Prospect and Problems of a Common Market: An Empirical Examination of the OIC Countries

M. Kabir Hassan & Faridul Islam

Abstract

The paper examines the success and failures of various economic groupings among the OIC countries by estimating a gravity model. The GDP of OIC is only 4.7% of world GDP; its exports are 7.28% of world exports and its imports 6.78% of world imports. This paper primarily presents a synthesis of the Islamic perspectives on the Islamic Common Market (ICM), reviews the present state of economic integration among the contemporary Islamic countries, identifies relevant tasks for the Islamic governments, and offers feasible recommendations for the governments of Islamic countries within the framework of the prevailing theories of international trade and free market. The establishment of an Islamic Common Market would require a firm political commitment on the part of the Member States of the OIC, expressing their political will and a common understanding on the coverage, extent, mechanisms and stages of implementation, as well as modalities of realization, of such an advanced mode of economic integration.

Introduction

The changing world order and the consequent impact on global economic activity during the past decades in general, and the decade of the 90's in particular, are bringing in increasing complexity in the way national

M. Kabir Hassan is professor of Economic Development and Finance at University of New Orleans, Louisiana.
Faridul Islam is at Department of Finance and Economics and Enterprise Strategy, Utah Valley State College, Utah.

economies act and interact with each other and with global economic institutions. Despite the creation of the World Trade Organization and the efforts at establishing the commercial rules of the game at the global level, it appears that regional economic arrangements will be the wave of the future. Their feasibility is reinforced by a variety of factors, including the fact that they need less negotiation and involve fewer transaction costs. The move towards greater regional integration has now become a global phenomenon driven by the pull of market forces, as they open up opportunities for trade amongst center-periphery. The rise of regionalism has understandably raised the specter of exclusionary blocs and concern over the dangers of trade diversion. About one-third of the 109 regional deals under GATT/WTO were notified between 1990-1994 alone when the Uruguay Round of negotiations was in full swing. The facts that a free-trade area (FTA) was established between North America and Mexico (NAFTA) in 1993, and that the 7 ASEAN members have agreed on an accelerated move towards FTA by the year 2003, and that the Asia Pacific Economic Community (APEC) has pledged itself to realize free trade amongst its members by the year 2020 testifies to a heightened interest towards freeing the movement of factors of production within the regional space.

On the European front, EC has been a significant economic power and its prominence continues to increase. Like the EC countries, the Organization of Islamic Countries (OIC) shares within itself a lot of similarity in culture and socio-economic condition. However, in contrast to the EC countries, OIC's are a heterogeneous mix of countries that includes categories of low, medium and high income. Trade liberalization among the OIC countries is expected to open windows of opportunity translating into potential for significant gains for all the economies in the region. A close look at the existing structure of trade reveals that, in the context of trade liberalization among countries, the interaction between policy-determined barriers (e.g., tariffs, quotas and other non-tariff barriers) and natural barriers (e.g., transport costs, linguistic and institutional differences) remains a strong impediment to a smooth trade relation. Need for research and comprehensive study aimed at eliminating these barriers, to better understand the prospects of enhanced economic cooperation and trade among the OIC countries, is of paramount importance. Such studies will have important policy implications for the future course of economic cooperation among the OIC member countries and the role trade can play

to bolster them. A number of contemporary Muslim economists have recently argued in favor of an Islamic Common Market. Unfortunately these studies lack in-depth empirical content. Judged by mere number, the research might look inadequate, but these papers contain an enormous amount of knowledge wealth. They provide an insightful economic analysis, and practicable policy guidelines for all the Islamic economic agents in the region, particularly in the context of establishing the Islamic Common Market (ICM)[1]. Within a regional framework, Hassan[2] estimated a gravity model of international trade to examine whether intra SAARC (Bangladesh, Pakistan and Maldives are already members of the OIC) countries would be trade-creating or trade-diverting. Results show that it is neither, thus offering considerable opportunities for a regional as well as multilateral integration. Liberalization of trade among the SAARC countries also offers potential for significant gains for all the economies in the region.

The objective of this paper is to extend the existing literature on ICM by conducting a formal theoretical analysis of trade creation and diversion among the existing members, supplemented by data. The research, in general, is expected to provide empirical support for a proposed block consisting of OIC members. Specifically, this paper estimates a gravity model of preferential trading arrangement among the OIC members. Such a model can be useful to better understand the trade creation and trade diversion effects among these economic blocks. To the knowledge of the authors, this is the first of its kind purporting to empirically investigate trade in the overall OIC context. This paper is organized into five parts. Section II presents a synthesis of the political economy of the OIC economic block. Section III provides an overview of the economic conditions of the OIC countries. Section IV reports the empirical results of the gravity model. Section V concludes the paper.

The Political Economy of the OIC Integration

Although the Organization of the Islamic Conference (OIC) had initially started out as a political forum, it was realized early on that effective political action had to be based upon and complemented by wide-ranging joint economic action. The Charter of the OIC, approved in February 1972, reiterated the necessity for co-operation for community-wide economic progress and to help individual member states accelerate productive capacities. It was realized that the establishment of an Islamic Common Market would require a firm political commitment on the part of the

Member States of the OIC, expressing their political will and a common understanding on the coverage, extent, mechanisms and stages of implementation, as well as modalities of realization, of such an advanced mode of economic integration.[3]

The changing international political landscape continues to usher in fundamental changes in the way many developing countries, individually and collectively, evaluate their salience on the international agenda, except where the interest of the big powers is at stake. This has not only eroded the ability of these governments to pursue their own agenda but also has restricted the scope for their autonomous policy-making.[4] Given that the major players of this paradigm are going to dominate the global center stage for some time to come, the developing countries will be better served if, as the long-term strategy, they focus on pooling and coordinating their resources towards a regional solidarity. A realistic analysis of the anticipated obstacles and a contingency plan thereto is a necessary precondition for the determination of its feasibility and the establishment of an ICM.

There is little disagreement over the issue that technological progress in the areas of micro-electronics, biotechnology and renewable resources lies at the root of structural changes in an economy. Internationalization of various types of markets including e-transaction through deregulation of financial markets can be effective. Exchange rates are determined more by the expectations in financial markets than by the needs of trade adjustment. Structural changes would have profound impact on international economic relations, giving fresh impulse to economic integration. In addition to changing the structure of world trade, these are modifying the international division of labor and altering the competitive position of developing countries. Innovations in the areas of micro-electronics and new materials technologies are eroding the traditional comparative advantage of the developing countries in labor and natural raw materials in several areas. They could potentially trigger negative repercussions on the export to developing countries, due to lower capacity to absorb, lagged adjustment to new technologies, and inadequate diversification. The developing countries should try to attain, accommodate and manage higher levels of technological development to enhance their international competitiveness for easy access to new and buoyant areas in world trade. Otherwise the gap could accentuate the technological and industrial polarization between both the developed and the developing, as well as among the developing, countries.

A major change in recent years has been the resurgence of interest in integrating national economies in formal groupings such as common markets, customs unions or free-trade areas. The likely effects of these schemes on the world trading system and on the trading interests of developing countries depend on the outcome of the GATT Uruguay Round. A closer integration of Europe with North America can strengthen the major economies and support global economic growth provided it is accompanied by openness. Another possibility is from limiting preferential market access, which influences the patterns of growth of international trade and specialization. This could affect foreign direct investment in ways not consistent with the long-term comparative advantage or growth needs, offering difficult policy choices for the non-participants.

For their part in international trade, the developing countries are facing continued worsening commodities terms of trade; lost sectoral competitiveness compounded by problem of food self-sufficiency; flight of capital; and extensive external sector volatility. The industrialized economies are trying to protect their agricultural and manufacturing sectors against the external flow of goods, such as textiles, automobiles in the US and in general terms within the EC. This is tantamount to exporting expensive and importing cheap products. Overall deficits in industrialized economies are being mitigated by taxation and by flight of capital from developing countries. Under such a neo-mercantilist order, the drive for external sector balances at home under exchange rate flexibility and perfect capital mobility causes industrialized economies to adopt monetary policies. For the developing countries, the interest rate and exchange rate volatility of monetary policies proves permanently disequilibrating, as historically they are selling cheap and buying expensive from the industrialized economies. Thus, both export orientation and capital trans-actions in the overall balance of payments are permanently de-equalizing.

The developing world submits to the policy consequences of macro-economic coordination, an international Keynesianism of the Bretton Woods institutions promoting fictitious notions of a target of full employment, monetary and fiscal disciplines to control an inflationary pressure, originating in interest-based financial speculation, monopolistic competition and declining productivity in the industrialized countries. The monetary and fiscal policies of the eighties in the West led to world-wide recessionary and stagflationary pressures. Then there is the export orientation regime, a negation of import substitution and interlinked IMF-

World Bank financing formulas revolving around structural adjustment and conditionalities. The neoclassical prescription was sought for the ailments. Despite the World Bank's catchword, "alleviation of global poverty," the rising tide of the poor today stands at a staggering three billion, much as a result of the failure in exchange and entitlement, in spite of government's expenditures toward transfer incomes.

The purpose and the justification of economic integration lie in their ability to attain higher rates of growth and development. Only such a prospect should convince the sovereign states in this highly nationalistic age, as has happened with the EU, to submit to the restraining framework of a common organizational set up where discretionary national policies would rarely be allowed to reign.[5] The efforts of the Organization of African Unity to support and strengthen the subregional schemes for Africa deserve special recognition and can offer valuable input for the OIC members in Africa. Countries in Asia, the Middle and Near East, and especially in the Far East, have been active participants in economic cooperation and integration schemes with records of significant progress. The OIC countries have attempted two types of cooperation and integration schemes: only the OIC countries, and other developing countries. (Appendix 1).

Needless to say, the various integration schemes among the OIC countries have faced considerable conceptual and practical difficulties. On the one hand, the African and Arab groups of the OIC have advanced forms of integration as targets. On the other hand, more than two-thirds of the OIC countries are associated with some form of regional and sub-regional economic cooperation and integration scheme. Many of the Least Developed OIC countries are members in these groups, which indicates political will and spirit to join together. This may prepare the OIC to embark upon community-wide action to expand and extend cooperation.[6]

Three rather difficult issues in a scheme of regional cooperation among the OIC's include (i) effective co-ordination of investment throughout the region, (ii) compensation of member countries that may suffer losses in the early stages, and (iii) surrender of powers at the national level by member countries on economic and social decisions. Coordinating investment for establishing region-wide industries, reducing costs of production and attaining equitable distribution are the basic pillars of planning. To prevent a widening gap among the member countries it may be necessary to arrange for financial compensation for the weaker nations although funding may require external help.

As part of a common market the members agree to abolish all the tariffs on each other's exports; share a common tariff policy when importing from the rest of the world; and allow a free flow of commodities as well as factors of production (capital, labor, technology etc.) amongst each other. Even those OIC member states that are on the road to advanced forms of economic integration like common markets have not addressed these basics. It may be a good idea to begin with modest objectives, with a complete integration as the ultimate aim. A limited trade expansion among the OIC countries can create a climate of mutual trust and solidarity, keeping in mind the ultimate integration.[7] In a rapidly changing world order, the South is going to face an ever more integrated North. The OIC may have to review and remodel its objective to accommodate the changing dynamics in the world of politics and economics. A useful and practical approach to such an orientation would be to adopt regional economic integration schemes interlinked with one another at the OIC level.

The rationale for the establishment of the ICM can be found in the poor development performance of a disintegrated Islamic world's 52 national economies despite the fact that they possess the material prerequisites for economic development.[8] However, the establishment of an Islamic Common market is a long-term goal that should be approached in stages. To achieve the ultimate objective, some important initiatives have been taken in economic co-operation comprising of trade preferences, joint-ventures, co-ordination and harmonization of various sets of economic policies, and regional co-operation in the fields of money and finance. Once these work thoroughly, the establishment of regional integration schemes, linked through preferential arrangements, should be the next step. This could, in turn, provide the solid foundation for an overall Islamic Common Market Framework made up of regional components.[9]

The poor growth performance of the Islamic countries lies in their failure to engage in international trade and use this as the engine of growth. The following factors may be identified for such failure: (i) inconsistent economic policies of the Islamic countries' governments; (ii) reliance on exports of a few primary products to finance their development projects; (iii) low income elasticities of demand for primary products; (iv) deterio-rating prices of primary products and their impact on terms of trade; (v) discriminatory policies of high tariffs, quotas and other barriers effectively discouraging export from the Islamic countries by the developed countries,

(vi) the Islamic countries' negative capital flows due to the excess of their imports over exports; (vii) inelastic exports; (h) rising debts; (i) overvalued exchange rates; (j) small domestic markets; (k) small volume of intra-Islamic trade.

It is logical to conclude that the Islamic countries will not be able to completely realize all the potential gains from international trade which is dominated by the non-Islamic countries. The latter are hostile to the Islamic establishments and are against the idea of an ICM. Needless to say, an ICM can provide opportunities for its constituents, working as an agent to achieve socio-economic solidarity and generate aggregate demand. The resulting increased aggregate demand can, in turn, help achieve economies of large-scale production; reduce economic dependence; improve foreign currency reserves and enhance the bargaining power of the Islamic countries in international trade and financial markets. Thus the ICM can activate and promote intra-Islamic trade, based on the Islamic doctrines of honesty and economic justice, by providing them access to the largest global ICM.

The Socio-economic Structures of the OIC Countries

Although the OIC is a conglomerate of countries with diverse socio-economic and political structures, having differing levels of development and resource endowment, the common denominator that can bring them under one umbrella is the factor of religious unity. It is important to understand that the role of religion as a force of cohesion derives much of its strength from the common social and cultural practice the countries share that dictates some kind of uniformity in consumption patterns. This commonality can be a strength favoring an economic integration towards forming a trade block to promote an agenda that is mutually beneficial. In the following paragraphs, we briefly present the diversity in economic structures among the OIC countries, and reflect on how these can offer opportunities for the cooperation process among them.[10]

The service sector remains predominant in these economies, measured by its contribution to the GDP, followed by industry. A large number from among these OIC countries, classified as Least Developed Countries (LDC's), have a dominant agricultural sector measured by its contribution to employment, foreign exchange generation, and government revenue. Even between the LDC's where the service sector is important, the share of agriculture, remains high. In countries where industry dominates, the majority are oil producing with industrial activities revolving around oil,

and the overall share of manufacturing in the industrial production is only modest. The OIC's have a diverse production structure, with differing levels of income and living standards. In terms of stages of economic development, they can be categorized under high-income, high-to-middle, low-to-middle, and low-income. However, the OIC, with a population of 1.1 billion, albeit mostly rural, does offer the potential for a large market in the long run.

The differences in income levels are also reflected in the resource balances. A majority with a negative net domestic savings implies that investment falls short of the level needed for sustained growth, and in part explains heavy debt burdens. Experience shows that the poor OIC countries look at cooperation from the point of view of assistance, while the rich ones see it differently. On the political front, the systems of government range from democracy to monarchy to military regime. Such diverse structures imply contradictions, in terms of priorities. It is not unfair to say that the rapprochement among Islamic countries would be very different if the decision were made to reflect the will of the nation, rather than those of the powerful individuals or oligarch.[11]

A majority of the OIC countries produce primary products, be they mineral or agricultural. Because of this, the trade is characterized, with few exceptions, by the export of raw materials and import of manufactured goods from the developed countries. The richest OIC members export oil and oil products to the OECD countries, importing only luxury items from them.[12] Thus, the intra-OIC trade remains low, as exports to the developed countries continue to rise. The low level of intra-OIC trade is rooted in its history, dating back to the days of their former colonial masters. In recent times, the OIC's dependence on non-OIC countries is gaining momentum as the intra-regional trade rises. This trend sharply contrasts with other strong regional groupings, among which the intra-regional trade has grown more rapidly than their world trade.[13] While oil ensures a steady inflow of foreign currency, it makes export and production structures sensitive to world oil price changes.

The Gravity Model of OIC
Member Countries' Various Groupings:
Methodology and Data

The gravity model provides a flexible approach for the analysis of spatial interaction among spatially separated nodes, thereby offering a framework for analyzing and measuring the patterns of trade. International trade flows

are determined by comparative advantage, the possibility of intra industry trade, transport cost etc. Trade policy may revise the normal trade flows. A gravity model of international trade estimates the trade flow as a function of variables that directly or indirectly affect the determinants of normal trade flow. Using the gravity model to examine whether a lower magnitude of intra-OIC trade is a normal outcome or not, is quite appropriate.

The gravity model has long been used for empirical studies of trade patterns. Specifically, the volume of trade between two countries should increase with their real GDPs (the so-called gravity variable), since large countries should trade more than small ones, and with per capita incomes, since rich countries should trade more than poor ones. One should expect trade to decline with geographical distance because distance increases transportation and information costs. Since the dependent variable in the gravity model is bilateral trade between pairs of countries, each variable (other than distance) is entered in product form. Dummy variables are added for participation in various preferential arrangements. If the two countries (both participating in the same preferential arrangement) trade more with each other than predicted by their incomes and distance, a positive coefficient on the dummy variable implies that the arrangement is trade-creating for its members. A negative coefficient on the dummy variable indicates that only one member of the pair participates in a particular preferential arrangement, and is taken as evidence of trade diversion vis-a-vis the rest of the world.[14]

The typical gravity model specification relates bilateral trade to income, population (or per capita income), distance and congruity between the trading partners:

$$\log(TRADE_{ijt}) = a + \beta_1 \log(GDP_{it}GDP_{jt}) + \beta_2 \log(PCI_{it}PCI_{jt})$$
$$+ \beta_3(DISTANCE_{ij}) + \beta_4(BORDER_{ij}) + e_{ijt} \quad (1)$$

where,

$TRADE_{ijt}$ = bilateral trade between countries i and j at time t (measured in U.S. dollars),

GDP = real gross domestic product (the so-called gravity variable),

PCI = per capita income,

$DISTANCE$ = distance between two countries, and

$BORDER$ = dummy variable taking 1 if two countries have common border, and 0 otherwise

e_{ijt} = the conventional error term obeying the assumptions of OLS.

As trade is expected to increase with the size of domestic economy (GDP), per capita income (PCI) and common border (BORDER), and to decline with distance (DISTANCE), the signs of β_1, β_2 and β_4 should be positive, and that of β_3 negative.

A systematic way to adjust for the natural determinants of trade is by means of the gravity model. The assumptions of the model are that trade between two countries is proportional to the product of their GNPs and the product of their per capita GNPs. This is an increasing function of adjacency (countries sharing a common land border), and decreasing with distance. Dummy variables are added when both countries in a given pair belong to the same regional grouping to determine how much trade within each region is due to factors common to trade throughout the world and how much remains to be explained by regional effects.

Annual data on bilateral trade flows among OIC countries has been taken from IMF"s Direction of Trade Statistics, and the SESRTCIC database. The UNCTAD and the United Nations COMTRADE database have also been used to compare import and export trade flows of OIC countries.

The gravity model, however, has a number of weaknesses. One is that the coefficients on dummy variables for subgroups of countries will pick up all respects in which those countries differ in their trade performance that are not controlled for in the gravity equation. Dummy variables for preferential arrangements serve as a catch basin for omitted factors. Another difficulty arises with the measurement of distance. The underlying theory appeals to transaction costs to trade, and in empirical implementation it is posited that such costs should rise with distance. But economic and geographic distances are not the same. Insofar as economic distance is mismeasured, its effects may be loaded into the dummy variables intended to capture the effects of regionalism. The third problem arises from the omission of a third country, which from the econometric consideration has the same effect as omission of a relevant explanatory variable from the model. While bilateral trade is assumed to depend only on the two countries, in practice, it also depends upon competitiveness relative to other countries and markets.

Analysis of Empirical Results

We present our empirical results for the two years: 1995, 1996. The number of observations varies from year to year since the number of regional grouping keeps increasing with the passage of time. Tables 1 and 2 present descriptive statistics while Tables 3 and 4 present a correlation

matrix of various explanatory variables used in the gravity model. Since the parameter estimates for our regression equations are the same in almost all cases in terms of direction, and very close to each other in terms of magnitude for the years under study, we are analyzing the results relative to the year 1995 only. The interpretation of the results would be almost similar. In case they are not we have provided interpretation within the framework of economic theory.

We use regional block variables in our analysis in three ways. First, we use five regional blocks of countries, GCC, SAARC, AMU, ECO and D8, for these blocks represent a significant amount of trade among themselves. The SAARC block consists of Bangladesh, India, Nepal and Bhutan, Pakistan, Sri Lanka and the Maldives. The GCC consists of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE. The AMU block consists of Algeria, Mauritania, Morocco, Tunisia, whereas the ECO consists of Iran, Pakistan and Turkey. The D8 block consists of Bangladesh, Pakistan, Malaysia, Indonesia, Egypt, Iran, Turkey and Nigeria. Second, we form the hypothetical trading block GCCAMUECO among the member countries of GCC, AMU and ECO blocks to examine the likely effects of such a grouping if it were to materialize. Third, we add a term for each grouping in order to capture trade-diversion effects. These terms are indicated by a suffix "N", standing for trade with non-members of the grouping in question.

We present the regression results for the year 1995 and 1996 in Tables 5 and 6 respectively. To check the robustness of our results, we perform three regression runs: first, with the existing and hypothesized trading block countries; second, with existing trading block countries; finally, with the hypothesized trading block countries. We have 33 countries in our data set, so that there are 528 data points [=(33*32)/2] for a given year. We find all three standard gravity variables (GDP, GDP per capita, distance and contiguity) to be significant with p-values at less than 1%. All variables except GDP PER CAPITA have expected signs. However the LOGPCI for the estimate of year 1996 has the correct sign. The negative sign for GDP per capita suggests that as the GDP per capita improves, it trades less with its block member. At first glance this may appear counter intuitive because the argument is: as per capita income rises so should trade among them. Although apparently this result may be plausible with some members of OIC countries because most of them have similar per capita income, this paradoxical result can be resolved using the standard economic theory. It is important to understand that the economies under study here are

characterized by production, which offers limited choice to the rich within the domestic or regional framework. It can be argued that a rise in per capita income has the same effect as "income effect" in standard microeconomics textbook. Thus viewed, a rise in per capita income can easily translate into a Giffen Good type of phenomena. In that case, it is quite possible that rise in per capita income can shift demand to highly luxurious goods, perhaps not available within the region. This, in its turn, may cause a decline in the regional trade and increase in trade with developed countries, thereby giving an apparent wrong sign for the year in question. It is plausible that a strong preference for luxury goods, imported from the West, due to income effect, can explain this.

The dependent variable in all regressions is the value of trade (imports plus exports), in log form, between pairs of countries. The estimated coefficient in log of the product of the two countries' GDPs at 0.202 indicates that trade increases with size but less than proportionately, reflecting that small countries tend to depend more on trade than larger and more diversified ones. The estimated coefficient on the product of per capita GDPs -0.204, indicates that poorer countries trade less with each other. The coefficient on log of distance at -0.518 indicates that as distance between two nonadjacent countries rises by 1%, trade between them falls by 0.52%. The coefficient on adjacency, at 0.957, indicates that two countries sharing a land border trade about one and half times as much [exp (.957) = 2.60] as two similar countries.

In the absence a notion of trade blocs, these basic variables would soak up most of the variation in bilateral trade flows, leaving little to attribute to a dummy variable. Variations in intra-regional trade would be due solely to the proximity of countries and their rates of economic growth. All dummy variables for five various regional blocks are statistically significant and of positive signs, implying that these regional blocks are trade-creating. Moreover, all GCCN, AMUN, ECON, D8N and GCCAMUECON dummy variables are positive and statistically significant, implying that formation of these groups does not divert trade from low-cost outside block countries to high-cost within block countries. Therefore, the dummy variables of the gravity model indicate that OIC regional block countries are trade-creating and NOT trade-diverting.

For example, D8 and D8N dummy variables are statistically significant, indicating the preferential trading agreements among these countries would yield trade creation benefits. Two countries in the D8 block would trade 22 [exp(3.104)= 22] times more among themselves than two otherwise-

similar countries outside the block would. In addition, two countries in the D8 block would trade 3 times more trade with non-D8 block countries, signifying that the formation of the D8 block will not be a trade diverting (trade diversion is an argument against forming preferential trading arrangements). Similar interpretations can be given to all other dummy variable coefficients. For example, if two countries were members of the GCC, they would trade more than nine times as much as would two otherwise-similar countries. Moreover, these two countries would trade more than three times more with non-member countries.

Only the SAARC block within the OIC member countries would neither be trade-creating nor trade-diverting. If two countries were members of the AMU, they would trade more than five times as much as would two otherwise-similar countries, and trade more than one time more with non-AMU countries. If two countries were members of the ECO, they would trade more than one time as much as would two otherwise-similar countries, and trade more than one time more with non-ECO countries. If two countries are members of the GCCAMUECO, they would trade more than seven [exp(2.016)=7.51] times as much as would two otherwise-similar countries, and trade more than two times with non-ECO countries.

Summary, Conclusions and Policy Suggestions

Research on economic cooperation based on cultural or religious factors to achieve common goals of progress and growth is not a new concept. If history is any guide, we can emphatically say that search for economic cooperation in any form that works has always been there and will continue to be there to reap advantages based on sound economic principles. Thus viewed, the prospect of an economic grouping based a common platform of Islam should not come as any surprise. Samuel Huntington[15] contends that civilization identity will manifest in increased regionalism. He claims the European Community rests on the shared foundation of European Culture and Christianity. He refers to the rapid expansion of economic relations between the Chinese/Confucian countries (China, HK, Taiwan, Singapore). He refers to common culture and religion-based Economic Cooperation Organization, among ten non-Arab Muslim countries, namely Iran, Pakistan, Turkey, Azerbaijan, Kazakhstan, Kyrgystan, Tadjikstan, Uzbekistan and Afghanistan.

A striking feature of the OIC is that the intra-regional trade is low but the dependence on the industrialized countries is considerably higher. To reap the benefit of trade creation within OIC it may be necessary to remove

tariff and non-tariff barriers and open up profitable intra-regional trade channels. Structural change can create new vertical and horizontal linkages and generate dynamic benefits. The scope of economic cooperation among Muslim countries may be limited, but still can be operated on a small scale. The experiences of EEC and ASEAN can offer valuable insight.

The OIC countries should participate with the WTO, APEC, ASEAN, EU, and NAFTA, to maximize the intra-OIC linkages and ensure technology transfer, gain economies of scale, and increase the size of domestic and regional markets. This is consistent with globalization of trade on a non-discriminatory basis while reaping the benefits of geographical arrangements based on discriminatory trading for a freer world trading system.[16] The OIC countries should diversify exports to include non-traditional and manufactured products, as well as expand trade complementarities. The rich capital-surplus OIC countries should invest their surplus funds in member countries either by direct long-term investment to promote economic growth or by short-term portfolio investment to help develop their capital markets. Other forms of cooperation may include, but not be limited to, financial cooperation via clearing union arrangements, export credits and payments unions. The lack of domestic resources and foreign exchange imply that funds to finance imports must be obtained from the developed countries. While this type of concessionary financing increases north-south trade, it does not help intra-OIC trade. It is the latter that can be achieved by increased financial assistance among OIC countries.

Payments for trade (between the currencies) generally have to be made in convertible currencies. Inconvertibility of the currencies of the member countries can hinder trade. The question is how to facilitate trade and investment linkages, thereby circumventing the need for convertible currencies. Three such arrangements are: clearing unions, export credit, and payments unions. An OIC Clearing House can be formed with the help of the Islamic Development Bank. Export credits by the OIC countries can increase trade. The foreign exchange surplus OIC member countries as short-term export creditors can help exporters obtain local currency payments as they wait for convertible currency. These arrangements are efficient as long as the proceeds are used to pay the importing country. Otherwise, the problem is not solved, only shifted.

Non-convertibility of the currency of some OIC members will always be a problem. The success of export credit facilities, the OIC Clearing Union and payments union will depend on the participation of the Islamic

Development Bank in providing access to convertible currencies. If the surplus countries accept non-convertible currencies as payment, the problem can be resolved. The OIC capital markets can be made more attractive, if the liquidity of these markets is improved, transaction costs reduced, and pricing efficiency adopted. The regulatory regime should focus on three main areas: the new issues market and related disclosure, accounting and listing standards, and secondary market trading activities. These should include legal provisions prohibiting insider trading; improving accounting and reporting standards; simplifying procedures for listing new firms; surveillance and enforcement through registration and prudential standards. OIC members should diversify their portfolio liabilities and use tools of investment, e.g., acquire and promote joint ventures.

Investment policies need to be formulated to cater to environmental, industrial and sectoral needs. A vigorous dynamic private sector is indispensable for sustained growth, which must be promoted to help attract the FDI to supplement domestic finance for development. The synergy from cooperation between the government and the private sector should be reaped. The D-8 will not be successful without effective support of the business community. To increase the trade volume, more interaction and cooperation among businessmen within the D-8 countries should be promoted. The D-8 should hold a dialogue between developed and developing countries for a prosperous future. Muslim countries can unite on a common platform to provide each other support and to enhance cooperation. The Muslim world should have their own media to reflect their point of view. The western media give distorted news about them.

Market instability and volatility and its international transmission have demonstrated the fragility of the global economy, pointing to the need for its proper management and the role government should play. The turmoil in the world financial market causes more harm to developing countries than to developed ones. While globalization has its benefits, it comes with the risks of destabilization inequality between rich and poor nations. Greater transparency and more disclosure in the international financial market, public and private sectors, and large market players, such as hedge funds, are needed. If necessary reforms are made, it may be possible to check or prevent recurrence of major international transmission of shocks to the world markets. Although the severity of the shock from a global financial and economic crisis varies by country, the D-8 can help members in shaping their institutional and financial structure for better management of crisis.

Notes

1. For a detailed discussion of the material the reader is referred to: Syed Farid Alatas, "An Islamic Common Market and Economic Development," *Islamic Culture*, pp. 28-38, 1987; Driss Alaoui Mdaghri, "Towards An Islamic Common Market," *Journal of Islamic Banking and Finance*, Jan-Mar, 1988; El-Gharib Nasser, "The Role of Islamic Banks for Initiating An Islamic Common Market," *Journal of Islamic Banking and Finance*, Jan-Mar, 1988; Iftekharuz Zaman, and Abdur Rob Khan, "Islamic Common Market: A Step Forward in ECDC," *Bangladesh Institute of International and Strategic Studies Journal*, Vol. 4, # 4, Oct 1983; Ismail Shalaby, "The Islamic Common Market," *Journal of Islamic Banking and Finance*, Jan-Mar, 1988; Sadi Cindoruk, "Economic Cooperation among OIC Countries and the Islamic Common Market," Journal of Economic Cooperation among Islamic Countries, Vol. 13, # 1-2, Jan-Apr, pp. 1-18, 1992; Cindoruk, "International Economic Integration and Prospects for An Islamic Common Market," *Journal of Islamic Banking and Finance*, Jan-Mar, 1988; Salmon Ahmad, *A General Equilibrium Model of Customs Union among Islamic Countries*, International Islamic University, Islamabad, Pakistan. Unpublished Ph.D. dissertation, 1995; Muhammad Iqbal Anjum, "The Challenge of Establishing an Islamic Common Market: Ideals, Realities and Tasks Ahead," paper presented at the Second International Conference on Islamic Political Economy, held on December 10-11, 1996 at Penang, Malaysia; Zeinelabdin A. Ahmed and Ilhan Ugurel. "The Islamic Common Market: Is it Economically and Politically Justifiable?" Paper presented at the Second International Conference on Islamic Political Economy, held on Dec 10-11, 1996 at Penang, Malaysia; Mohamed Ariff, "Proliferation of Regional Groupings: Policy Options for the OIC," *Journal of Economic Cooperation Among Islamic Countries*, Vol. 19, # 1-2, Jan-Apr, 1998, pp. 15-30; Syed Nawab Haider Naqvi, "Globalization, Regionalism and the OIC," *Journal of Economic Cooperation Among Islamic Countries*, Vol. 19, # 1-2, Jan-Apr, 1998: 257-284; M. Kabir Hassan. "Portfolio Investment of the OIC Countries and Their Implications on Trade," Paper presented at a Seminar on "Intra-OIC Trade and Investment and Economic Stabilization and Structural Reforms in OIC Member States," held in Casablanca, Morocco, Sep 30-Oct 2, 1998.

2. See Hassan, "Is SAARC a Viable Economic Block?: Evidence from Gravity Model," *Journal of Asian Economics*. Vol. 12, # 2 (Summer), 2001 (Forthcoming); also see Hassan, "Regional Cooperation in Trade, Finance and Investment Among SAARC Countries: The Bangladesh Perspective," Paper

presented at a seminar organized by the Center for Development Research on June 20, 1998.

3. Ahmed and Ugurel. "The Islamic Common Market: Is it Economically and Politically Justifiable?"; M.A Choudhury, "The Nature of Globalization and the Muslim World," *Managerial Finance,* Vol. 22, # 5/6, 1996.

4. See Choudhury, *Islamic Economic Cooperation.* London: Macmillan Press and New York: St. Martin's Press, 1989; Choudhury, "Social Choice in an Islamic Economic Framework," *American Journal of Islamic Social Sciences,* Vol. 8, No. 2, 1991; Choudhury, "The Nature of Globalization and the Muslim World", 1996.

5. Ahmed and Ugurel. "The Islamic Common Market: Is it Economically and Politically Justifiable?"; See also Alatas, "An Islamic Common Market and Economic Development", 1987.

6. Cindoruk, "Economic Cooperation among OIC Countries and the Islamic Common Market", 1992; See also Ahmed and Ugurel, "The Islamic Common Market: Is it Economically and Politically Justifiable?"

7. Ahmed and Ugurel. "The Islamic Common Market: Is it Economically and Politically Justifiable?"

8. Ibid; Anjum, "The Challenge of Establishing an Islamic Common Market: Ideals, Realities and Tasks Ahead."

9. Ahmed, and Ugurel. "The Islamic Common Market: Is it Economically and Politically Justifiable?".

10. Ibid.

11. Ibid.

12. Syed Nawab Haider Naqvi, "Globalization, Regionalism and the OIC," *Journal of Economic Cooperation Among Islamic Countries,* Vol. 19, Numbers 1-2, Jan-Apr, 1998: 257-284.

13. Ibid.

14. See Tamim Bayomi and Barry Eichengreen, "Is Regionalism Simply a Diversion? Evidence from the Evolution of the EC and EFTA," IMF Working Paper, November 1995; See also Barry Eichengreen and Douglas A. Irwin, "The Role of History in Bilateral Trade," Working Paper 5565, National Bureau of Economic Research, May 1996.

15. See Huntington, Samuel P. (1993). "The Clash of Civilizations," *Foreign Affairs,* 72: 22-49.

16. See Ariff, "Proliferation of Regional Groupings: Policy Options for the OIC," *Journal of Economic Cooperation Among Islamic Countries.*

Appendix 1

MAJOR ECONOMIC CO-OPERATION AND INTEGRATION SCHEMES: OIC COUNTRIES

A. Schemes Containing OIC Countries Only

1. Council of Arab Economic Unity (CAEU) [1957]

{Egypt, Iraq, Libya, Jordan, Kuwait, Mauritania, Somalia, Sudan, Syria, UAE, Yemen}

Arab Common Market – a customs union – is a basic aim. Standardized customs laws, terminology and settlements prepared; co-ordination of external trade policy aimed; Arab Monetary Fund established in 1976; several multilateral agreements initiated and developed.

2. Arab Common Market (ACM) [1964]

{Egypt, Iraq, Libya, Jordan, Mauritania, Syria}

Liberalization of trade; total abolition of customs duties on all agricultural products, natural resources and manufactures (with some exceptions); establishment of Compensatory Fund for LDC's against customs revenue losses all realized; preparing to unify tariffs against imports from other countries.

3. Gulf Cooperation Council (GCC) [1981]

{Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE}

Unified trade and industrial legislation, as a common uniform customs tariff, liberalization of intra-trade of industrial goods, policy coordination in petroleum industry, coordination of financial and monetary policies, introduction of common currency, as well as technical and scientific cooperation aimed.

4. Economic Cooperation Organization (ECO) [1985] (Former RCD)

{Iran, Pakistan, Turkey, Azerbaijan}

Projects and modalities being developed in various technical committees relating to economic and technical cooperation in trade, industry, agriculture, energy, infrastructure and several other fields; protocol on exchange of trade preferences signed.

5. Arab Maghreb Union (AMU) [1987]
{Algeria, Libya, Mauritania, Morocco, Tunisia}

Institutional Framework and broad guidelines for integration in food security, economy and finance, infrastructure, human resources development completed; joint service and service infrastructure aimed; sectoral councils in trade, industry, energy-mines, finance, tourism and crafts operative; a joint air company, an AMU investment bank planned.

6. Preferential Trade Agreement for North Africa (PTANA) [1987]
{Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia}

Establishing timetable of discussions and negotiation of the Treaty establishing the PTA planned for 1990.

7. Arab Cooperation Council (ACC) [1989]
{Egypt, Iraq, Jordan, Yemen}

Coordination and harmonization of major economic policies planned, especially in finance, customs, industry, trade and agriculture, towards the creation of a common market.

8. D-8 [June 15, 1997]
{Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan and Turkey.}

The D-8 countries will cooperate with each other in a number of areas such as: (a) Cooperation among private sectors through establishment of a Joint Business Council, (b) Consultation and collaboration at international forums, (c) Finance and banking, (d) Promotion of investment, (e) Scientific research and development, (f) Technological and industrial cooperation, etc.

B. Schemes with Other Developing Countries

1. West African Monetary Union (WAMU) [1962]
{Benin, Burkina Faso, Mali, Mauritania, Niger, Senegal plus 2 non-OIC Countries}

Operation as a monetary union with a common currency (CFA franc) issued by a common central bank (BCEAO) aimed; finance ministers recently decided on a reform package aiming to strengthen integration, promote "Africanization" of members' economies and render BCEAO a full-fledged central bank for the zone.

2. Central African Customs and Economic Union (UDEAC) [1966]
{Chad, Gabon, Cameroon plus two non-OIC countries}

Gradual establishment of common market aimed at freeing trade among members, adopting policies for equitable distribution of joint industrial projects, adopting common customs tariff, harmonization of taxation and investment codes by implementing joint policies towards integration; common industrialization policy adopted; new emphasis on sectoral projects and programs.

3. Association of South East Asian Nations (ASEAN) [1967]
{Brunei, Indonesia, Malaysia plus three non-OIC countries}

Intra-ASEAN trade liberalization realized through the Basic Agreement on Preferential Arrangements of 1977; coordinated policies developed on commodities, GSP, trade promotion; ASEAN Finance Corporation and ASEAN Swap Arrangement established; various sectoral arrangements and agreements put into effect, including industrial cooperation schemes; substantial programs and common projects in diverse economic and social fields planned; greater role to private sector cooperation foreseen; bilateral arrangements were developed with various other economic groupings and developed countries.

4. Mano River Union (MRU) [1973]
{Guinea, Sierra Leone plus one non-OIC country}

Liberalization of intra-trade, cooperation in international trade, joint expansion of productive capacity, development of common protective policy, harmonization of policies and positions aimed; first phase of customs union completed.

5. West African Economic Community (CEAO) [1974]
{Burkina Faso, Mali, Mauritania, Niger, Senegal plus one non-OIC country}

Free movement of identified unprocessed goods, a preference scheme for industrial products of the zone with no quantitative restrictions, a common customs tariff, "regional cooperation tax" to replace import duties and charges, together with a fiscal compensation scheme all realized; common customs nomenclature adopted; common external tariff aimed; the Solidarity Fund for Community Development (FOSIDEC) established for CEAO projects.

6. Economic Community of the West African States (ECOWAS) [1975]
{Benin, Burkina Faso, Gambia, Guinea, Guinea Bissau, Mali, Niger, Nigeria, Mauritania, Senegal, Sierra Leone plus five non-OIC countries}

Common market aimed; trade liberalization through consolidation of customs duties, charges and non-tariff barriers, adoption of common nomenclature and documents, elimination of all non-tariff barriers; compensation scheme for liberalization of trade of industrial goods; cooperation and gradual harmonization in all major sectors, as well as in monetary and financial questions, aimed.

7. Bangkok Agreement [1975]
{Bangladesh plus three non-OIC countries}

Trade liberalization through tariff and non-tariff concessions with preferences provided for LDC's aimed; concessions on 93 mostly industrialized products exchanged.

8. Preferential Trade Area for Eastern and Southern Africa (ESA PTA) [1981]
{Comoros, Djibouti, Somalia, Sudan, Uganda plus 13 non-OIC countries}

Endeavoring to establish a common market eventually, by gradual elimination of trade barriers internally and adopting a common external tariff; a clearing facility and payments arrangements planned; private sector activated to promote intra-trade; certain joint projects in industry, energy, agriculture, infrastructure and institutionalism initiated with support of external funding.

9. Economic Community of Central African States (CEEAC) [1983]
{Cameroon, Chad, Gabon plus seven non-OIC countries}

Established a clearinghouse; allowing free movement of certain categories of citizens; cooperation in air transport planned.

10. South Asian Association for Regional Cooperation (SAARC) [1985]
{Bangladesh, Pakistan, Maldives plus four non-OIC countries}

Dimension of cooperation activities expanded in 1988 to cover trade, manufactures, services and education.

Table 1: Descriptive Statistics for 1995

Series	Obs	Mean	STD	Minimum	Maximum
LOGTRADE	528	1.449	1.960	0.000	7.695
LOGGDP	528	39.911	4.734	28.936	56.518
LOGPCI	528	8.063	3.630	0.492	20.317
LOGDISTANCE	528	7.641	0.792	3.638	8.895
BORDER	528	0.081	0.274	0.000	1.000
GCC	528	0.028	0.166	0.000	1.000
GCCN	528	0.307	0.462	0.000	1.000
SAARC	528	0.006	0.075	0.000	1.000
SAARCN	528	0.170	0.376	0.000	1.000
AMU	528	0.011	0.106	0.000	1.000
AMUN	528	0.220	0.414	0.000	1.000
ECO	528	0.006	0.075	0.000	1.000
ECON	528	0.170	0.376	0.000	1.000
D8	528	0.053	0.224	0.000	1.000
D8N	528	0.379	0.485	0.000	1.000
GCCAMUECO	528	0.148	0.355	0.000	1.000
GCCAMUECON	528	0.492	0.500	0.000	1.000

Source: IMF Direction of Trade and Author's own calculation.

Table 2: Descriptive Statistics for 1996

Series	Obs	Mean	STD	Minimum	Maximum
LOGTRADE	465	1.441	1.989	0.000	8.831
LOGGDP	465	31.048	3.211	21.896	37.974
LOGPCI	465	-1.911	5.994	-25.013	10.792
LOGDISTANCE	465	7.643	0.786	3.638	8.895
BORDER	465	0.088	0.284	0.000	1.000
GCC	465	0.032	0.177	0.000	1.000
GCCN	465	0.323	0.468	0.000	1.000
SAARC	465	0.006	0.080	0.000	1.000
SAARCN	465	0.181	0.385	0.000	1.000
AMU	465	0.013	0.113	0.000	1.000
AMUN	465	0.232	0.423	0.000	1.000
ECO	465	0.002	0.046	0.000	1.000
ECON	465	0.125	0.331	0.000	1.000
D8	465	0.043	0.203	0.000	1.000
D8N	465	0.363	0.482	0.000	1.000
GCCAMUECO	465	0.142	0.349	0.000	1.000
GCCAMUECON	465	0.490	0.500	0.000	1.000

Source: IMF Direction of Trade and Author's Own Calculation.

Table 3: Correlation Matrix for 1995

	LOG TRADE	LOG GDP	LOG PCI	LOG DISTANCE	BORDER	GCC	GCC N	SAA RC	SAA RCN	AMU	AMU N	ECO	ECO N	D8	D8N	GCC AMU ECO	GCC A MUE CON
LOGTRADE	1.000																
LOGGDP	0.192	1.000															
LOGPCI	-0.026	0.857	1.000														
LOGDISTANCE	-0.194	0.131	0.035	1.000													
BORDER	0.328	0.036	0.010	-0.552	1.000												
GCC	0.207	-0.222	-0.152	-0.424	0.283	1.000											
GCCN	0.059	-0.336	-0.230	0.095	-0.078	-0.114	1.000										
SAARC	0.020	-0.034	-0.071	-0.035	-0.023	-0.013	-0.050	1.000									
SAARCN	0.067	-0.091	-0.191	0.267	-0.116	-0.077	-0.105	-0.034	1.000								
AMU	0.114	-0.045	-0.077	-0.104	0.229	-0.018	-0.071	-0.008	-0.048	1.000							
AMUN	-0.015	-0.095	-0.163	0.109	-0.091	-0.091	-0.115	-0.040	-0.094	-0.057	1.000						
ECO	0.176	0.182	0.142	-0.031	0.162	-0.013	-0.050	-0.006	0.100	-0.008	-0.040	1.000					
ECON	0.266	0.492	0.384	0.102	-0.024	-0.077	-0.105	0.10	0.223	-0.049	-0.094	-0.034	1.000				
D8	0.350	0.303	0.099	0.066	0.022	-0.040	-0.157	0.095	0.162	-0.025	-0.125	0.319	0.019	1.000			
D8N	0.213	0.340	0.112	0.256	-0.033	-0.133	-0.113	0.045	0.207	-0.084	-0.112	-0.059	0.425	-0.185	1.000		
GCCAMUECO	0.364	-0.072	-0.082	-0.193	0.266	0.411	0.209	-0.031	-0.018	0.258	0.243	0.182	0.211	-0.027	0.005	1.000	
GCCAMUECON	-0.036	-0.030	-0.034	0.194	-0.210	-0.168	0.330	0.026	-0.023	-0.105	0.209	-0.074	0.158	0.020	-0.027	-0.410	1.000

Source: IMF Direction of Trade and Author's Own Calculation.

Table 4: Correlation Matrix for 1996

	LOG TRA DE	LOG GDP	LOG PCI	LOG DIST ANC E	BOR DER	GCC	GCC N	SAA RC	SAA RCN	AMU	AMU N	ECO	ECO N	D8	D8N	GCC AMU ECO	GCC A MUE CON
LOGTRADE	1.000																
LOGGDP	0.514	1.000															
LOGPCI	0.305	0.703	1.000														
LOGDISTANCE	-0.225	0.145	0.201	1.000													
BORDER	0.352	0.107	0.026	-0.580	1.000												
GCC	0.222	-0.034	-0.162	-0.456	0.287	1.000											
GCCN	0.077	-0.048	-0.228	0.096	-0.085	-0.126	1.000										
SAARC	0.024	0.006	0.044	-0.038	-0.025	-0.015	-0.056	1.000									
SAARCN	0.071	0.016	0.112	0.268	-0.126	-0.086	-0.126	-0.038	1.000								
AMU	0.127	0.059	0.025	-0.112	0.233	-0.021	-0.079	-0.009	-0.054	1.000							
AMUN	-0.051	0.121	0.063	0.131	-0.099	-0.100	-0.118	-0.044	-0.099	-0.063	1.000						
ECO	0.102	0.077	0.035	-0.029	0.149	-0.008	-0.032	-0.004	0.099	-0.005	-0.026	1.000					
ECON	0.194	0.291	0.130	0.106	0.020	-0.069	-0.093	0.132	0.313	-0.043	-0.084	-0.018	1.000				
D8	0.291	0.342	0.286	0.062	0.009	-0.039	-0.146	0.115	0.176	-0.024	-0.117	0.219	0.209	1.000			
D8N	0.198	0.438	0.345	0.268	-0.014	-0.138	-0.120	0.051	0.238	-0.086	-0.119	-0.035	0.378	-0.160	1.000		
GCCAMUECO	0.314	0.145	-0.085	-0.208	0.286	0.449	0.194	-0.033	-0.015	0.281	0.243	0.114	0.219	-0.056	-0.051	1.000	
GCCAMUECON	-0.048	0.064	-0.052	0.182	-0.214	-0.179	0.372	0.028	-0.024	-0.112	0.235	-0.046	0.124	-0.017	-0.035	-0.399	1.000

Source: IMF Direction of Trade and Author's Own Calculation.

Table 5: Gravity Model Regression Results for 1995

Variable	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats
Constant	-2.382	-1.650	-2.374	-1.640	-8.379	-6.927	-8.403	-6.934	-0.521	-0.398	-7.275	-6.991	0.4948*	0.3471
LOGGDP	0.202*	5.016	0.201*	4.979	0.386*	11.937	0.385*	11.904	0.149*	4.020	0.353*	12.360	0.1419*	3.5070
LOGPCI	-0.204*	-4.446	-0.203*	-4.407	-0.408*	-10.893	-0.407*	-10.859	-0.191*	-4.528	-0.387*	-10.541	-.2038*	-4.4168
LOGDISTANCE	-0.518*	-4.705	-0.527*	-4.778	-0.404*	-3.583	-0.410*	-3.626	-0.485*	-4.774	-0.391*	-3.689	-0.490*	-4.4341
BORDER	0.957*	3.261	1.013*	3.458	0.987*	3.211	1.043*	3.408	1.090*	3.789	1.122*	3.668	1.5117*	4.9043
GCC	2.244*	4.196	2.850*	6.503	2.403*	4.290	2.959*	6.434						
GCCN	1.196*	6.566	1.369*	8.563	1.118*	5.863	1.277*	7.631						
SAARC	-0.402	-0.470	-0.452	-0.527	0.173	0.193	0.122	0.137						
SAARCN	0.266	1.321	0.279	1.384	0.424**	2.016	0.436**	2.073						
AMU	1.723**	2.469	2.335*	3.730	1.106	1.532	1.662**	2.565						
AMUN	0.552*	2.763	0.752*	4.369	0.157	0.784	0.340**	1.999						
ECO	0.378	0.386	1.016	1.097	2.168**	2.216	2.718**	2.932						
ECON	0.131	0.529	0.329	1.447	0.673**	2.733	0.860*	3.882						
D8	3.104*	7.393	3.075*	7.307					2.955*	8.167			2.9681*	7.5027
D8N	1.098*	5.357	1.120*	5.459					1.017*	5.795			1.0487*	5.4745
GCCAMUECO	0.567**	1.967			0.522**	1.731			2.016*	10.090	2.032*	9.567		
GCCAMUECON	0.000	0.000			0.000	0.000			0.715*	5.115	0.705*	4.740		
R-square	0.485		0.481		0.428		0.425		0.464		0.392		0.375	
F-statistic	32.115		33.943		29.661		31.760		56.305		55.983		48.319	
Significance of F	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
DW	1.839		1.842		1.786		1.788		1.810		1.680		1.639	

NOTES: 1. GLS estimates of the gravity equation: LOGTRADE=a + b LOGGDP + c LOGPCI + d LOGDISTANCE + e BORDER are presented in the table. 2. LOGTRADE is logarithm of bilateral trade between two countries; LOGGDP is logarithm of the product of two countries' GDP; LOGPCI is logarithm of the product of two countries' per capita income; LOGDISTANCE is logarithm of distance between economic centers of two countries; BORDER is a dummy variable which takes a value of 1 if two countries have common border and 0 otherwise. 3. SAARC block consists of Bangladesh, India, Nepal and Bhutan, Pakistan, Sri Lanka and Maldives; GCC consists of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE; AMU block consists of Algeria, Mauritania, Morocco, Tunisia; ECO consists of Iran, Pakistan and Turkey; D8 block consists of Bangladesh, Pakistan, Malaysia, Indonesia, Egypt, Iran, Turkey and Nigeria. GCCAMUECO represents a hypothetical trading block among the member countries of GCC, AMU and ECO blocks; 4. GDP, PCI and BORDER are expected to have positive effect on TRADE, and DISTANCE to have negative effect on TRADE. 5. The dummy variables GCC, SAARC, AMU, ECO, D8 and GCCAMUECO represent trade creation effects, while GCCN, SAARCN, AMUN, ECON, D8N and GCCAMUECON represent trade diversion effects. 6. *, **, and *** mean estimates are significant at the 1, 5 and 10 percent significance level respectively.

Table 6: Gravity Model Regression Results for 1996

Variable	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats	Coefficient	T-stats
Constant	-1.894	-1.252	-1.924	-1.270	-4.859	-3.547	-4.907*	-3.578	-1.246	-0.849	-4.599	-3.429	-3.889	-2.738
LOGGDP	0.220*	5.563	0.218*	5.514	0.311*	8.950	0.310*	8.904	0.197*	5.144	0.295*	8.529	0.292*	8.328
LOGPCI	0.012	0.678	0.013	0.712	0.009	0.520	0.010	0.549	0.009	0.503	0.007	0.393	-0.025	-1.486
LOGDISTANCE	-0.579*	-4.603	-0.578*	-4.584	-0.506*	-4.020	-0.503*	-3.991	-0.559*	-4.773	-0.457*	-3.906	-0.540*	-4.487
BORDER	0.980*	3.072	1.043*	3.292	1.019*	3.134	1.082*	3.354	0.994*	3.137	1.084*	3.328	1.259*	3.927
GCC	1.413*	2.464	1.952*	4.289	1.156**	1.983	1.673*	3.625						
GCCN	0.880*	4.573	1.023*	6.071	0.652*	3.436	0.790*	4.796						
SAARC	0.125	0.142	0.076	0.086	0.771	0.868	0.723	0.812						
SAARCN	0.563**	2.732	0.571**	2.770	0.784*	3.813	0.793*	3.852						
AMU	1.197**	1.639	1.726*	2.673	0.659	0.899	1.164**	1.800						
AMUN	0.113	0.525	0.281	1.520	-0.209	-1.010	-0.048	-0.274						
ECO	-0.472	-0.299	0.044	0.028	0.686	0.433	1.162	0.750						
ECON	-0.156	-0.574	0.021	0.086	0.073	0.268	0.246	0.998						
D8	2.275*	4.959	2.262*	4.924					2.247*	5.552			1.773*	4.348
D8N	0.700*	3.269	0.710*	3.311					0.678*	3.663			0.443**	2.392
GCCAMUECO	0.495**	1.542			0.476	1.448			1.422*	5.721	1.085*	4.367		
GCCAMUECON	0.000	0.000			0.000	0.000			0.448*	2.716	0.257	1.545		
R-square	0.475		0.404		0.446		0.444		0.444		0.404		0.404	
F-statistic	27.164		51.801		27.993		30.079		45.549		51.717		51.801	
Significance of F	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
DW	1.986		1.943		1.961		1.964		1.953		1.865		1.943	

NOTES: 1. GLS estimates of the gravity equation: LOGTRADE=a + b LOGGDP + c LOGPCI + d LOGDISTANCE + e BORDER are presented in the table. 2. LOGTRADE is logarithm of bilateral trade between two countries; LOGGDP is logarithm of the product of two countries' GDP; LOGPCI is logarithm of the product of two countries' per capita income; LOGDISTANCE is logarithm of distance between economic centers of two countries; BORDER is a dummy variable which takes a value of 1 if two countries have common border and 0 otherwise. 3. SAARC block consists of Bangladesh, India, Nepal and Bhutan, Pakistan, Sri Lanka and Maldives; GCC consists of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE; AMU block consists of Algeria, Mauritania, Morocco, Tunisia; ECO consists of Iran, Pakistan and Turkey; D8 block consists of Bangladesh, Pakistan, Malaysia, Indonesia, Egypt, Iran, Turkey and Nigeria. GCCAMUECO represents a hypothetical trading block among the member countries of GCC, AMU and ECO blocks; 4. GDP, PCI and BORDER are expected to have positive effect on TRADE, and DISTANCE to have negative effect on TRADE. 5. The dummy variables GCC, SAARC, AMU, ECO, D8 and GCCAMUECO represent trade creation effects, while GCCN, SAARCN, AMUN, ECON, D8N and GCCAMUECON represent trade diversion effects. 6. *, **, and *** mean estimates are significant at the 1, 5 and 10 percent significance level respectively.