

Economic Analysis of Foreign Trade between Egypt and countries of the Great Arab Free Trade Agreement

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Abstract: Establishment of Great Arab Free Trade Agreement (GAFTA) is considered one of the most important economic achievements among Arab countries, where the declaration of GAFTA is an important factor to accelerate the process of canceling of tariff and non-tariff barriers on trade among Arab countries. The research problem is concerned with the volume of trade between Egypt and GAFTA countries is relatively small, so the object of this research is to try to access how to increase the volume of trade between Egypt and country members in the GAFTA, and to identify the most important variables affecting Egyptian exports and imports with GAFTA, and to identify the most important countries that are expanding or limiting in imports from Egypt. The results showed that Saudi Arab was ranked as the first in the list of Egyptian exports, which ranged between 21.7%, 20.4% during 2005, 2009. As it turns out that Kuwait was as the ranked first in the list of Egyptian imports in 2005 by 33.6% of the total value of Egyptian imports from these countries. Exports of Saudi Arab to Egypt were in the first rank during the period (2006-2009) by 37.8%, 48.4%, 44.3%, 42.3%, respectively. The results of the gravity model showed that an increase in per capita GDP in each of Egypt and GAFTA countries lead to increase exports and imports, while increasing the geographical distance between Egypt and GAFTA countries lead to a decrease both of them. Gravity model for exports showed that to Sudan and Syria response to the demand for Egyptian exports at high levels of income of individuals, while the gravity model for imports showed the Egypt response to import from Saudi Arabia, UAE, Libya, and Kuwait. The study therefore recommended the need to develop joint infrastructure projects, and improve the means of transport, particularly two states, with neighboring Libya and Sudan, and export of good and services take into account consumer taste and quality requirements.

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Key Words: Great Arab Free Trade Agreement (GAFTA) Gravity Model Egyptian Exports, Egyptian Imports, open door policy.

Introduction:

The importance of Great Arab free trade Agreement is that it will prove a sort of balance among the Arab economic integration through the permeability between the Arab markets, and the open door policy on the world economy, and also the different international trading Blocks due to the integrally of Arab markets will lead to establish some projects for the development of industrial, agricultural and other sectors to face the challenges of world trade association and the flowing of investments between the member countries, and benefiting from the huge Arab markets and establishing of mutual Arab investments, that achieve Arab development aiming to achieve the common Arab market, the establishment of the Great Arab free trade Agreement is considered one of important economic achievements on the common Arab work level, where the Arab countries began to liberate all the Arab commodities that are exchanged between them gradually since 1998, through decreasing custom, duties and taxes, which have the similar impact by 10% per year reaching to the full liberalization of all exchanged Arab commodities in the year 2005. The declaration of the Great Arab free

trade Agreement forms an important factor accelerate the process of releasing custom duties and other duties in the exchange trade and improving exchange terms between Arab countries.

Research Problem:

The research problem is that the volume of the exchanged trade between Egypt and members of the Great Arab free trade Agreement is relatively small which reflect its impact in the difficulty for getting hard currency which is needed to push economic development cycle where the Egyptian exports and imports value imports with the Great Arab free trade Agreement members were estimated 8.2 and 6.3 milliard dollar represents 31.8% and 12.2% from the total Egyptian exports and imports that are about 25.8 and 51.8 milliard dollar in 2009.

Research Aim:

Due to Egypt has a positive trade balance with the Great Arab free trade Agreement estimated members about 1.9 Milliard dollar in the year 2009, so the research aims to the possibility of raising the exchange value between Egypt and the Arab countries, through acknowledge of the most

important countries that can expand or limit its imports from Egypt, with the countries of the Great Arab trade Agreement and present some suggestions which help to increase commercial exchange between Egypt and (GAFTA) members. .

Research Method and Data Sources:

The "Gravity Model" was estimated by using the (section data) and "Panel Data" regression method also the data had been collected from the central authority for general mobilization statistics and also the web site of the "International Bank" during the period (1995-2009).

Advantages of the Great Arab free trade Agreement:

1. Protection of the Arab Economic interests, also activating the trade between them in a form working to raise the level of the Arab Economy especially that the Great Arab trade Agreement is considered an important take-off facing a gradual liberalization which lead to the liberation of securing the transportation of the production elements between the Arab countries and the distinguish usage of it, an activating in a useful way working to transfer it to an Arab custom union reaching to an Arab common market.
2. The Importance of this region is concealed in uniting and concluding the Arab markets through comprehending the new technology and directing towards the production, reducing the costs, creating new work opportunities, distinguishing distribution of resources, better integration of the industries, and the open door policy on the world Economy with confidence.
3. Facilitating the gradual integration process among the new trade systems and creating a unique Arab distinction to deal with the requirements of the world trade Organization and the different international trade masses, especially that the unifying of the Arab markets will lead to establishing some projects for the agricultural and industrial development to face the challenges of the agreements of the world trade organization, to support the confidence between the local and the foreign investors and also to inflow the investments among the member countries, the attraction of the direct investments from a broad and polarization of the projects of technological transfer, will contribute to the consolidation of Arab economic development which lead to realizing the hopes related to the Arab Common Market.
4. To facilitate the trade between the Arab countries members in the Great Arab free trade Agreement. Where the approval was cancelled on the certificates of source (origin) and all the attached certificates from the embassies and consulates of

the countries members as the distinguished treatment, also, the countries which is conform canceling legalization for the certificate of origin are : Saudi Arabia, Egypt, Sudan, sultanate of Oman, Bahrain, Kuwait, Lebanon, Morocco, Tunis, Syria. The United Arab Emirates).

5. The gradual reducing in the custom duties and the taxes which have similar affection, where it was declared the vary to liberate all the Arab commodities that are exchanged among the member countries which started from January 1998, through the reducing the custom duties, and the other taxes with have the same affection and hazing in each member country with the Beginning of applying the agreement by a percentage of 10% per year, and in a form led to achieve the complete liberation for all the Arab commodities with the beginning of the year 2005. Libya has cancelled all this fees since the beginning of the agreement; also Palestine was from the applying of the gradual reducing (The Arab summit- non usual- agreement No. 355 in the data 22-10-2000).

As for Sudan, started reducing the fees on the exports with the Sudanese origin by 60% since January 2003, reading to 100% percentage since January 2005. As for the Arab origin imports in Sudan, it have been collected all custom duties completely since the end of the year 2004 there for began the gradual reducing by 20% percentage from January 2005 reaching the complete liberation in January 2010 (The Arab Summit –No. 233 in 28-3-2002) The gradual began in Yemen from January 2005 with a percentage of 16% yearly until January 2009, then it became 20% in the beginning of 2010, and to be totally admitted at the end of that year.

The obstacles of processing the agreement of the Great Arab Free Trade Agreement:

1. The non-custom restricts either technical or administrative, the most important of it is the overestimation of custom re-evaluation fees, the complications in the procedures of crossing the borders, over-estimating the period spent in checking the samples and the inspection procedures, in addition, the over-estimation of the requirements of specifications and measurements, the strict limitation on weight control, the complications in the procedures of detecting and inspection and the medical procedures.
2. The fees and adwinshative and technical dues similar to the custom duties that prevent achieving the expected hopes from the area (region), especially it shows a progressive increase than the previous time especially in the sphere the overland freight and the transit.

3. The not reading of a decision for detailed rules of origin, unified for all the Arab origin commodities.
4. The continuation of some member countries of the exception of the gradual reducing the custom fees, where Egypt reject it cancellation with the condition of putting the unique detailed rules of origin for the Arab commodities.
5. The non-commitment of some member countries with the adjudicates of the executive program, like Sudan which didn't commit diving the gradual reducing of custom fees and taxes of the same impact by a percentage of 16% beginning of the year 2005, it has been late because the renew and the development on the Sudanese yard related to the definition of the peace agreement in Sudan which has opposed new burdens on the Sudanese government budget.
6. The non-completion of all the Arab countries to Join the agreement, Algeria and Mauritania didn't complete the procedures of joining the (GAFTA) and, there three are Arab countries didn't join the (GAFTA) yet, these are Djibouti, Somalia and the Moon Islands.
7. The insistence of some member countries to the conditioning of the approval on the certificates of origin from its embassies and consulate like Qatar united Emirates and Libya, although it was a plural decision of canceling this condition.
8. The imposed restrictions on the currency exchange in some Arab countries through paying exaggerated dues like Egypt, Syria and Iraq.
9. The decrease of the freight costs in some Arab countries and the connections between the member countries.
10. The difficulty of gaining visas to some Arab countries like Saudi Arabia, Kuwait, Morocco and the United Emirates.

The Recent situation of the foreign trade between Egypt and the Arab countries:

The Egyptian exports are likely to be of a relative variation comparing with the imports as follows:

The development of the Egyptian exportation value to the most important country members in the Agreement (GAFTA):

The Table (1) shows the evolution of the Egyptian exports in Million dollars to the most important Arab countries during the period (2005-2009). Where it was occurred that the Saudi Arabia had occupied the first standing in the Egyptian exports list that was from about 21.7% in the year 2005 to about 20.4% in the year 2009 of the total value of Egypt's exports to these countries.

In the second standing, is the United Emirates with about 17.4%, 16.1% in the years 2005-2006 squinty, then Libya occupied the second standing in the years 200-2009 by about 14.6%, 15.1% in sequence.

Algeria, had occupied the last standing on the Egyptian export list in the years 2005, 2006 by a percentage of 1.8% and 2.0% squinty, while Kuwait had occupied the last standing in the years 2007, 2008 and 2009 by a percentage of 2.5%, 3.1% and 2.6% in sequence.

Table (1): The value of the Egyptian exports to the member countries in Great Arab Free Trade Agreement (GAFTA).

Exp	2005	%	2006	%	2007	%	2008	%	2009	%
Algeria	31.3	1.8	36.8	2.0	59.3	2.8	189.8	3.4	364.3	5.6
United Emirates	305.8	17.4	302.7	161.1	198.3	9.4	530.0	9.6	558.6	8.5
Jordan	196.4	11.2	249.3	13.3	301.8	14.3	717.0	13.0	933.9	14.3
Kuwait	39.0	2.2	64.7	3.4	53.0	2.5	168.8	3.1	169.9	2.6
Lebanon	174.0	9.9	204.0	10.9	326.7	15.5	419.3	7.9	441.1	6.8
Libya	149.8	8.5	168.6	9.0	247.8	11.7	803.1	14.6	987.8	15.1
Morocco	85.9	4.9	84.8	4.5	169.7	8.0	339.7	6.2	359.0	5.5
Saudi Arabia	381.8	21.7	318.4	16.9	384.0	18.2	1247.4	22.6	1330.0	20.4
Sudan	185.2	10.5	194.6	10.4	165.3	7.8	545.8	9.9	563.4	8.6
Syria	207.4	11.8	255.7	13.6	208.0	9.8	557.7	10.1	828.1	12.7
Total	1756.7	100	1879.5	100	2113.7	100	5521.5	100	6533.0	100

Source: central authority for general mobilization & statistics, between of foreign trade- separate editions.

Table (2): The value of the Egyptian imports to the member countries in Great Arab Free Trade Agreement (GAFTA)

Exp	2005	%	2006	%	2007	%	2008	%	2009	%
Algeria	694.5	27.6	601.7	16.0	369.8	8.0	495.2		364.3	5.6
United Emirates	137.2	5.5	131.4	3.5	191.0	4.1	881.9		558.6	8.5
Jordan	72.6	2.9	85.3	2.3	66.0	1.4	108.1		933.9	14.3
Kuwait	843.0	33.6	1084.0	28.8	1244.6	26.9	1603.8		169.9	2.6
Lebanon	66.0	2.6	73.7	2.0	102.0	2.2	171.0		441.1	6.8
Libya	119.2	4.7	102.9	2.7	197.9	4.3	261.5		987.8	15.1
Morocco	11.0	0.7	14.0	0.4	23.3	0.5	38.4		359.0	5.5
Saudi Arabia	357.7	14.2	1425.3	37.8	2243.5	48.4	3115.1		1330.0	20.4
Sudan	64.6	2.6	60.2	1.6	50.5	1.1	48.9		563.4	8.6
Syria	146.5	5.8	190.2	5.0	146.2	3.2	306.0		828.1	12.7
Total	2512.2	100	3768.6	100	4634.8	100	7029.7		6533.0	100

Source: central authority for general mobilization & statistics, between of foreign trade- separate editions.

The development of the Egyptian importation value from the most important country members in the (GAFTA).

Table (2) shows the evolution of the value of the Egyptian imports in Million dollars from the most important Arab countries during the period (2005-2009), where it occurred that Kuwait had occupied the first standing in the Egyptian imports list in the year 2005 by a percentage of 33.6% of the total imports of Egypt from these countries.

Also exports of Saudi Arabia to Egypt had come in the first standing during the period (2006-2009) by a percentage of 37.8%, 48.4%, 44.3% and 42.3% squinty.

The Kuwait's exports to Egypt the second standing during the period (2006-2009) by a percentage of 28.8%, 26.9% 22.8% and 24.2% in sequence.

Morocco had occupied the last standing in the Egyptian imports list during the period (2005-2008) with a percentage of 0.4%, 0.4%, 0.5% and 0.5% in sequent while Sudan occupied the last standing in the year 2009 with a percentage of 0.9%.

Measuring the economic trade exchange between Egypt and the Great Arab free trade Agreement .

By estimating the gravity Model for trade exchange between Egypt and the most important countries of the great Arab free trade Agreement in both cases of exports and imports they are (Algeria-United Emirates – Kuwait-Lebanon-Libya Saudi Arabia- Sudan- Syria) during the period (1995-2009), where Egypt export to them about 80% also, it imports about 75% from the total of Egypt's exports and imports from the Great Arab free trade Agreement during the period (2005-2009).

$$\ln Y_{ij} = \beta_0 + \beta_1 I_n PcGDP - \beta_2 I_n PcGDP_j + \beta_3 I_n DIST_{ij} + \xi_{ij}$$

$$\ln Y_{ij} = \beta_0 + \beta_1 \ln Pc GDP_i - \beta_2 \ln Pc GDP_j + \sum_{j=1}^s a_{j-y} D_j + \xi_{ij}$$

Where

Y_{ij} = Egypt's real exports and imports to or from the country (j) in Million Dollar

$Pc GDP_i$ = per- capita from the real local production total in Egypt (i) in thousand Dollar.

$Pc GDP_j$ = per – capita from the real local production total in the country (j) in thousand Dollar.

$Dist_{ij}$ = the Geographic distance between Egypt (i) and each country (j) in Kilometer.

D_{jt} = Dummy variable for the country (j).

The first model reflects the individual impact of the population of every country on Egyptian exports and imports of and contains variables of per-individual from the total local

production of Egypt and the rest countries, also, the geographic distance between Egypt and each country.

Also the second model reflects the estimation of the same first model with inserting some dummy variables.

The estimation results of the gravity model for exports:

The equation (1) in Table (3) pointed to the gravity model of exports, from it, we conclude that the per-individual from total local production for each of Egypt and the other countries of the Great Arab free trade Agreement and the geographic distance between Egypt and each country, that explains about 80.2% of the variable changes in the

exports of Egypt to these countries, while the remained changes owed to other variables that are not measured in the model as for a definition factor measure, the model of gravity was signified at the level of 0.01 as for the "F-test".

The results show that increasing of per-capita from the total local production in Egypt by 1.0% lead to increasing of Exports of Egypt to the member Great Arab free trade Agreement by a

percentage of 7.25% while it occurred that the per-capita from the total local production in each country of these countries by 1.0% lead to increase of the Egyptian exports to them by a percentage of 0.32%, also, it occurred that the increase the geographic distance between Egypt and each country by 1.0% lead to decrease in Egyptian exports by a percentage of 0.58% , that with the constancy of the other remained factors at a certain level.

Table (3): The results of estimation the gravity model for the exports and imports of Egypt with the grand Arab free trade Area during the period (1995-2009)

Constant var.	Exports Model (1)	Imports Model (2)
Constant/limit	-44.37 (-11.60)**	-45.34 (-6.49)**
Per-Individual from the total local production in Egypt.	7.25 (14.84)**	6.84 (7.31)**
Per- Individual from the total local production in GAFTA members.	0.32 (1.99)*	-66 (2.81)**
Geographic distance	-0.58 (-2.05)*	-0.49 (-1.67)***
N	150	150
R ²	0.820	0.768
F-Test	(263.2)**	(73.4)**

Where: The numbers between brackets and under the factors of regression point to the values of the calculated (t).
-(*), (**), (***) point to the significance at the level of 0.05, 0.01, 0.10 squinty.

-N: Number of scenes, R²: factor of definition, f-test: the value of the calculated f.

Source: Gathered & Calculated from the data of the text (1), (6), (17), (19).

The equation (1) mentioned in table (4) to the gravity modal of exports, to estimate the individual compact for each country on the Egyptian exports from this it occur that the per-capita from the total local production for each of Egypt and the member countries of the Great Arab free trade Agreement in the model and the geographic distance between Egypt and each countries of them explains about 87.5% of the changes in Egypt's exports to these countries while the remained changes is owed to other factors not measured in the model as the factor of definition, the gravity model is significant statistically at the level of 0.01% as for the F-Test the results shows that the increase of per-individual from the total local production of Egypt by 1.0% lead to increase Egypt's exports to the countries of the Great Arab free trade Agreement by a percentage of 5.74% , it also occurred that the increase of the per-individual form the total local in each of these countries by a percentage of 1.0% lead to the increase of Egypt's exports to the countries of the Great Arab free trade Agreement by a percentage of 2.12% while it occurred that the increase the geographic distance between Egypt and each country by 1.0% lead to decrease Egypt's exports by percentage of 0.32%, this was readied with the constancy of other factors at a certain level. The same results was showed

by equation (2) in Table (4), that the value of "Group F-Test" to measure the individual impact for each country on the Egyptian exports was reached about (29.5), this was greater than the tabled value, thus rejecting the privative hypothesis and the acceptance of the alternative hypothesis that explains the existence of the impact of the individuals of these countries on the Egypt's exports, where , it showed that Sudan and Syria respond to the demand on Egypt's exports when the level of income of its individual by a percentage 0.62% and 0.51% it sequence in also occurred that the most important countries which were responsible.

The results of estimating the "gravity Model" for the imports:

The equation (2) in table (3) points to the "gravity Model" to measure the individual impact for each country on Egyptian imports, it occurs from it that per-capita from the total local production for each Egypt and the countries member of the grand Arab free trade area. In the model and the geographic distance between Egypt and each country of them, explain about 76.8% of the changes in the imports of Egypt for these countries while the remained changes refers to other factors not measured in the model as for the factor of

definition the "Gravity Model" was statistically signified at the level (0.01) as for the F-Test".

The results show that the increasing of per-capita from the total local production in Egypt by 1.0% lead to increase of Egyptian imports from the members of the Great Arab free trade Agreement by a percentage of 6.84% while it was occurred that when the per-individuals from the total local production in each of

these countries increase by 1.0% lead to Egyptian imports increase by a percentage of 0.66% from them, also it occurred that the increase the geographic between Egypt and every country by 1.0% lead to decrease Egyptian imports by a percentage of 0.49% with constancy of other factors at a certain level.

Table (4): The results of estimation of the Gravity Model in measuring the impact of the countries of the Grand Arab free trade Area on the Egyptian foreign trade during the period (1995-2009)

Constant Var	(1) Exports Model	(2) Imports Model
Constant/limit	-48.83 (-14.54)**	-44.75 (-6.51)**
Per-Individual from the total local production in Egypt.	5.74 (9.00)**	7.43 (6.21)**
Per-Individual from the Total local production in (GAFT) members.	2.12 (3.93)**	0.05 (3.26)**
Geographic distance	-0.32 (-2.41)*	-0.51 (-1.99)*
The impact of each country		
Algeria	-1.57 (-3.97)**	1.48 (1.88)***
United Emirates	-4.64 (-3.35)**	1.96 (3.80)**
Kuwait	-5.50 (-4.36)**	1.61 (2.72)**
Lebanon	-0.04 (-2.17)*	0.58 (1.83)***
Libya	-3.10 (-3.20)**	1.68 (3.98)**
Saudi Arabia	-2.14 (-2.31)	3.73 (2.27)*
Sudan	0.62 (2.42)*	0.45 (2.08)*
Syria	0.51 (1.99)*	0.81 (2.37)*
N	150	150
R ²	0.875	0.748
F-test	400.3	121.1
Group F test	(29.5)**	(15.3)**

-N: Number of scenes, R2: factor of definition, F=test: the value of the calculated (F)

- Group F. test: The test of country impact.

- Source: Gathered & Calculated from the data of the test (1), (6) (17), (19)

of the decreasing of Egypt's exports in case of the raise of the individual income, are, Kuwait, United Emirates, Libya and Saudi Arabia, that shared in decreasing Egypt's exports by a percentages of 5.5%, 4.64% , 3.10% and 2.14% squinty.

The equation (2) in table (4) points to the "gravity Model" to measure the individual impact for each country on Egyptian imports it occurs from it that per-capita from the total local production for each Egypt and the countries member of the Great Arab free trade Agreement in the model and the geographic distance between Egypt and each country

of them explains about 74.8% of the changes happened in Egyptian imports to these countries, while the remained changes to other factors that are not measured in the model as the factor of definition, the gravity model" was statistically signified at the level (0.01) as for the F-Test" the results explain that the increase of the Per-capita from the total local

production in Egypt by 1.0% lead to the increase in Egyptian imports from the country member of the Great Arab free trade Agreement by the percentage of 7.43% it also occurred that the increase of the per-capita from the total local production in each country of them by 1.0% lead to the increase in the Egyptian imports from the countries of the Great Arab free trade Agreement by a percentage of 0.05% while it occurred that the increase in the geographic distance between Egypt and each country by 1.5% lead to the decrease of Egyptian imports by a percentage by 0.51% , with the constancy the other remained factors at a certain level .

The same results of equation (2) in Table (4) that the value of "group F-Test" to measure the individual for each country on Egyptian imports, reached about (15.3) which is greater than the value in table, although we must refuse the hypothesis of privation and accept the alterative hypothesis which shows the existence of an impact of the individuals of these countries on Egyptian imports, where it explain the respond of Egypt to increase its imports from Saudi Arabia, Emirates , Libya and Kuwait by percentages of 3.73%, 1.95%, 1.68 and 1.61 squinty.

Recommendations:

1. Developing the Mutual fundamental projects between the members of the Great Arab free trade Agreement.
2. Improving the transportations between Egypt and countries of the Great Arab free trade Agreement, especially the two neighboring member countries, Libya and Sudan.
3. Exports of Egyptian goods and services take account of the consumer Arab taste and quality requirements through studying the inside markets member countries of the Great Arab free trade Agreement.
4. Establishing a mutual area for investment between the members of the Great Arab free trade Agreement.
5. Removing the obstacles and the non –custom strains that disrupt achieving and activating the agreement and obligate all the member countries to follow rules and discussions of the agreement

of what deal with liberation of the custom and concealing the non-custom strains.

6. Elasticity inactivating the cleanses of the agreement, taking in consideration the less-developing countries and their economic status.
7. Limitation of prescription of exceptions of the custom liberation to some member countries.
8. Impelling the Arab countries that are not members in the agreement to complete their procedures of joining the Great Arab Free Trade Agreement.
9. Facilitative the procedures of graining visas among the members.

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