

Trade and Intra-regional Integration: Is Arab Region A Potential Candidate for Economic Union?

Yu-Feng L. Lee¹ and Abdelaziz Gohar

The existing economic/currency unions such as the ‘Dollar Zone’ and the ‘Euro Zone’ have spurred academic and political dialogues regarding the economic integration in the Arab region. This paper analyzes recent inter- and intra-Arab trade trends and its regional patterns of trade, based on the standard gravity model of international trade.

As the conventional gravity model has predicted, countries with closer distance significantly trade more than otherwise in the Arab region. However, higher GDP per person weakens the intra-Arab exchange. Possible explanatory factors include the different levels of economic development in Arab, sub-grouping trade arrangements between individual Arab countries (e.g. “Maghreb Union”) and the European counterparts, and the Gulf oil exporters’ trade with the non-Arab developed nations around the world. It is found that Arab countries with bilinguals (i.e. Arabic and French) and/or dual religious beliefs (i.e. Islam and Christianity) tend to significantly diverge their bilateral trade. Particularly, such alternative in reality offers Arab countries greater trade option inter-regionally. Given these findings, it is suggested that creating an intra-Arab economic union is currently infeasible, and a needing caution is essential for any pursuit of such integration.

1. Introduction

In the contemporary world with highly-emphasized globalization, the existing economic/currency unions such as the ‘Dollar Zone’ and the ‘Euro Zone’ have spurred intellectual and political dialogues with respect to the possible economic integration in the Arab region. As

¹ Corresponding author. Department of Economics and International Business, New Mexico State University, Las Cruces, NM, U.S.A. E-mail: wlin@nmsu.edu

debated in these dialogues, to have a regional integration may much likely assist Arab to strengthen its economic competitiveness and global citizenship in the world economy.

Studying the intra-Arab growth and trade trends may seem somewhat depressing. Without startling and sustainable growth like that in its neighboring East Asian region, the overall Arab regional growth experience reveals to be unpleasant and unstable between 1960s and early 2000, with the average regional growth rate equivalent to 1.24%, and the individual country's growth rate ranging from around -6% (e.g. -6.5% of Kuwait in 1970~80; -5.7% of Saudi Arabia in 1980~90) to 8% (7.9% of Saudi Arabia in 1970~80; 6.4% in Syria 1970~80) across different decades (see Noland and Pack, 2007). Such fluctuating growth may be attributed to different levels of national development among which the high-income oil exporters such as Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE) are able to resourcefully develop their economies through export revenue, while the low-income nations such as Mauritania, Somalia, Sudan, Yemen, Djibouti, and Morocco are endowed with comparably low natural resources for foreign trade and fail to commit a governmental export-led strategy.

As to the international trade performance, the Arab region has evidently "undertraded" in manufacturing exports both intra- and inter-regionally with less than US\$20 billion per annum between 1980 and early 2000, as compared to over US\$1,200 billion traded by the group of East-Asian economies in 2004. Such Arab under-trade is reflected by the higher level of trade protection with an average tariff rate in 23% relative to its East-Asian counterpart which sets the preferential trade tariff lower than 10% (see Noland and Pack, 2007). Although more and more Arab economies have their interests in preferential scheme through tariff elimination on merchandise trade, the "free(r)-trade" commitment could be still far from adequacy to promote the intra-Arab integration, given that the service and financial/investment sectors remain heavily regulated in the region.

To study the likelihood and/or appropriateness of intra-Arab integration, various approaches can be employed. In this paper, the bilateral trade effects are evaluated using the conventional "gravity" model of international trade. It may be recommendable for further integrating

efforts, if the empirical results disclose a strong trade gravity pulling toward the region. Nevertheless, an incompatible trade pattern in the region would rather suggest the non-readiness of the intra-Arab economic unionization, *ceteris paribus*.

The paper is organized as follows. After the first section of introduction, Section (II) summarizes the literature of the intra-Arab integration. Section (III) provides a preliminary analysis centered on the recent intra-Arab trade trend and Arab countries' fundamental comparison. Section (IV) outlines the theoretical framework and methodology. Section (V) reports the empirical findings. The entire study is then concluded in the final section.

2. Literature Review

Political and intellectual interests in building an Arab economic zone have been raised in around fifty years ago. However, these interests were hardly put into effective actions. As studied in Konan (2003), the potential regional economic integration ought to be desirable and its resulting benefits may be substantial. Using the empirical study of Egypt and Tunisia, he referred that *deepening integration* among Arab economies, involving regulatory reform and services liberalization, may yield larger regional welfare gains than the *shallow integration*, namely the elimination of tariff and non-tariff trade barriers. He recommended especially the scheme of service sector liberalization in the Arab region for significant economic payoffs. Laabas and Liman (2002) supported with a similar result of the welfare gain from the creation of a sub-regional currency union centered on the oil-producing Gulf Cooperation Council (GCC) countries.

In terms of the feasibility of economic integration among Arab countries, many academic debates focus on the political and economic divergence, despite common factors such as religion, language, customs and traditions adopted among these countries. Noland and Pack (2007), Zineldin (1998), and Fawzy (2003) agreed that although over the past decades, there were series of attempts for intra-Arab regionalization including the early 1950s Arab League, Treaty for Joint Defense and Economic Cooperation, Arab Economic Unity Agreement; the 1960s endeavors of creating an Arab common market; the recent advent of

Gulf Cooperation Council, the Arab Cooperation Council, the Arab Maghreb Union, and the interests in forming an Arab free trade area in late 1990s, the results of these efforts were short-lived and negligible. Evident reasons consist of, across most of the Arab economies, non-existence or underdevelopment of capital markets, low trade complementarity explained by the classical Heckscher-Ohlin patterns of trade, distinct levels of economic development and the wide intra-regional income gap (between the lowest per capita income of US\$610 in Sudan and the highest of US\$12,710 in Kuwait), over-protected trade policy leading to de-prioritized exports and lack of global competitiveness, and the over-sized governments which marginalize and even crowd out the economic capability of private sectors. From the political point of view, Fawzy (2003) stated that the Arab governments believed that the regional integration is rather politically undesirable due to their belief under which the expected political costs of integration most likely outweigh its benefits. The fear of loss of national sovereignty, lack of commitment to form the supranational or supra-regional institution, and the insufficiency and involuntary acceptance of regional leadership make these governments reluctant to formally integrate themselves (also see Aarts, 1999).

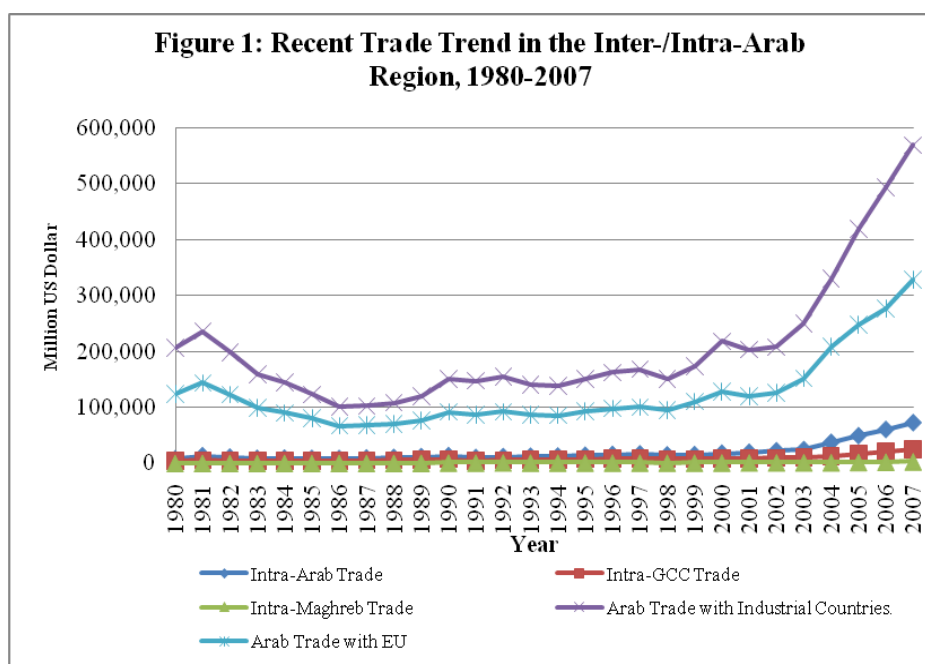
3. Preliminary Analysis: Intra-Arab Trade Trend and Intra-regional Country Comparison

In this section, first, Figure 1 offers the recent inter- and intra-Arab trade outlook. As observed, trade in the intra-Arab region including those of the Gulf Cooperation Council (GCC) and the Maghreb Union has been trivial and stagnant between 1980s and late 1990s. Since early 2000, due to some renewal and increasing interests of preferential scheme between/among the Arab nations, the aggregated regional trade volume started to increase, even if it is not yet evident in the Maghreb group.

On the contrary, for the comparison purpose, it is unambiguous to trace a greater inter-regional trade between the Arab economies and the EU, as well as their trade with the industrial countries including some major OECD members (the U.S., U.K., Germany, and Japan). Both trade trends move consistently and a significant growth is especially notable after the advent of millennium.

Quite obviously, the intra-Arab region is “undertraded” due to the fact that its trade with the rest of the world somewhat diverges its own

regional exchange. Given that a fair proportion of intra-regional trade is crucial to the economic integration, the Arab economies are in need to intensify their bilateral exchange before the integration could effectively proceed further.



Covering twenty Arab economies, Table 1 tabulates the multinational comparison with respect to the levels of economic development, types of government, official language (with or without other common languages/dialects), religion, and the colonial history. These fundamentals can be used to measure some pre-conditions for the possible formation of the regional economic island. Other things being equal, if they are synchronized across countries, the next step for the potential intra-Arab regionalization may be worth to pursue.

In the level of economic development, following the *World Development Indicators* of the World Bank, most Arab economies including Algeria, Djibouti, Egypt, Iraq, Jordan, Morocco, Sudan, Syria, and Tunisia are classified as the lower-middle income countries, with the Gross National Income (GNI) per capita in 2008 ranging from US\$936 to US\$3,705. To appropriately compare, these countries' 2008

Gross Domestic Product (GDP) per capita adjusted to Purchasing Power Parity (PPP) are also reported. Lebanon and Libya are listed as the upper-middle income countries with their GNI per capita falls between US\$3,706 and US\$11,455, where Lebanon's GDP (PPP) per person is comparable but slightly lower than that of Libya at around US\$12,000.

The Gulf countries, also known as the Arab oil producers, including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE) are categorized as the high-income (non-OECD) economies. Their GNI per person is higher than US\$11,456; meanwhile, the highest GDP (PPP) per person is realized in Qatar at US\$86,669, followed by Kuwait, the United Arab Emirates, and Bahrain over US\$30,000. In contrast, Somalia and Yemen were ranked in the low income group with their GNI per person less than US\$935. The average GDP (PPP) per capita of Yemen is approximately US\$2,500, which is four-fold to that of Somalia.

Having preliminarily evaluated these statistics, one could find that the levels of most Arab countries' economic advancement are somewhat dichotomous into the high/upper-income group and the low/lower-middle income group, rather than reaching a converging/synchronized economic development.

In the political structure across Arab, slightly more than half (11 of 20) of the sample nations are in the system of *republican* government. Bahrain, Jordan, Morocco, Oman, and Saudi Arabia, on the other hand, build their government based on the *constitutional/monarchy* system after their independence (except for Saudi Arabia without colonization history). A similar structure of monarchy, namely *emirate*, is adopted by Kuwait, Qatar, and United Arab Emirates. In rather different form, Libya is currently under the political regime of *Jamahiriya*.

In short, the overall political system in the Arab world is observed to be in a prevalence of undemocratic regimes (see Noland and Pack, 2007). Although to establish an economic bloc emphasizes preferential economic and political liberalization (to the degree of democracy), such prevalence may in fact bring in the political convergence in Arab, which in turn forms the consensus in the pursuit of political reform toward liberalization.

The language and religion components are in the highest level of parity. Most Arab dwellers speak Arabic, the official and most popular lingo. In addition, Islam widely spreads across the sample nations. The convergence of them may serve as a favorable mean for the entire region in any future economic integration.

The last column of Table 1 shows the colonial history across the Arab nations. Majority of the sample nations were politically colonized by one of the two colonizers, namely United Kingdom and France. Libya and Oman were once governed by Italy and Portuguese, respectively. It is believed that countries colonized by the same colonizer tend to share similar colonial experience. Thus, it might be less problematic to integrate these nations in the Arab area, at least to the socio-economic level, given their common colonial history, *ceteris paribus*.

Table 1: Intra-Arab Country Comparison

Country	Level of Economy / GDP Per Capita 2008 (PPP; US\$)	Government	Language	Religion	Colonizer
<i>Algeria</i>	Lower-Middle Income / \$6,927	Republic	Arabic, French	Islam	France
<i>Bahrain</i>	High Income / \$33,988	Constitutional Monarchy	Arabic	Islam, Christian	UK
<i>Djibouti</i>	Lower-Middle Income / \$2,400	Republic	French, Arabic	Islam, Christian	France
<i>Egypt</i>	Lower-Middle Income / \$5,904	Republic	Arabic	Islam, Christian	UK
<i>Iraq</i>	Lower-Middle Income / \$4,000	Republic	Arabic, Kurdish, Turkman	Islam, Christian	UK
<i>Jordan</i>	Lower-Middle Income / \$5,171	Constitutional Monarchy	Arabic	Islam, Christian	UK
<i>Kuwait</i>	High Income / \$40,943	Emirate	Arabic	Islam	UK
<i>Lebanon</i>	Upper-Middle Income / \$12,063	Republic	Arabic	Islam, Christian	France
<i>Libya</i>	Upper-Middle Income / \$14,593	Jamahiriya	Arabic	Islam	Italy
<i>Mauritania</i>	Low Income / \$2,108	Republic	Arabic, French	Islam	France
<i>Morocco</i>	Lower-Middle Income / \$4,432	Constitutional Monarchy	Arabic, French	Islam	France
<i>Oman</i>	High Income / \$26,094	Monarchy	Arabic	Islam	Portuguese
<i>Qatar</i>	High Income / \$86,669	Emirate	Arabic	Islam, Christian	UK
<i>Saudi Arabia</i>	High Income / \$24,119	Monarchy	Arabic	Islam	--
<i>Somalia</i>	Low Income / \$600	Republic	Arabic, Somali	Islam	UK, Italy
<i>Sudan</i>	Lower-Middle Income / \$2,335	Republic	Arabic, Nubian	Islam, Christian, Indigenous	UK
<i>Syria</i>	Lower-Middle Income / \$4,668	Republic	Arabic	Islam, Christian	France
<i>Tunisia</i>	Lower-Middle Income / \$8,020	Republic	Arabic, French	Islam	France
<i>UAE</i>	High Income / \$39,076	Emirate	Arabic	Islam	UK
<i>Yemen</i>	Low Income / \$2,404	Republic	Arabic	Islam	UK

Source: International Monetary Fund, <http://imf.org>; CIA World Factbook; World Bank.

4. Theoretical Framework and Methodology

To appropriately evaluate the intra-Arab economic integration, the conventional “gravity” model of international trade is used. Intellectual modeling of the “gravity” analysis has appeared in many studies of the currency/monetary union and economic integration across different regions (Rose, 2000; Rose and Engel, 2002; Frankel and Rose, 1998; Sharma and Chua, 2000; Baxter and Kouparitsas, 2005; Kalbasi, 2001; Gilbert, Scollay, and Bora, 2001). However, while different econometric methods have been applied in various intra-Arab research (Bolbol and Fatheldin, 2005; Laabas and Limam, 2000; Boughanmi, 2008; Buitter, 2008, and Al-Atrash and Yousef, 2000), the gravity model examining the recent trade trend across wide-ranging Arab economies has not yet been explored.

In this paper, the gravity analysis is employed in light of the framework of Rose and Engel (2002).

$$\ln(X_{ij}) = \beta_0 + \beta_1 \ln(D_{ij}) + \beta_2 \ln(Y_i Y_j / \text{Pop}_i \text{Pop}_j) + \beta_3 \text{Adjacency}_{ij} + \beta_4 \text{Religion}_{ij} + \beta_5 \text{Language}_{ij} + \beta_6 \text{Colonizer}_{ij} + \beta_7 \text{GCC}_{ij} + \beta_8 \text{Maghreb}_{ij} + \varepsilon_{ij}$$

where the endogenous variable, X_{ij} , is the bilateral trade flows between country i and country j . In addition to the intercept term, β_0 , eight exogenous variables are included in the model. D_{ij} is the distance between countries i and j . It is measured by the distance of the capital cities between two countries. Variable $Y_i Y_j / \text{Pop}_i \text{Pop}_j$ captures the GDP per capita of country i and country j . Adjacency_{ij} is the first binary dummy variable which is unity if countries i and j share the same border and zero otherwise. Religion_{ij} is the second dummy variable. Given that all the sample nations have their first religion in Muslim (Islam), this variable measures their second religious belief, namely Christianity, which equals to one if people in countries i and j share it in common and zero otherwise. The third dummy, Language_{ij} , takes the same consideration where, across Arab, Arabic is the official and most common lingo. Since many Arab dwellers (such as the Maghreb Union) also popularly communicate in French due to some of their colonial background, this language dummy thus takes to quantify the effect of French language on the bilateral trade. It reckons the value of one if both

countries i and j converse French (additionally to Arabic), and zero otherwise.

$Colonizer_{ij}$ denotes the colonial dummy in the intra-Arab region. Based on individual national history, if both country i and j were colonized by the same colonist, their colonial tie will assume a value of one, and zero for the non-common colonizers. Above and beyond, there are two membership dummies employed here; GCC_{ij} designates the first membership dummy in the model. It takes the value “one” if both country i and j are affiliated with GCC in the Gulf area, and “zero” for non-members. On the other hand, $Maghreb_{ij}$, represents the status of Maghreb membership between country i and j . A unity is assigned if both countries are members of the Maghreb Union, and zero otherwise. Lastly, ε_{ij} denotes the residuals of the model with its expected value equal to zero.

The object of interest is the coefficients β from the OLS operation. A negative β_1 would indicate that two countries with shorter geographical distance tend to trade more. A direct relationship between the GDP per capita of any two Arab countries and their trade flows is expected to show in a positive β_2 . That is, countries with higher personal income would tend to result in a greater trade. Countries with close adjacency are inclined to trade more, represented in a positive β_3 . β_4 remains positive if countries sharing the same second religion (i.e. Christianity) trade more. A positive sign of β_5 indicates that countries would trade intensively when French is used as another common lingo in addition to Arabic. β_6 in a positive value implies that a common colonizer between two Arab countries would assume a higher volume of bilateral trade. Lastly, the membership in GCC and/or in the Maghreb Union is to expand the bilateral exchange in the region, which is secured in the positive value of β_7 and β_8 .

Data for the bilateral trade are collected from the *Direction of Trade* CD-Rom of International Monetary Fund, while the per capita GDP statistics are retrieved from the World Bank data source. For the geographic distances between two Arab countries (measured by their capital cities), they are imported from the <http://www.chemical-ecology.net/java/capitals.htm> site. Statistics for the *Adjacency*, *Religion*, *Language*, and the *Colonizer* dummies are compiled from the CIA

World Factbook. Lastly, the membership statistics for both *GCC* and *Maghreb* are imported from Noland and Pack (2007).

5. Empirical Findings

Table 2 reports the empirical results of the Arab “gravity” analysis. First, a negative distance coefficient (-2.313) suggests that countries being closer geographically tend to trade more in the intra-Arab region, with its significance level equivalent to 1%. Second, higher GDP per person in the Arab economies suggests a significantly lower bilateral trade. It could be explained by some primary factors as follows: (1) in terms of the level of economic development, the oil-rich/exporting countries, such as Algeria, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and United Arab Emirates with comparably higher development and growth, bilaterally trade more between/among themselves as a sub-group than to other counterparts in the region. (2) Many Arab economies including Algeria, Libya, Mauritania, Morocco, and Tunisia – the so-called “Maghreb Union” – involve in individual trade arrangements with European countries such as France, England, and Italy, thanks to some of their common historical/colonial ties. (3) The Gulf primary oil exporters internationally trade with non-Arab developed nations around the world; meanwhile, some of the Arab “Mashreq” countries (i.e. Egypt, Jordan, Iraq, Syria, and Lebanon) recently have engaged in more trade agreements with the United States and the European Union. In short, these factors enlighten why the higher (per capita) income nations somewhat diverge the intra-bilateral trade in the region.

As to the parameter of *Religion*, it is evident that Arab nations with Christianity as a secondary religion appear to significantly and negatively affect bilateral trade in Arab. It is reasonably believed that most Arab nations with the Islamic faith would be inclined to trade more among themselves. However, for those with both Islam and Christianity beliefs (such as Bahrain, Djibouti, Egypt, Iraq, Jordan, Lebanon, Qatar, Sudan, and Syria), they presumably face greater trade options inter- and intra-regionally. As reflected in Figure 1, since 1999, a higher trade volume is observed between the Arab countries and European Union as a group than that in the intra-Arab region. This been said, the Arab countries could simply trade more with their European counterparts given the mutual religious belief. Here, one point worth-noting is that

among the “Mashreq” countries, many of them have relatively high Christian population, which may also imply an increase of their trade linkage with other Christian-countries and/or the rest of the world.

For the *Language* component, it is found that the Arab countries speaking French in addition to Arabic do not necessarily trade more (at the 5% significance level) with their neighboring countries of which Arabic is the *only* spoken language. Instead, these bilingual Arab nations expand their trade with the other region such as the European Union and/or the rest of the world. In reality, such attempt has been detected in the Maghreb Union which has increasingly augmented its trade with the Western world.

A total of four parameters are without robust impacts on the bilateral trade in the intra-Arab region. Although the impacts are not momentous, the signs of these parameters are as expected. First, the positive value of *Adjacency* suggests that the closer the border, the greater the bilateral trade may be assumed. This result is consistent with the finding in *Distance* which retains an opposite sign (i.e. the shorter the distance between countries, the higher volume the bilateral trade). Second, Arab nations with the same colonizer is liable, but insignificantly, to trade more. Likewise, for the membership status, both GCC and Maghreb membership are assumed to be advantageous for the growth of mutual exchange in Arab, other things being equal. Such positive but insignificant relationship between the sub-group membership and the bilateral trade in the Arab world can, to some extent, be shed lights to a claim in Fawzy (2003), in which she asserted that the sub-regional grouping could result in a slower regional integrating progress due to the fact that these sub-groups likely to intensify trade between/among themselves at the expense of trading with other non-sub-group members within the region.

Table 2: Regression Results of Gravity Model for Intra-Arab Region, 1998~2007

Dependent Variable: Bilateral Trade

Parameters	Estimates	Standard Error	t-value
Constant	7.5295**	1.7016	4.4250
Distance	-2.3133**	0.4384	-5.2772
GDP per Capita	-0.2320**	0.0931	-2.4926
Adjacency	0.0180	0.3582	0.0501
Religion	-0.7530**	0.2888	-2.6070
Language	-0.9859*	0.5060	-1.9485
Colonizer	0.0253	0.2333	0.1085
GCC	0.6485	0.5122	1.2660
Maghreb	0.6711	0.7553	0.8886
Overall standard error	1.3674		
Number of observations	190		
F-test	10.1927*		
R ²	0.3106		
Adjusted R ²	0.2801		

** : 1% of the significant level; * : 5% of the significant level.

6. Concluding Remarks

The original attempts and interests of Arab regional integration were dated back in the early 1950s, although it was chronically underdeveloped and compared unfavorably with those of other economic blocs. Owing to the growing emphasis of globalization, the renewal integration interests in the intra-Arab region have been progressively reaffirmed among Arab governments and intellectual units.

In this study, the unveiled recent intra-Arab trade has not shown a striking pattern. The majority of Arab economies remain trading less-intensively with their neighbors within the region. Instead, their trade with the European Union and the rest of the world has revealed a

substantial growth especially after the advent of millennium. The intra-Arab trade divergence is coincided in Figure 1 and Table 1, in which many Arab nations such as the Maghreb group inter-regionally trade more with their European counterparts at the expense of their intra-regional exports and imports, on account of the advantage of alternative languages and religions, and the common colonial tie across their histories.

From the empirical findings, as the conventional gravity model has predicted, countries with closer distance significantly trade more than otherwise in the Arab region. Nevertheless, higher GDP per person in fact weakens the intra-Arab trade. It could be explained by the different levels of economic development in Arab, sub-grouping trade arrangements between individual Arab countries (such as the “Maghreb Union”) and the European counterparts, and the Gulf oil exporters’ trade with the non-Arab developed nations around the world. On the other hand, it is found that Arab countries with bilinguals (i.e. Arabic and French) and/or dual religions (i.e. Islam and Christianity) tend to significantly and negatively affect their bilateral trade. In general, with an alternative language and/or religious belief, they most likely face greater trade options inter- and intra-regionally.

Four parameters in the empirical model generate insignificant impacts on the intra-Arab bilateral trade, even though their signs are as anticipated. First, the positive value of *Adjacency* suggests that the closer the border, the greater the bilateral trade could be assumed. Second, Arab nations with the same colonizer are liable to trade more bilaterally. Lastly, for the membership status, both GCC and Maghreb membership are assumed to be potentially beneficial for the growth of mutual exchange in Arab, other things being equal.

Although the above findings are suggestive rather than decisive, given that these results are indirect and not immediately advantageous, it is believed that the creation of an intra-Arab economic union is currently infeasible, and a needing caution is essential for any pursuit of such regional integration.

References

Aarts, P. (1999), "The Middle East: A Region without Regionalism or the End of Exceptionalism," *Third World Quarterly*, 20 (5), 911-925.

Al-Atrash, H., and Yousef, T. (2000), "Intra-Arab Trade: Is It Too Little?" *IMF Working paper*, International Monetary Fund.

Baxter, M., and Kouparitsas, M. (2005), "What Determines Bilateral Trade Flows?" *NBER Working Paper*. National Bureau of Economic Research.

Bolbol, A., and Fatheldin, A. (2005), "Intra-Arab Export and Direct Investment: An Empirical Analysis," *Arab Monetary Fund*, Abu Dhabi.

Boughanmi, H. (2008), "The Trade Potential of the Arab Gulf Cooperation Countries(GCC): A Gravity Model Approach," *Journal of Economic Integration*, 23 (1), 42-56.

Buiter, W. (2008), "Economic, Political, and Institutional Prerequisites for Monetary Union among the Members of the Gulf Cooperation Council," *Open Economic Review*, 19, 579-612. Available online at <http://www.cepr.org/pubs/new-dps/dplist.asp?dpno=6639>

Fawzy, S. (2003), The Economics and Politics of Arab Economic Integration, in A. Galal and B. Hoekman (eds), *Arab Economic Integration: Between Hope and Reality*, Brookings Institution Press: Washington D.C , USA.

Frankel, J., and Rose, A. (1998), "The Endogeneity of the Optimum Currency Area Criteria," *The Economic Journal*, 108 (July), 1009-1025.

Gilbert, J., Robert, S., and Bora, B. (2001), "Assessing Regional Trading Arrangement in the Asia-Pacific," *Policy Issues in International Trade and Commodities Study Series*, No.15. Available online at http://www.unctad.org/en/docs/itcdtab16_en.pdf

Kalbasi, H. (2001), "The Gravity Model and Global Trade Flows," 75th *International Conference on Policy Modeling for European and Global Issues*. Available online at http://www.ecomod.net/conferences/ecomod2001/papers_web/KALBASISI.pdf

Konan, D. (2003), *Alternative Paths to Prosperity: Economic Integration among Arab Countries*, in A. Galal and B. Hoekman (eds), *Arab Economic Integration: Between Hope and Reality*, Brookings Institution Press: Washington D.C., USA.

Laabas, B., and Limam, I. (2002), "Are GCC Countries Ready for Currency Union?" *Arab Planning Institute*, Kuwait. Available online at <http://www.arab-api.org/jodep/products/delivery/wps0203.pdf>

Noland, M., and Pack, H. (2007), *The Arab Economies in Changing World*, PeterG. Peterson Institute: Washington, D.C., USA.

Rose, A. (2000), "Common Currency Areas in Practice," Available online at <http://www.bankofcanada.ca/en/res/wp/2000/rose.pdf>

Rose, A., and Engel, C. (2002), "Currency Unions and International Integration," *Journal of Money, Credit, and Banking*, 34 (4), 1067-89.

Sharma, S., and Chua, S. (2000), "ASEAN: Economic Integration and Intra-Regional Trade," *Applied Economics Letters*, 7, 165-169.

Zineldin, M. (1998), "Globalisation and Economic Integration among Arab Countries," *The Fourth Nordic Conference on Middle Eastern Studies*, Oslo. Available online at <http://www.smi.uib.no/pao/zineldin.html>.