan have the big conflicts related to the use of Caspian Sea resources including Kazakhstan and Russia too. Major sectors of cooperation based on calculated RCA are: Agro-sector, fuels supply in the boarder-related regions, minerals, production of herbs and spices, tourism sector.
- Iran – Georgia: despite the cases of Armenia and Azerbaijan, Georgia is more easy to start economically as energetically this country is much dependent from Azerbaijan, which is not a big rival for Iran in the region. The major sectors of being sponsored by the Government of Iran had to be minerals, agro-sector, tourism, production of herbs and spices, fuels, and transportation. All are based on RCA of each countries.
- Iran – Turkmenistan: Relations between these two countries could not be considered warm, although they have same religion. The major consideration of Iran with this country should be on mutual beneficial use of resources for the

increase of welfare of their citizens. Moreover, Turkmenistan has much social, traffic problems and better to be considered to be united into the proposed integration model on the last stage, when it would make several changes in its social, political and legislation aspects. At first stage of economic integration, the field of cooperation is quite limited compared with other three countries in the region. These are: supply of fuels in the near-boarder-regions, tourism and textile sectors.

- Each country has RCA in the sectors which could be supplemented each other leading to the creation of clusters to turn into the major producers of the various products in the world market and compete with China, Turkey, the EU, USA and Russia.
- Impacts of possible free trade agreements on the economies of all countries are more or less positive. The most increased welfare would be in Azerbaijan followed by Iran, Armenia, Turkmenistan and Georgia. All countries would have the positive trade creation and diversion as a result of possible regionalization among themselves: Armenia and Azerbaijan from Iran and among themselves, Georgia from Iran, Iran and Turkmenistan from other 4 countries appropriately. This positive could be increased within 5 to 10 years in case of strong political and economic willingness of all participant countries as all of them have all vital resources required for economic high growth rate in the world market.

Moreover, we suggest that:

- Taking into consideration the trends in the Global economy as well as experiences of the EU, NAFTA and EAEU, it is strongly advisable to omit several stages of integration proposed by Balassa, among which are the **Preferential trading area or agreement**. This proposed newly created integration had to start from **Free trade area** after examining carefully other unions' experiences to omit all possible failures followed by other stages like the common market and economic union. The last three stages of integration suggested by Balassa (economic and monetary union; and Complete economic integration) should be left for the future as the

current experiences of these stages have not complete version and have high risks of failure within today's global international financial system.

- Assess the RCA of each countries in sub-sector level potentially to become members of the Union and base economic relations on creation of sectoral clusters regionally;
- Free the Economy of Iran for the trade with the Northern Neighbor countries;
- Free the Economy for the FDIs;
- Sign Free trade agreements with the targeted countries based on the outcomes of the actions mentioned above;
- Attract FDIs in all member-countries based on each countries' RCA and developed possible clusters;
- Decreasing tariff rates for the third countries, but making strict the quality infrastructure requirements;
- Economic leadership case is the only way to not violate the presence of other superpowers presence in the region as Political leadership case is full of political and economic risks not only from the side of major powers of the world economy, but also by Armenia, Azerbaijan, Georgia and Turkmenistan. The key-stone of the economic integration had to be creation of regional clusters which would bake the countries in the region to be entrepreneurially interdependent;
- The integration process has to be stage by stage where Iran had to develop model to be based on each countries advantages and suggesting appropriate resources for the latters for further processing. But this resource export based cooperation should not be directed into weakening of production capacity of Iran. The first stage had to be piloting and started with Armenia because of several logical reasons as: having boarder, sharing the same history, strong presence of Armenian Diaspora in Iran, no political misunderstanding and/or any territorial disagreement, the potential of economy of Armenia by its volume is not competitor for Iran in the region as well as in the world market, etc.;



- Use profits from gas and oil production for the development of transportation infrastructure among its northern neighboring countries;
- Move major part of expenditure from security sector into the production sector;
- Turn from single- religion way of management into multi-religion one;
- Free the financial sector, etc.

If Iran would be conducted targeted and continuous policy, in very short time it could remove Turkey's presence in the region as the economic development process is the most attractive factor of promoting the other countries to be under your umbrella. All actions of Iran had to be transparent with stress on weakening security expenditure, which does not mean weakening security system of the country as there are several strong pre-conditions that neighbor developing countries could "think" about the war with Iran to gain the mining of the latter and/or lands.

The strong economy of Iran will have its positive impacts on Russian relations as well, because the region would be divided not by the political powers, but by the economic impacts, while the developed economy would increase the mutual dependence of the businessmen and producers in the region, which would have its positive impacts on the political relations as well in the region.

Thus, first of all the Government of Iran had to clarify its major goals/interests in the region. It had to start from the economic improvements within its economy and region, if it chooses the path of economic leadership in the World Economy the –precondition of which the country has. The precondition of Iranian "wakening" had to be economic and trade openness. To start with political leadership will turn "friendly" Russia into the "additional strong enemy" besides Israel and the USA, while leaving as it was, will move Iran from the international relation issues and it will stay among less developed countries giving current opportunities to Turkey, which Turkey wants and started to do, although some political pressures from Georgia and Azerbaijan have been applied it.

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## ANNEXES

### Annex 1. List of products of the HS CODE

Product
01-05_Animal
06-15_Vegetable
16-24_FoodProd
25-26_Minerals
27-27_Fuels
28-38_Chemicals
39-40_PlastiRub
41-43_HidesSkin
44-49_Wood
50-63_TextCloth
64-67_Footwear
68-71_StoneGlas
72-83_Metals
84-85_MachElec
86-89_Transport
90-99_Miscellan

## Annex 2

### 2.1. Trade Creation Effect (TCE) of Armenia

Partner	Code	TCE	Partner	Code	TCE	Partner	Code	TCE
World	96	2.774	World	66	0.785	Iran	22	0.014
Iran	96	2.774	Iran	66	0.785	World	21	7.672
World	95	5.714	World	65	0.008	Iran	21	7.672
Iran	95	5.714	Iran	65	0.008	World	20	195.549
World	94	23.302	World	64	5.874	Iran	20	195.549
Iran	94	23.302	Iran	64	5.874	World	19	27.009
World	91	3.37	World	63	14.035	Iran	19	27.009
Iran	91	3.37	Iran	63	14.035	World	18	1.576
World	87	23.79	World	62	0.476	Iran	18	1.576
Iran	87	23.79	Iran	62	0.476	World	17	1.814
World	85	6.25	World	61	1.656	Iran	17	1.814
Iran	85	6.25	Iran	61	1.656	World	15	121.994
World	84	32.693	World	57	125.932	Iran	15	121.994
Iran	84	32.693	Iran	57	125.932	World	9	0.003
World	83	0.475	World	49	0.206	Iran	9	0.003
Iran	83	0.475	Iran	49	0.206	World	8	507.251
World	82	2.945	World	48	3.985	Iran	8	507.251
Iran	82	2.945	Iran	48	3.985	World	7	1524.073
World	73	21.51	World	43	3.957	Iran	7	1524.073
Iran	73	21.51	Iran	43	3.957	World	6	22.659
World	70	1096.553	World	42	0.889	Iran	6	22.659
Iran	70	1096.553	Iran	42	0.889	World	4	57.463
World	69	159.435	World	40	17.93	Iran	4	57.463
Iran	69	159.435	Iran	40	17.93	World	3	222.377
World	68	153.374	World	39	272.864	Iran	3	222.377
Iran	68	153.374	Iran	39	272.864			
World	67	1.454	World	25	30.995			
Iran	67	1.454	Iran	25	30.995			
			World	22	0.014			

Source: the calculations have been done by the author based on the statistics for Georgia taken from UN COMTRADE

## 2.2 Trade Creation Effect (TCE) in 1000 USD for Azerbaijan

Partner	Code	TCE	Partner	Code	TCE	Partner	Code	TCE
World			World	55	4.283	World	48	66.952
Iran	33	0.045	Iran	90	4.555	Iran	32	69.984
World	33	0.045	World	90	4.555	World	32	69.984
World	41	0.061	Iran	22	5.883	Iran	20	70.449
Iran	41	0.061	World	22	5.883	World	20	70.449
Iran	58	0.114	World	15	6.091	Iran	27	82.575
World	58	0.114	Iran	15	6.091	World	27	82.575
Iran	49	0.121	Iran	35	6.922	Iran	84	113.19
World	49	0.121	World	35	6.922	World	84	113.19
Iran	18	0.156	Iran	76	7.241	Iran	19	114.00
World	18	0.156	World	76	7.241	World	19	114.00
Iran	10	0.418	Iran	83	7.355	Iran	40	125.75
World	10	0.418	World	83	7.355	World	40	125.75
Iran	74	0.465	Iran	23	8.278	Iran	73	161.70
World	74	0.465	World	23	8.278	World	73	161.70
Iran	96	0.569	Iran	29	9.213	Iran	17	187.62
World	96	0.569	World	29	9.213	World	17	187.62
Iran	62	0.587	Iran	24	12.089	Iran	85	399.84
World	62	0.587	World	24	12.089	World	85	399.84
Iran	42	0.615	Iran	34	12.42	Iran	70	419.87
World	42	0.615	World	34	12.42	World	70	419.87
World	51	0.848	Iran	94	13.679	Iran	39	467.66
Iran	51	0.848	World	94	13.679	World	39	467.66
Iran	3	0.927	Iran	64	19.708	Iran	28	511.79
World	3	0.927	World	64	19.708	World	28	511.79
Iran	60	1.161	Iran	4	20.402	Iran	68	511.90
World	60	1.161	World	4	20.402	World	68	511.90
Iran	82	1.184	Iran	11	27.713	Iran	8	567.98
World	82	1.184	World	11	27.713	World	8	567.98
Iran	95	1.3	Iran	87	28.062	Iran	57	601.23
World	95	1.3	World	87	28.062	World	57	601.23
Iran	59	1.374	Iran	26	30.536	Iran	69	654.53
World	59	1.374	World	26	30.536	World	69	654.53
Iran	53	2.007	Iran	38	50.418	Iran	54	759.64
World	53	2.007	World	38	50.418	World	54	759.64
Iran	21	2.7	Iran	56	52.052	Iran	7	1531.4
World	21	2.7	World	56	52.052	World	7	1531.4
Iran	46	2.807	Iran	63	54.308	Iran	72	5003.8
World	46	2.807	World	63	54.308	World	72	5003.8
Iran	44	2.823	Iran	6	54.327	Iran	25	16934
World	44	2.823	World	6	54.327	World	25	16934
Iran	61	2.867	Iran	9	59.813			
World	61	2.867	World	9	59.813			
Iran	55	4.283	Iran	48	66.952			

Source: the calculations have been done by the author based on the statistics for Azerbaijan taken from UN COMTRADE

### 2.3. Trade Creation Effect in 1000 USD Of Iran by country

Partner	Code	TCE
World	97	0.08
Az	97	0.08
World	94	4.57
Az	94	3.79
Tu	94	0.77
World	92	5.67
Arm	92	5.29
Az	92	0.38
World	90	20.30
Arm	90	18.61
Tu	90	1.17
Az	90	0.511
World	89	0.182
Geo	89	0.182
World	87	163.4
Tu	87	160.9
Az	87	2.142
Geo	87	0.422
World	86	43.31
Az	86	41.26
Arm	86	2.05
World	85	514.7
Geo	85	332.6
Arm	85	175.6
Az	85	6.47
World	84	2929.6
Arm	84	2254.7
Geo	84	339.3
Tu	84	169.9
Az	84	165.6
World	83	2821.6
Az	83	2820.0
Tu	83	1.54
World	82	0.27
Geo	82	0.19
Az	82	0.08
World	76	318.4
Az	76	168.2
Arm	76	150.2
World	74	46.14
Arm	74	39.74
Az	74	6.401
World	73	638.5
Az	73	343.4
Arm	73	195.9

Geo	73	57.67
Tu	73	41.39
World	72	1097.1
Az	72	572.5
Geo	72	446.9
Arm	72	77.58
World	70	34.08
Geo	70	31.00
Az	70	3.077
World	68	10.25
Az	68	10.08
Arm	68	0.169
World	64	0.795
Az	64	0.795
World	61	0.208
Az	61	0.208
World	55	6.12
Tu	55	3.885
Az	55	2.234
World	52	834.7
Tu	52	834.7
World	50	56.53
Az	50	46.10
Tu	50	10.43
World	48	365.3
Arm	48	361.7
Az	48	3.603
World	44	1802
Az	44	1060
Geo	44	733.2
Arm	44	8.104
World	41	2647
Az	41	2647
World	40	3.72
Arm	40	3.72
World	39	107.6
Tu	39	49.15
Az	39	29.27
Geo	39	18.559
Arm	39	10.614
World	38	284.7
Tur	38	275.9
Az	38	8.746
World	34	4.906
Az	34	4.906
World	31	0.89

Az	31	0.507
Arm	31	0.383
World	29	36
Geo	29	34.99
Az	29	0.55
Arm	29	0.46
World	28	66.532
Tu	28	63.65
Geo	28	2.882
World	27	19013.568
Tu	27	19002.94
Az	27	10.628
World	26	137.771
Geo	26	137.7
Tu	26	0.026
World	25	12.27
Tu	25	10.14
Arm	25	2.133
World	23	8425
Tu	23	5961
Az	23	2464.7
Arm	22	9.786
World	22	9.786
World	20	29.7
Az	20	28.24
Arm	20	1.455
World	15	24.14
Tu	15	24.14
World	14	36.69
Tu	14	36.69
World	12	183.9
Az	12	170.4
Tu	12	13.53
World	10	34.41
Az	10	34.41
World	9	11.41
Az	9	11.41
Arm	7	4.236
World	7	4.236
World	1	643.7
Arm	1	564.9
Geo	1	78.75

Source: the calculations have been done by the author based on the statistics for Iran taken from UN COMTRADE

## 2.4 Trade Creation Effect (TCE) in 1000 USD of Turkmenistan

Partner	Code	TCE
World	4	92.61
Iran	4	92.61
World	7	60.85
Iran	7	60.85
World	8	1819
Iran	8	1819
World	15	183.5
Iran	15	180.4
Az	15	3.151
World	16	1.031
Iran	16	1.031
World	17	160.5
Iran	17	160.5
World	19	43.85
Iran	19	43.85
World	20	73.79
Iran	20	61.01
Arm	20	10.39
Geo	20	2.383
World	21	126.1
Iran	21	126.1
World	22	71.91
Arm	22	38.27

Iran	22	17.89
Geo	22	15.74
World	24	14401
Geo	24	1318
Iran	24	122.9
World	25	10.3
Iran	25	10.29
World	27	24.36
Iran	27	24.36
World	28	198.4
Az	28	173.4
Iran	28	25.09
World	34	48.09
Iran	34	48.09
World	56	77.45
Az	56	57.68
Arm	56	15.1
Iran	56	4.669
World	57	182.6
Iran	57	182.6
World	61	3.505
Iran	61	2.012
Arm	61	1.493
World	62	40.33

Iran	62	40.33
World	63	75.73
Iran	63	65.79
Arm	63	9.939
World	64	5.03
Iran	64	5.03
World	68	300.4
Iran	68	300.2
Arm	68	0.199
Arm	71	334.8
World	71	334.8
World	84	1
Iran	84	1
World	85	222.3
Iran	85	182.4
Arm	85	39.87
Geo	85	0.079
World	87	204.4
Iran	87	204.4

Source: the calculations have been done by the author based on the statistics for Turkmenistan taken from UN COMTRADE