International Journal of Economics and Management Sciences
Vol. 1, No. 4, 2011, pp. 84-97

MANAGEMENT JOURNALS
managementjournals.org

IS IT VIABLE AN ECONOMIC INTEGRATION AMONG "CNETAC" COUNTRIES? EVIDENCE FROM GRAVITY EQUATION**

Levent Aydin[1*] and Rustem Yanar[2]
[1] *Kırıkkale University, Department of Economics, Kırıkkale, Turkey*
**(Corresponding author)*
E-mail: leventaydin60@gmail@com
[2] *Gaziantep University Department of Economics, Gaziantep, Turkey*

ABSTRACT

The Turkey's new policy that is called "Zero Problems with Neighbors" and increasing trade volume between Turkey and Middle East has ushered the idea of new regional cooperation in the Middle East. In July 2010 a multilateral regional free trade agreement was signed between Turkey, Syria, Jordan and Lebanon, the so-called "Close Neighbors Economic and Trade Association Council" (CNETAC). The council envisages establishing a free-trade and visa free area. In addition it aims improving the cooperation in trade, transport, tourism and energy. This paper attempts to make a formal analysis of these issues, and estimates a gravity model of trade and migration flows to examine whether intra-region is lower or higher than what is predicted by an economic model. The results indicate that the variables traditionally included in the gravity equation present the expected signs and highlight the role played by intra-bloc effects. The estimated coefficients present, in most cases, the expected signs and magnitudes.

Keywords: *Economic integration; labor migration; gravity equation*
JEL : *F15, F13,C23, R15, O53, O24*

1. INTRODUCTION

In recent years, Turkey's Middle East policy has transformed profoundly. Turkey has become an increasingly proactive and prominent player in the Middle East. It has gone from being a passive, inward-looking regional actor to a power that actively seeks to assume a leading role in the region (Nykänen 2011). As a result of these policy Turkey's economic ties with the Middle East has strengthened and has manifested in efforts to expand trade, capital flow and the movement of people.

The Turkey's new policy that is called "Zero Problems with Neighbors" and increasing trade volume between Turkey and Middle East has ushered the idea of new regional cooperation in the Middle East. In July 2010 a multilateral regional free trade agreement was signed between Turkey, Syria, Jordan and Lebanon, the so-called "Close Neighbors Economic and Trade Association Council (CNETAC)". The council envisages establishing a free-trade and visa free area. In addition it aims improving the cooperation in trade, transport, tourism and energy.

Free trade area in the region is the first step for regional economic integration. This agreement unequivocally will lead to expand the trade and economic cooperation in the region. So that it will increase regional welfare as well as, in the long run, help to better integrate the Middle East into the global economy and increase interdependence in the region. Also it may help the region to solve some of its persistent conflicts and problems. Increased trade and movement of people among the Member Countries do indeed contribute to greater integration, and hence greater stability and peace in the Middle East (Kirişci 2011).

** This paper subject was discussed at brainstorming meeting in the Institute of Strategic Thinking, Ankara, April 15, 2011

However, The Middle East has not been a region easily associated with economic integration. Main characteristics of the region are geopolitical discord, state-led economies, authoritarian regimes that fear the reverberations of political liberalization that might come with economic openness (Broude 2009). Although since 1950 several attempts at economic integration have been made in this region, it has failed of its goals which would eventually include a free trade area or common market.

The rest of paper is organized as follows: Section 2 provides a brief overview of regional economic integration attempts and intra regional trade. Section 3 discusses the gravity model and its essential features. This section presents the empirical results of the gravity model within the context of CNETAC. Section 4 presents the results of empirical analysis and section 5 provides the concluding remarks and some policy recommendation.

2. REGIONAL ECONOMIC INTEGRATION ATTEMPTS AND INTRA REGIONAL TRADE

Regional Economic integration is an agreement which reduces and eventually removes tariff and non tariff barriers between member countries. Hence it provides free flow of goods and services and production factors among the countries. For analytical purpose, five types of economic integration agreement are distinguished: 1) Preferential Trade Arrangement (PTA) proposes tariff reductions in certain products or sectors agreed upon by the trading partners. 2) A free trade area (FTA) is an integration formed by removing tariffs on trade among nations that are FTA members without changing tariffs on imports from non-members. 3) A customs union (CU) is an FTA where member countries apply a common tariff to all trade flows from non-members. 4) A common market (CM) is higher level integration that permits free movement of factors as well as goods and services among member countries. 5) Economic and Monetary Union is perfect integration that member countries use a single currency in conjunction with monetary and economic policy coordination (Aydın and Acar, 2011).

After Viner (1950) there is a host of literature devoted to the economic effects of regional integration. Expected positive effects include the potential benefits of trade creation, an enlarged market to realize economies of scale and scope, increased competition and learning effects as well as stimulating investment (Zorob 2008). Economic effects of integration are categorized three types (Baldwin ve Venables 1995). The first includes impact on the static allocation of resources. The second encompasses a RIA's impact on the accumulation of productive factors. The third covers an RIA's impact on the spatial allocation of resources.

The realization of the welfare effect of integration depends on some conditions. These conditions are size of the economy and per capita of GDP and distance and the particular production and demand structures and the relative volume of external trade and the tariff rates, as well as the type and degree of trade distortions that remain after the establishment of the preferential arrangement. But these conditions are mostly empirical and differ from case to case.

2.1 Regional and bilateral economic agreements in the Region.

Regional integration effort in the Middle East dates back to the 1950s starting with the "Treaty for Joint Defense and Economic Cooperation". The first attempt toward economic integration in this region was *The Agreement on Trade Facilitation and Regulating Transit Trade* which was signed in 1953 by a number of Arab countries (Péridy 2009). Since then several initiatives at economic integration were made in the region, but it has not succeeded in satisfying an ambitious interpretation of its goals, which would ultimately include a free trade area or common market (Broude 2009). As in 2009 intra-regional trade flow in the middle east was proximity 20 percent, it was 37.9 percent in the North America and 57 percent in Asia(Table 1).

Table 1- Shares of regional trade flows in world merchandise exports, 2009

	World	N USA	S&C USA	EU	CIS	Africa	ME	Asia
World	100	100	100	100	100	100	100	100
North America (NUSA)	13.2	37.9	29.3	5.7	3.0	7.2	9.7	10.1
South & Central USA (S&C USA)	3.8	5.7	27.4	1.8	1.9	3.3	2.2	3.0
Europe (EU)	41.2	18.1	17.1	70.9	47.1	41.5	30.1	13.3
CIS	3.7	1.2	1.2	4.7	27.9	1.8	2.8	2.0
Africa	3.2	3.2	2.1	2.9	0.4	11.5	2.3	2.7

Middle East (ME)	5.7	3.0	1.1	1.5	1.2	8.6	20.9	11.2
Asia	29.4	31.0	21.8	12.5	18.5	26.0	32.0	57.8

Source: WTO, International Trade Statistics 2010, World Trade Development.

There are many studies that have researched reasons of weak trade integration in the Middle East (Fawzy, 2003 and Galal 2000). The reasons can be classified as economic, political, and institutional (Kheir-El-Din and Ghoneim 2008).

High similarity in production and exports structure, mismatch between exports of the countries and their imports (lack of complementarily), dominating ideology of import substitution, large size of public sector, and the relatively high tariff protection can be regarded as economic reasons.

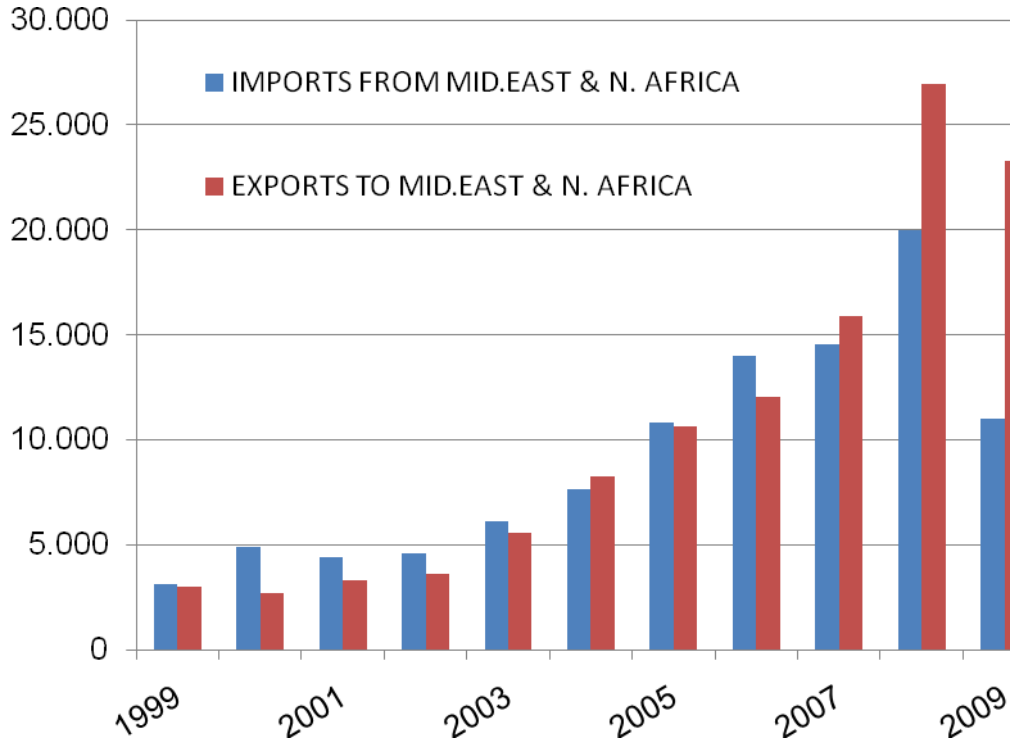
Political considerations have played important role in the Middle East integration. Most eminent political factors were the absence of political commitment to integrate, lack of credibility and feasibility among the countries (Fawzy, 2003)

The institutional reasons behind the frustration of integration have been that the weak transport infrastructure, ambiguity of rules and regulations governing trade at the borders (Kheir-El-Din and Ghoneim 2008).

2.2 Export and Import among CNETAC countries

Until the 2000s Turkey's relation with the Middle East has been limited. But last decade Turkey's involvements in the region have been considerably transformed. During this period, Turkey signed FTA with many countries in the Middle East (Syria, 2007; Egypt, 2007; Tonus 2005; Morocco, 2006 and Jordan 2011). Hence Turkey's Trade volume with the MENA has increased (Figure 1).

Figure 1- Turkey's exports and imports volume with MENA



Source: IMF, Direction of Trade Statistics.

In particular the foreign trade of the CNETAC countries has increased in a dizzy speed in this period (Table 2). For example Turkey's export to Syria has enlarged over 500 percent compared to 2001. Likewise Lebanon and Jordan trade with Turkey has increased.

Table 2- Turkey's trade with CNETAC (Millions US Dollars)

	2001		2004		2007		2010	
	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp
Lebanon	184	26	234	147	393	116	619	229
Syria	281	463	395	358	798	377	1.849	663
Jordan	119	14	229	14	389	12	572	42

Source: Turkstat, Foreign Trade Statistics.

Increasing trade volume in CNETAC countries has brought about the idea of a Free Trade Area and eventually economic integration in this region. Since these countries are already involved in a variety of bilateral and multilateral integration agreements (Annex 1), chance of success the new regional agreement is ambiguous. However the realization of integration depends on some conditions.

First of all success of economic integration relates to welfare effect which rely on size and purchasing power of the economy.

Table 3- GDP, (Current Price, Millions USD)

	Turkey	**Jordan**	**Lebanon**	**Syria**
2001	196,01	8,98	17,65	21,1
2002	232,54	9,584	19,152	21,582
2003	303,01	10,198	20,083	22,397
2004	392,17	11,411	21,802	25,013
2005	482,98	12,589	21,839	28,559
2006	530,9	15,645	22,437	33,407
2007	647,16	17,765	25,057	40,549
2008	730,34	22,697	29,933	54,516
2009	614,6	25,092	34,528	52,177

World Bank, World Development Indicators & Global Development Finance

Turkey is the largest economy in the region (Table 3). Despite high growth rate in the last decade, Syria, Lebanon and Jordan GDP's are quite small. Trade creation effect will be low, because the sizes of economies are small and disproportionate.

Per capita GDP is also important factor as regards trade creation effect. When In Turkey and Lebanon Per capita GDP is relatively high, it is very low Syria and Jordan. But In recent years, increasing per capita GDP is conspicuous.

Table 4- Per Capita GDP(Current Price)

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Türkiye	2,906	3,400	4,371	5,582	6,786	7,365	8,865	9,881	8,215
Ürdün	1,826	1,902	1,975	2,157	2,326	2,823	3,130	3,905	4,216
Lübnan	4,605	4,913	5,065	5,413	5,351	5,438	6,020	7,138	8,175
Suriye	1,244	1,238	1,248	1,351	1,494	1,705	2,019	2,649	2,474

Source: World Bank, World Development Indicators & Global Development Finance

Second essential factor to be taken into account is structure of export and import. As we mentioned before, intra-regional trade in CNETAC has increased rapidly since 2000. Nevertheless intra-regional share in the total trade has very low (3,98 %). While total trade to world was around 316 billion in 2009, Intra regional trade occurred only around 12 billion (Table 5).

There is a great deal of variation among countries in terms of intra-regional trade. Syria and Lebanon conduct as much as 15-20 percent their trade within the CNETAC, while the corresponding figure for Turkey is in the vicinity of 1.2 percent. Syria and Lebanon seem to trade more with each other than other countries in the group.

Table 5- World and intra-regional trade of CNETAC countries in 2009 (Million US Dollars)

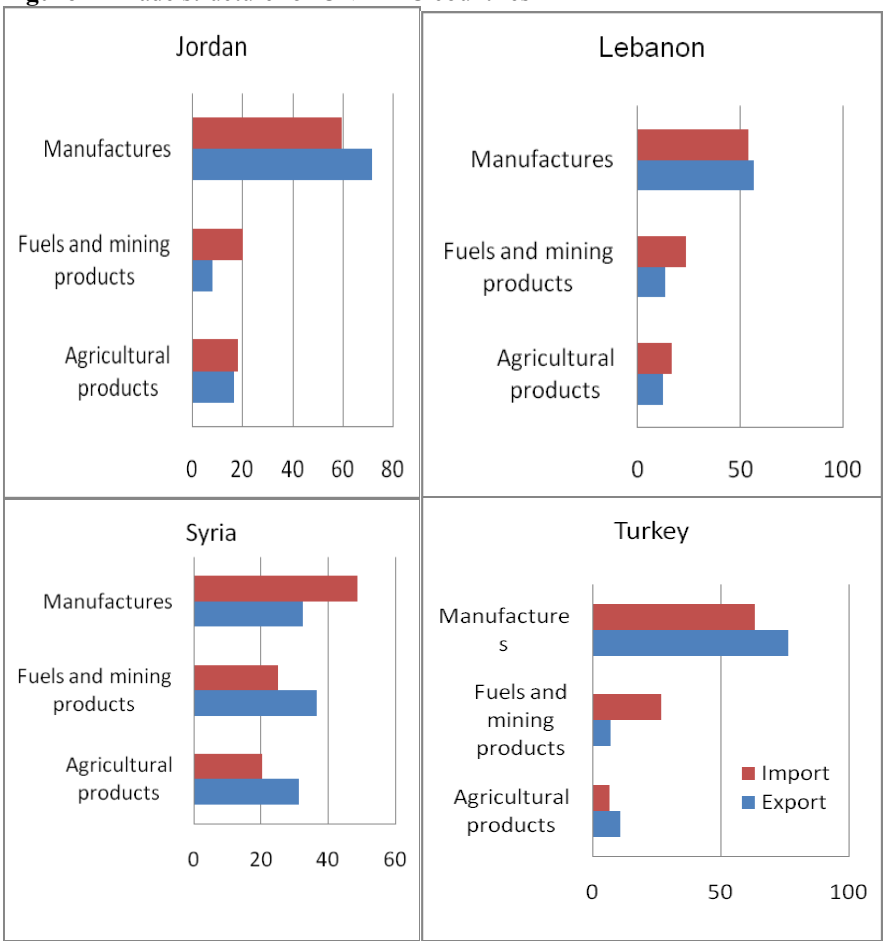
	Export	Import	Total Trade	Share of The Region(%)
Total Trade(of World)	121,879.81	194,739.80	316,619.61	
Turkey	102,234.00	140,928.00	243,162.00	
Syria	11,347.60	22,405.50	33,753.10	
Lebanon	3,257.13	17,170.10	20,427.23	
Jordan	5,041.08	14,236.20	19,277.28	
Intra-regional Total Trade.			12,608.64	3,98
Turkey	2,566.31	457.00	3,023.31	1,24
Syria	2,014.74	2,724.27	4,739.01	14,04
Lebanon	1,042.06	2,532.14	3,574.19	17,49
Jordan	417.54	854.59	1,272.13	6,59

Source: IMF Direction of Trade Statistics

The reasons behind the low intra-regional trade in these countries are involved. They comprise the low level of complementarity of trade (similar production structures), poor investment climates, weak political commitment to economic integration, lack of a common vision, and ongoing conflicts in the region.

Figure 2 illustrate export and import structure in the region. In Turkey's, Lebanon's Jordan's bulk of Export's are manufactured goods. Great majority of Syrian exports consist of fuel and agricultural products (Figure 2).

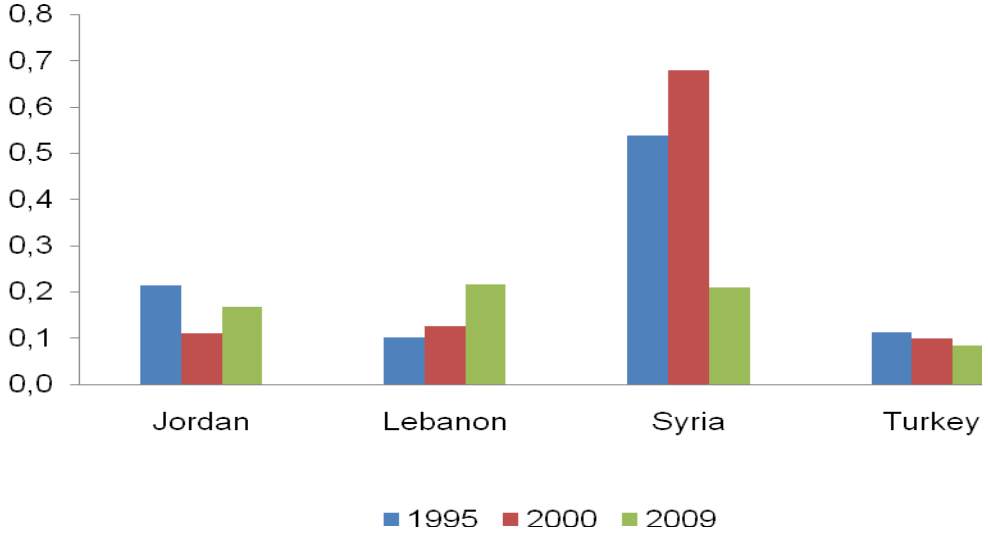
Figure 2- Trade structure for CNETAC countries



Source: WTO

Trade concentration is a main factor for increasing intra-regional trade. Syria and Lebanon are among the least concentrated countries in the MENA region with respect to export products, with a concentration index of around 0.2 (Figure 3). Most concentrated county is Turkey with a concentration index of 0.08. These countries have seen some improvement between 1995 and 2009, but Lebanon has not.

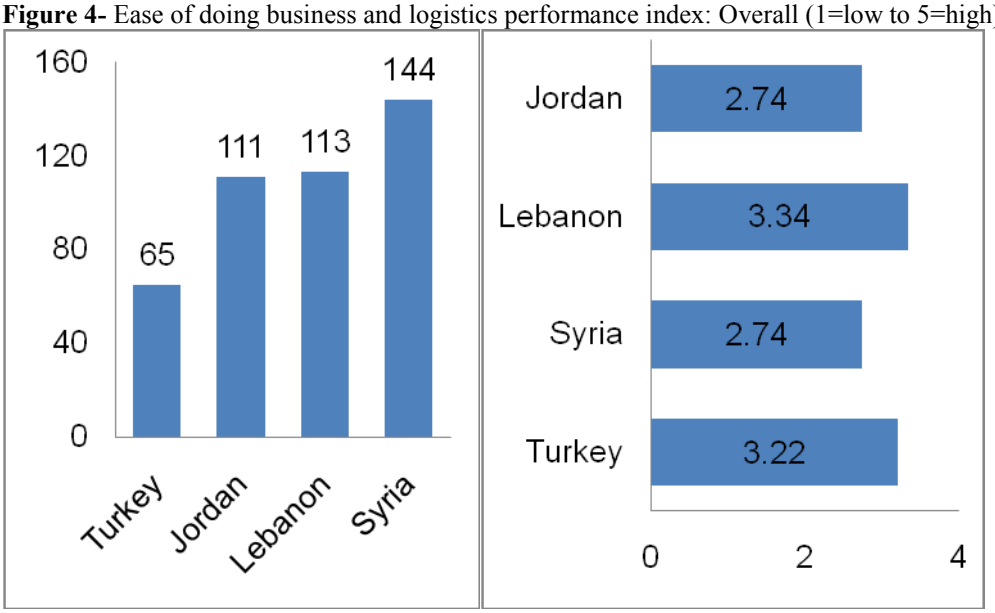
Figure 3- Exports concentration index



Source: UNCTAD, UNCTADstat, Concentration and diversification indices of merchandise exports and imports by country, annual, 1995-2009

Regional economic integration would be enhanced through better trade facilitation procedures and by better transport infrastructure. Policies relating to further improving the investment climate and private sector development also matter (Word Bank, 2010). Figure 4 shows the poor enabling environment for trade in the region. While Turkey is better than other countries with respect to the ease of doing business, Lebanon is more advanced with respect to logistics performance.

Figure 4- Ease of doing business and logistics performance index: Overall (1=low to 5=high) (2009)



Source: World Bank, Doing Business 2010, World Bank and International Finance Corporation; Global Development Finance and World Development Indicators data, 2010

3. GRAVITY MODEL: An application to trade and immigration in the context of integration

3.1 Theoretical Background

Gravity model based on universal gravitation law of Newton in 1867 was firstly used by Tinbergen [1962] and Pöyhönen [1963] to explain international trade flows between countries. Theoretical support for research in this field was originally very poor, but since the second half of the 1970s several theoretical developments have appeared in support of the gravity model. Theoretical foundations of the empirical model are firstly formed by Anderson (1979). He made the first formal attempt to derive the gravity equation from a model that assumed product differentiation. Bergstrand [1985, 1989] also explored the theoretical determination of bilateral trade in a series of papers, in which gravity equations were associated with simple monopolistic competition models. Helpman [1987] used a differentiated product framework with increasing returns to scale to justify the gravity model. More recently, Deardorff [1995] has proven that the gravity equation characterizes many models and can be justified from standard trade theories. Since the second half of the 1970's, gravity model has been successfully applied to international trade flows and migration, and foreign direct investment flows as well.

There is a large literature providing quantitative evidence of gravity model applied to economic integration. Some of them related to economic integration are as follows: Firstly Frankel (1997) is considered as one of the most important methods to formulize and explain determinants of inter and intra integration trade of EC, EU, EFTA, CUFTA, MERCOSUR and ASEAN. Soloaga and Winters (1999) used the same method for analyzing some economic integration such as EU, EFTA, NAFTA, MERCOSUR.

3.2 Gravity Equation

The gravity equations firstly apply to international merchandise trade flow in a period of 1999-2009 and then apply to migration flow to Turkey from 1999 to 2009.

3.2.1 Trade

The gravity model has been employed to provide a comprehensive empirical analysis for viability of possible economic integration between Turkey, Syria Lebanon and Jordan. According to the generalized gravity model, volume of trade (or exports and imports) between countries is a function of their incomes represented by GDPs and their geographical distances. Equation (1) states that the trade between two countries is determined positively by each country's GDP, and negatively by the distance between them.

$$X_{ij} = \beta_0 \, GDP_i^{\beta_1} GDP_j^{\beta_2} D_{ij}^{\beta 3} \qquad (1)$$

where X_{ij} indicates the flow of trade from country i to country j, Dij measures the geographical distance between the countries' capitals. β's are the parameters of equation.
Linneman added the population of countries into the equations as demographic variable. That's why equation (1) can be rewritten as follows:

$$X_{ij} = \beta_0 \, GDP_i^{\beta_1} GDP_j^{\beta_2} D_{ij}^{\beta 3} N_i^{\beta_4} N_j^{\beta_5} \qquad (2)$$

A high level of income in the exporting country indicates a high level of production, which increases the availability of goods for export. Therefore β1 is expected to be positive. The coefficient of Yj, β2 is also expected to be positive since a high level of income in the importing country suggests higher imports. The coefficient estimate for population of the exporters, β3, may be negatively or positively signed [Oguledo and Macphee, 1994] , depending on whether the country exports less when it is big (absorption effect) or whether a big country exports more than a small country (economies of scale). The coefficient of the importer population,β4, also has an ambiguous sign, for similar reasons. The distance coefficient is expected to be negative since it is a proxy of all possible trade transportation costs (Martinez-Zarzoso, 2003).
For the estimation purposes equation (2) in linear form in year of t is expressed as:

$$\begin{aligned} Log(X_{ij}) = \\ \beta_0 + \beta_1 \log(GDP_i) + \beta_2 \log(GDP_j) + \beta_3 \log(D_j) + \\ \beta_4 \log(POP_i) + \beta_5 \log(POP_j) + u_{ij} \end{aligned} \qquad (3)$$

3.2.2 Migration

The gravity model based on universal gravitation law of Newton has not been only used in international trade flows but also it has been used in different type of flows in economies. According to this model, attractive force between immigrant home and host countries depends on the difference between labor incomes in the two countries. Population size also matters; ceteris paribus, the more people there are in a home country, the more people are likely to migrate, and the larger the population in the host country, the larger is the labor market for immigrants. Like trade, migration costs are likely to be correlated with the geographical distance between countries. Econometrically Equation 4 gives linear form of gravity equation of immigration.

$$\begin{aligned} Log(MIG_{ij}) = \\ \gamma_0 + \gamma_1 \log(POP_i) + \gamma_2 \log(POP_j) + \gamma_3 \log(D_{ij}) + \\ \gamma_4 \log(RPCI_{ij}) + u_{ij} \end{aligned} \qquad (4)$$

where MIG_{ij} represents the log of immigration to host country i from home country j, and $RPCI_{ij}$ is the ratio of host to home country per capita incomes. The γ's are the parameter of gravity equation for immigration and expected signs of the parameters are $\gamma_0 > 0, \gamma_1 > 0 \; \gamma_2 > 0, \gamma_4 > 0$ and $\gamma_5 < 0$.

We now introduce some explanatory (dummy) variable to standard equation for migration to obtain augmented equation(5) as follows:

$$\begin{aligned} Log(MIG_{ij}) = \\ \gamma_0 + \gamma_1 \log(POP_i) + \gamma_2 \log(POP_j) + \gamma_3 \log(D_{ij}) + \\ \gamma_4 \log(RPCI_{ij}) + GAFTA_{ij} + COMBORD_{ij} + u_{ij} \end{aligned} \qquad (5)$$

Trading block's dummy variable (GAFTA) is used to evaluate the effects of preferential trade agreement and BORDER is dummy variable that takes a value of 1 if two countries have common border and 0 otherwise.

3.3 Data

Data (in current US$) on bilateral merchandise exports and total trade flows are from UNCTAT database. Bilateral trades of CNETAC countries are estimated over the period 1990-2009. The panel dataset has 240 observations (4×3×20). Incomes per capita, population, and human capital expressed by secondary school enrollment are from the World Development Indicators, and distance in kilometers between capitals is from http://www.indo.com/distance.

4. EMPIRICAL RESULTS

4.1 Trade effects

Table 6 reports the OLS estimates of the standard gravity equation 1 using all the countries in the sample. Equation estimated for separately imports, exports and sum of imports and exports (total trade) states that imports depend on GDP and country's export capacity is dependent on it's potential production. Thus we expect that economic size is positively dependent on imports and exports. The first column contains the results for imports. All variables have the right signs and are significant. An increase in home country's income (GDPit) leads to increase in purchasing power and an increase in imports. Similarly, an increase in the trading partners' income (GDPjt) leads to an increase in export. Home country's Income coefficients (elasticities) is 0.1 (below unity) indicating that its imports is less sensitive to its income and that of its trading partners. The distance variable is significant at the 1 percent level. The second and third columns report the result for exports and total trade respectively. The signs are all correct and the variables are significant. Overall, the results support the predictions of the gravity model for integration.

Table 6- Standard gravity model estimates for bilateral trade testing economic integration

Variables	**Export**	**Import**	**Trade**
Constant	-1,40	1.59	0.69
	(-1.08)	(1.51)	(0.87)
Log GDP of exporter	0.70	0.10	0.42
	(16.76)*	(3.11)*	(16.63)*
Log GDP of importer	0.29	0.75	0.48
	(7.54)*	(23.7)*	(20.38)*
Log DISTij	(-0.71)	-0.68	-0.59
	(-9.14)*	(-10.82)*	(-12.37)*
Number of observations	204	204	204
Adjusted R-squared	0.59	0.74	0.74
F-statistic	97.4	191.9	189.0

Notes: The figures in parenthesis are the values of the t-statistics. "*" denotes significance at 1% level.

Table 7 presents modified gravity model equation (3) for imports, exports and total trade. The modified equation does not suggest a clear cut relationship between population and trade flow. For example the relationship between export and population is not clear. The positive (negative) sign of β4 indicates that export of the trading partner is labor (capital) intensive and the negative (positive) sign of β3 indicates that export is mostly composed of luxury (necessities) goods (Bergstrand, 1989). Theory suggests that an increase in the domestic country's population leads to an increase in import and an increase in the population of the trading partner may affect domestic country's export positively in absolute terms. In conclusion, with some ambiguity, it is more likely that populations of domestic country and her trading partner will affect trade flows positively.

The coefficient of the distance variable has the expected negative sign and is highly significant in exports, imports, and total trade. The magnitude of the estimated coefficient remained fairly constant within the range (-0.47,-0.63).
The coefficient of distance in exports equation is about 0.63 indicating that when distance between two nonadjacent countries is higher by 1%, immigration between them falls by 0.63 %. On the other hand the effect of membership in Great Arabian Free Trade Agreement (GAFTA) is positive and significant. The coefficient of GAFTA in trade flow varied within a range (1.1, 1.4).

Table 7- Modified gravity model estimates for bilateral trade testing economic integration

Variables	**Export**	**Import**	**Trade**
Constant	-11.31	-4.94	-7.43
	(-5.47) *	(-2.33)	(-5.36) *
Log of GDPi	0.50	0.51	0.55
	(5.77)*	(5.84) *	(9.37) *
Log of GDPj	0.31	0.38	0.33
	(3.92) *	(4.82) *	(6.19) *
Log of DISTij	-0.63	-0.52	-0.47
	(-8.34) *	(-6.93) *	(-9.24) *
Log of POPi	0.80	-0.14	0.29
	(9.38) *	(-1.80)	(5.36) *
Log of POPj	-0.03	0.37	0.15
	(-0.34)	(4.17) *	(2.35)
GAFTA	1.44	1.06	1.24
	(5.08) *	(3.48) **	(6.52) *
Number of observations	204	204	204
Adjusted R-squared	0.73	0.77	0.79
F-statistic	93.2	114.7	129.5

Notes: The figures in parenthesis are the values of the t-statistics. "*" denotes significance at 1% level and "**" denotes 5 % significance level.

4.2 Migration effect

In gravity equation (5) for migration each variable is bilateral in that it applies to both countries i and j. However, we have to test the influence on immigration of unilateral variables that reflect characteristics in only the source country (Turkey). Table 8 reports the estimates of four gravity equation using panel data on total legal immigration to each of three Middle East countries (Syria, Jordan, Lebanon) destination countries from source country (Turkey) for the ten years 1999–2008.

As expected, distance (DIST) between countries reduce unilateral immigration while, the rate of home country to host country per capita incomes (RCPI) increase in migration holding other factors constant. In addition to distance the result of level of human capital expressed as secondary school enrollment on migration in source country is negative but not statistically significant. This means that there is no significant impact of education on migration in the short-run. One of the other explanatory variables is common border between countries and its estimated coefficient is also positive but not significant. The coefficient on adjacency is about 0.19 indicates that two countries sharing a common border immigration roughly as much 1.2 [exp (0.19) = 1.2] as two otherwise similar countries.

Table 8- Gravity model estimates for migration testing economic integration

Variables	**Standard Equation for Migration**	**Modified Equation for Migration**
Constant	113.9	101.23
	(6.56) *	(1.60)
Log of RCPI	0.39	0.24
	(1.84)***	(1.11)
Log of POP j	5.80	5.07
	(6.17) *	(1.92)
Log of Distance	-4.06	-3.11
	(-6.82) *	(-1.01)
Log of POPI	-9.39	-8.14
	(-7.56) *	(-1.80)
Log of EDU		-0.03
		(-0.34)
COMBORD		0.19
		(0.75)
Number of observations	30	30
Adjusted R-squared	0.93	0.93
F-statistic	99.6	62.6

Notes: The figures in parenthesis are the values of the t-statistics. "*" denotes significance at 1% level, "***" denotes significance at 10% level.

5. CONCLUSION

Turkey has not been insensitive to its regional developments since it was established in 1923. Especially it has taken active part in their economic, political and military corporation efforts in Western Block. In this regard it has started to accessions negotiation to become membership of Europe Union since 2009. However, the hesitations about Turkey's membership of the European Union countries, interfere in this process way that does not, have caused Turkey to enter the new orientation.

In this paper we briefly discussed possible economic integration in the context of multilateral regional free trade agreement was signed between Turkey, Syria, Jordan and Lebanon, the so-called "Close Neighbors Economic and Trade Association Council"(CNETAC). In an effort to promote economic growth, diversify external markets and complete the EU-adjustment process, Turkey has signed free trade agreements with many countries in the Balkans and the Middle East.

More than two-thirds of world trade today is estimated to be accounted for by regional economic projects. Among the expected benefits of regional economic integration is to promote international trade and investments, hence accelerating economic growth. In addition, free trade and economic integration help reduce political conflicts and tension between neighboring countries, hence contributing to international peace and stability.

We argue that there are several economic as well as political benefits for Turkey and Syria, Lebanon and Jordan countries from moving towards higher degrees of economic integration. As the degree of integration intensifies and the free flow of goods, services, and investments are guaranteed across borders, we expect higher growth as well as less political conflicts and tension in the region.

The question we address in this paper is ''is it viable an economic integration among Turkey, Syria Lebanon and Jordan?'' In order to answer this research question we try to estimate a gravity equation for bilateral trade flows among four countries in order to analyze its determinants and to estimate trade potentials for certain economic blocs and countries over a long time span (1990–2009).

The results indicate that the variables traditionally included in the gravity equation present the expected signs and highlight the role played by intra-bloc effects. The estimated coefficients present, in most cases, the expected signs and magnitudes. Income elasticities (exporter and importer) of both trade and migration flows are positively signed and are close to unity according to the theory. The income elasticity of the exporter is higher than that corresponding to the importer which indicates the importance of a country's production capacity in fostering exports. We cannot find robust evidence of additional trade between countries in any of models specifications, neither in a standard fixed-effect panel context nor modified model that regresses on distance, border and regional dummies.

The estimated coefficient for the exporter population variable is positively signed which shows an economies of scale effect, the greater the size of the exporter, the grater the exports. However, the estimated coefficient corresponding to the importer population is negatively signed but not significant in export gravity equation. However, import gravity equation, the sign is significantly negative which points towards the growing importance of the role played by absorption effects in international trade models. Concerning geographic distance, its coefficient presents a negative sign with elasticities around 0.5 in trade flow and around 3 in migration flow. Integration dummies, GAFTA, are positive signed and highly significant. Surprisingly education level is negatively signed but it does not influence migration flow. In addition to education, sharing border does also not affect the migration.

In addition to the economic effects of integration, the political and social effects are also important. Deepening of economic integration with these countries is welcome in the security of Turkey.

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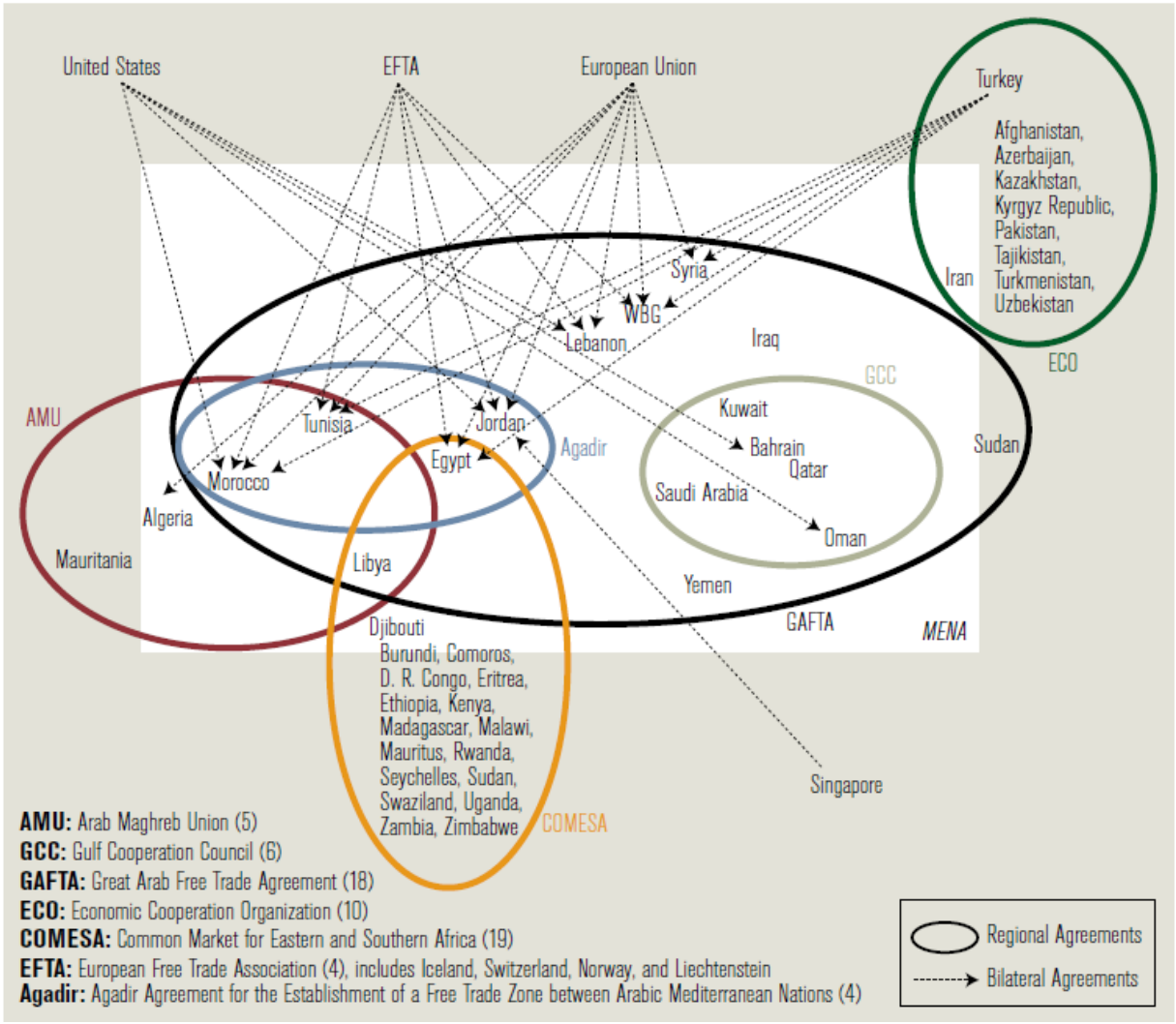
Annex 1. Regional and Bilateral Trade Agreement in the MENA



Source: World Bank 2010.