TRADE AND MIGRATION, ARE THEY COMPLEMENTS OR SUBSTITUTES: A REVIEW OF FOUR MENA COUNTRIES

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Abstract

This study reviews two types of migration flows within the Middle East North Africa (MENA) region and investigates their relationship with trade. The first type reviewed is the traditional South-North migration and its relationship with trade. The second type is the South-South migration and its relationship with trade. Four countries from the MENA region, representing four different case studies, are investigated. Tunisia and Morocco represent the South-North model in their trade and migration relationships with the European Union (EU) and Egypt and Jordan represent the South-South model in their trade and migration relationships with other countries in the MENA region. The study revealed that neither South-South migration nor South-North migration can be correlated to trade flows in any deterministic behavior. To overcome the chronic economic problems faced by most of the countries in the MENA region especially those related to the unemployment problem and to make use of the conventional wisdom of trade as a substitution for migration, the study recommends several policies that can be adopted on the local, regional and international levels.

1. Introduction

On the theoretical level, the relationship between trade and migration, though deeply investigated, has remained ambiguous. The conventional theoretical Heckscher-Ohlin-Samuelson model (factor-price-equalization theorem) identified a substitution type of relationship between trade and migration[1]. Changing the assumptions of the model, and especially imposing imperfect competition and increasing returns to scale instead of perfect competition and constant returns to scale, might change the substitution type relationship into a complementary one.

On the empirical level, economic research did not reach a concrete relationship between the two variables. The problem is mainly embedded in the large number of variables that affect such a type of relationship, and cannot be controlled for either, because of the absence of data or the inability to quantify that data. Among such variables are the technological and communication revolution variables which has facilitated the flows of people and of goods all over the world. Other factors include the protectionist type of policies against trade and/or migration flows.

This study aims at reviewing two types of migration flows arising within the Middle East and North Africa (MENA) region, and investigate their relationship to trade. The first type reviewed is the traditional South-North migration and the other type is the South-South migration. The historical review is further elaborated by an analysis of the available data to examine such type of relationships. Four countries from the MENA region, representing four different case studies, are investigated. Depending on the data availability, the depth of the analysis is extended. The four countries under study are not equally treated due to data limitations. Tunisia and Morocco represent the South-North model in their trade and migration relationships with the European Union (EU), and Egypt and Jordan represent the South-South model in their trade and migration relationships with other countries in the MENA region.

The study is divided into four sections. Following this introduction, section two provides a short theoretical review of the relationship between trade and migration accompanied by some empirical investigation. Section three reviews trade and migration trends in the MENA region with special emphasis on the four countries under study. Section four analyzes the reasons behind the relationship between trade and migration identified in Section three. Section five concludes.

2. Theoretical Review and Empirical Evidence

Theoretical Review

The basis for understanding the relationship between trade and migration is the Heckscher-Ohlin-Samuelson theorem. The Heckscher-Ohlin model, coupled with the assumptions of the North as being abundant in capital and the South as being abundant in labor, provides a useful analytical framework for explaining the North-South trade. Adding international labor mobility, substitution between migration and trade is attained since trade liberalization in either the North or the South leads to more trade and through the mechanism of reducing the North-South wage differential it leads to less migration.

Developments based on the Heckscher-Ohlin-Samuelson theorem showed that if some of the assumptions underlying the Heckscher-Ohlin model are changed, trade and migration may be complementary. This issue was examined, for example, by Markusen (1983) and Wong (1983). Markusen (1983) showed that complementarity between migration and trade is achieved if one imposes identical factor endowments in both countries but relaxes one of the following assumptions of the Heckscher-Ohlin model: (a) constant returns to scale, (b) identical technologies, (c) perfect competition, or (d) no domestic distortions. Then, free trade does not result in factor-price equalization. By relaxing the different assumptions, particularly perfect competition and constant returns to scale, different results are obtained. Moreover, whether trade and migration are substitutes or complements under economies of scale and imperfect competition depends on the specific model used.

Moreover, migration typically occurs from lower income to higher income countries or from South to North.[2] If the higher income is due to technological superiority in the North, it is likely that the technological superiority applies across the board. For instance, one would expect the EU to have a technological advantage over Egypt in both agriculture and industry. Alternatively, one can think of the North as being endowed with a superior institutional infrastructure, which raises the productivity of all factors (Olson, 1996). Thus, as in the case of economies of scale, whether technological differences result in substitution or complementarity between migration and trade depends on how they are modeled. If migration costs, financial constraints, foreign aid, fertility rates, remittances, economic uncertainty and past migration flows, among other factors (which reduce the cost of migration through what is coined by Schiff as social capital), are taken into consideration the story becomes more complicated and differentiation between the level of skills of the potential migrants becomes

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[1] According to the model, international trade will bring about equalization in the relative and absolute returns to homogenous factors across nations. As such international trade is a substitute for the international mobility of labor. The original proof of the factor-price equalization theorem is found in Samuelson (1948) and Samuelson (1949).

[2] For a summary on the main driving forces behind migration (demand pull and supply push) see Coppel, J, J. Dumont and I. Visco (2001), p. 11.

distinct[3], as well as the relation between trade and migration. Furthermore, the characteristics of different economies can play a role in determining the type of relationship. For example Rodrik (1997) argues that open economies to foreign trade and investment tend to have a more elastic labor demand curve and hence are probably more welcoming to immigrants. The reason is that businesses and consumers can substitute foreign labor for domestic labor more easily, either by investing abroad or by importing the products made by foreign labor (see Rodrik, 1997, Chapter Two). Thus it is expected a priori that in relatively more open economies trade and migration tend to be substitutes rather than complements. Moreover, the conventional theoretical models were 2*2*2 models. Most of the alternate modifications have concentrated on examining the strength of the assumptions and whether a change in them will lead to a different type of relationship between trade and migration or not. They failed to include the institutional (economic, political and cultural) aspects that might highly influence, if not be the major factor that governs, such a relationship[4]. Such institutional aspects include among others, the type of political regimes of the hosting country, its relation to the governing regime of the sending country, the unity of language, and the harmonization of religion and traditions. The contributions of researchers have concentrated on the relationship in the context of 2*2*2 model, which can be heavily affected if non-tradables are included and/or trade in services is considered.

In a nutshell, the entanglement of variables that influence the relationship between trade and migration shows how complicated the issue is. To reach a concrete unambiguous result we need to control for a large number of such variables which due to the paucity of data on most of such variables is a daunting task. Moreover, data on migrant flows—the number of persons entering and exiting a country within a given time period and the net remaining— do not exist (Russell and Teitelbaum, 1992, p. 9). Data available hardly distinguishes between the different types of migration, regarding whether it is for work, family unity, political reasons or others (Coppel, J, J. Dumont and I. Visco, 2001: p. 19). Hence, a rigorous analysis of the relationship between trade and migration might become an impossible task. The bottom line is that the theory developed so far and the existing data do not enable researchers to determine the exact relationship between those two variables.

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[3] The analysis is complicated further if the subsequent developments in economic theories of migration which underscore the importance of moving beyond the individual as the unit of analysis is adopted. Some have stressed the importance of including the household as the unit of analysis whereas others have emphasized the role of community characteristics (For a short review, see Russell and Teitelbaum, 1992, p. 4)

[4] That might explain that 60 percent of Japan's foreign population in 1997 was from Korea and China, and 71 percent of Luxembourg's foreign population in 2001 was from Portugal, Italy, France, and Belgium. See Solimano (2001).

Empirical Evidence

Policy prescriptions, especially in the South-North context do not seem to have the uncertainty when considering the type of relationship between migration and trade mentioned so far. Policy makers of the North seem to have rather a firm belief in the substitution type of relationship between trade and migration. With a quick review of the contemporary frameworks governing the trade relationship between South and North, we find that most of the policy prescriptions follow the Heckscher-Ohlin framework, and are based on an assumption of substitution between trade and migration, and between movements of capital and labor. It is widely assumed that the economic pressure underlying recent increases in international migration can best be moderated by rapid economic growth in "sending" countries. To this end, many have advocated economic transfers (via aid, investment, and trade) from high income to low income countries as a tool of immigration policy (Russell and Teitelbaum, 1992, p. 33). Hence, free trade agreements among developed and developing countries are primarily designed to encourage greater regional economic integration, but they are also falling within a new approach to the migration phenomenon, in which sending country development and job creation are encouraged in order to eventually reduce uncontrolled migration (Garson, 1999, p.1). Some researchers have argued that such an approach favors free trade over free migration as it tends to lessen the degree of domestic redistribution of income and social benefits, especially in the receiving countries (Wellish and Walz, 1998). Opposition to immigration in the EU and the US has increased in recent years. Before 1973, Europe was characterized by a tight labor market; and immigration from the South, mainly from North Africa and Southern Europe, was encouraged. The situation changed starting from the mid 1970s onwards and was extensively affected by the increased migration from Eastern and Central Europe starting from the beginning of the 1990s[5]. With the slowdown in growth, rise in unemployment and increased economic uncertainty, immigration came to be viewed as a burden by the hosting countries. But, while migration demand fell, supply did not (Schiff, 1996, p. 1).

The future of international migration depends to a large extent on the evolution of public and political reactions to economic circumstances. Within this context trade policy has been contemplated in order to deal with the migration problem as has been considered by the EU and the US. EU policy makers have expressed the view that opening their markets to exports from countries in the South and the East will reduce the pressure to migrate. Similarly, during the debate on NAFTA, Presidents Salinas and Bush argued that NAFTA would help Mexico export more goods and fewer people. These statements are based on the view that

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[5] In 1989, the total population of the EEC counted 324 million, out of them 13 million or 4 percent were counted as "foreign residents". Out of the 13 million over more than 4 million came from the Maghreb, Turkey and Yugoslavia (Russell and Teitelbaum, 1992, p. 10).

by raising the level of exports from these countries, trade liberalization will lower migration[6]. In other words, the assumption is that trade and migration are substitutes (Schiff, 1996, p. 4). Hence, it is expected that trade can enhance growth and create, together with financial assistance and capital flows, enough jobs in the sending countries that can reduce the migration pressure. Whether this is true or not, cannot be determined a priori and the following review of trade and migration in the MENA region might be able to answer, though still partially, this question which then can feed back in the general theoretical framework of trade and migration to contribute to the determination of the nature of their relationship.

3. Review of Trade and Migration in the MENA Region

3.1. The Demographic Profile

The demographic situation in the MENA region varies considerably among the countries of the region and between the region itself and the Northern Mediterranean European countries. Whereas Northern Mediterranean European countries have completed their demographic transition, those in the MENA region are still encountering a lot of demographic changes. Mortality, fertility and infant mortality rates differ considerably and hence not only the size of the population differs but also the structure of that population (see Table 1). Northern Mediterranean European countries have a relatively older population, those of the MENA region a fairly young population. MENA population doubled between 1960 and 1985, and despite the declining fertility rate since the 1980s it will double again by 2010 (Glytsos, 1999, p.2). Children aged under 15 account for between 35 percent and 40 percent of the population in Egypt and Morocco (see Table 1). This percentage is lower in Tunisia, which began its demographic transition earlier. The proportion of children under 15 will shrink in most of the countries of the Southern Mediterranean in the MENA region by the year 2010. Consequently the proportion of the working age population will grow more quickly than total population. According to some observers the percentage of the population in MENA aged 0-14 is expected to decrease from 43 percent to 32 percent by the year 2025, with total population increasing from 244 million to 552 million over the same period. But the actual number of people aged 0-14 will almost double (from 105 million to 177 million). This will mean greater pressure on educational systems and health expenditures, and on labor markets to create jobs (Shafik, 1996: p.12). Additional demand for employment will increase, and

as a result migratory pressures will follow as long as the domestic labor markets are incapable of absorbing such increase in job seekers[7].

The growth in the active age population in Southern Mediterranean MENA countries depends on the demographic situation, the emigration outlook, and the participation rates. The population aged 15 to 64 in these countries doubled in absolute value during the 1970s and 1980s. This population will be 1.8 times higher in 2010 than in 1990. Participation rates in those countries are usually lower than those of the EU, in particular because the population is young and there are few women in the labor market. However an increase in the participation rates is highly expected in those countries.

Employment, as well as participation rates are projected to rise because of the gradual change in the population structure and the greater number of women seeking work. In the 1970s and the 1980s, the active population grew at average annual rates that exceeded the overall growth rate of the population. These rates are forecast to be 3.4 percent in Algeria, 2.9 percent in Morocco, 2.5 percent in Tunisia, 2.7 percent in Egypt and 1.9 percent in Turkey in the period from 1990 to 2010. Fuelled by rural exodus, these rates outstrip the national rate in urban areas. The active population of Morocco, Tunisia and Egypt will have nearly doubled in 2010 from the level in the 1980s (Garson, 1999, p.2). Thus the heart of the unemployment problem in these countries is that the new entrants into the labor force cannot be absorbed by economic activity, which creates long-term unemployment. What is even more disturbing is that in some of these countries, particularly Egypt, the share of unemployed educated people is high, consisting mainly of those who queue for a government recruitment jobs (Glytsos, 1999, p.2).

The existing situation of labor markets in Southern Mediterranean MENA countries is such that their job creation capacity will be insufficient to absorb new job seekers. While such job seekers represent a large pool for a potential labor army that can be utilized in enhancing trade, expanding production and exports and hence lessening the migratory pressures, the existing difficulties faced by the Southern Mediterranean MENA countries in restructuring their economies suggest that increased migratory pressures will be the ultimate result in the short and medium runs. In other words, the demographic features of the Southern Mediterranean MENA countries reveal an expected strong, migratory pressure arising in those countries with a pessimistic view towards their absorption of productive exporting activities in their home countries.

To elaborate more on the link between the prevailing demographic features of the Southern Mediterranean MENA countries, the migratory pressure and its

[6] This is not only the opinion of policy makers but also the opinion of prominent economists as Stanley Fischer who argues that "if the Gulf countries no longer want to import migrant labor on the scale of the past they will need to consider increasing their financial investment in the home countries of the migrants, so that capital goes to labor instead of labor coming to capital."(Fischer, 1993, p. 432).

[7] For an extensive discussion of the demographic changes and projections in the MENA region and their impact on labor market conditions and emigration prospects see (Glytsos, 1999).

relationship with trade, it is useful to emphasize that the trend in the hosting countries tends to favor skilled labor. But is this the case in the countries under study in this paper? The answer is embedded in the demographic pressures existing in the Southern Mediterranean MENA countries which meant their related governments were unable to provide the necessary educational funds needed to handle this pressure. Combined with inefficient educational policies that resulted in a mismatch between the market requirements of skills needed, and the outcome of the educational system[8] and/or low quality of skills. The end result was an army of semi-educated low skilled job seekers who cannot be absorbed by the domestic labor market and are not equipped with the necessary skills required by the hosting countries in case of migration. As identified by some observers, one of the first adjustments necessary for trade liberalization to have the desired impact on employment entails smoothing out the mismatching between job seeker profiles and employer needs (ERF, 2000, p. 129) which unfortunately has not been the case so far. Relating this to our theoretical context identified in Section 2, it is easily shown that the demographic features of our concerned countries heavily affect the variables of the social capital in a way that tends to prevent migration from acting as a substitute to trade in different ways, the most important of which are widening the gap of skills required and wage differences (between the sending and hosting countries).

3.2. Trends of Migration

3.2.1. The South-North Context

Migration from the Maghreb (principally from Algeria, Morocco, and Tunisia) to European OECD countries is a long-standing phenomenon (see Nassar, 1993)[9]. As of 1970, there were nearly 1.2 million nationals of these three countries resident in six OECD countries (Germany, Belgium, France, Netherlands, Sweden, and Switzerland). By 1989-1990, there were nearly 2.1 million in eight European countries (the aforementioned plus Italy and Spain). Such figures exclude undocumented migrants which are a growing concern for the European governments[10]. These figures are not entirely the result of migration but they also include natural increases amongst the resident Maghrebian population. While most migration from the Maghreb has been employment related, not all North

African migrants resident in the EU are employed. Crude labor force participation rates amongst Maghrebians range from a low of 0.14 in Belgium to a high of 0.64 in Switzerland. The figures used to calculate these participation rates exclude the unemployed and the self-employed; however, the latter group includes many women who work in the informal sector. These figures are also likely to exclude Moroccans and Tunisians who, with the tightening of entry restrictions, have opted for short term seasonal migration on 4 month tourist visas to work in agriculture (Russell and Teitelbaum, 1992, p. 17).

All such aspects of seasonal employment, undocumented migration, and participation rates add to the difficulties in obtaining a non-obscure relationship between trade and migration. They represent a major loophole in any kind of data analyzed which researchers should consider. However, the main trend observed is that migration from the Southern Mediterranean MENA countries to the Northern Mediterranean European countries is increasing, despite all pressures to reduce it. As argued by some commentators "In years to come, demographic reasons alone are expected to raise potential emigration from the 'South' in general, against an extremely limited absorbing capacity for immigrants in the 'North' " (Glytsos, 1999, pp: 13-14). The latest data available indicate that inflows of foreign population coming from Algeria, Morocco and Tunisia increased from 36.1 thousand migrants to 49.2 thousand migrants in Belgium, France, the Netherlands and Norway between 1989 and 1998. However such increasing trends do not reveal the disaggregated features of the migration flows where for example such net migration inflows from Morocco to the Netherlands have decreased from 8.4 thousand to 5.3 thousand between 1989 and 1998 (SOEPMI, 2000).

3.2.2. The South-South Context

The migration changes in the South-South context within the MENA region can be classified mainly into three types of trends. The first trend is the one that takes place between some MENA countries and other MENA countries that are not located in the Gulf area such as Libya. The second trend is rather a phenomenon where the same sending country is also a hosting country of migrant labor, or rather, what is precisely defined as replacement migration, as in the case of Jordan. The third type is the traditional type of migration, which takes place between the non-Gulf labor exporting countries to the Gulf labor importing countries. Hence the labor movement can be described as the most active economic activity taking place in the MENA region (see Nassar, 1994) despite the fact that MENA does not enjoy the type of labor mobility found for example in the EU, where citizens of one country have an automatic right to work in other EU countries.

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[8] In Egypt, for example, 61 percent of secondary students attend vocational and technical schools, often to divert the numbers seeking admission to higher education. The consequence is that the vocational training system supplies five to seven times the number of technical workers required by the economy. In Morocco a payroll tax on employers goes solely to finance publicly provided vocational training, resulting in training that is often divorced from the needs of the private market. See World Bank (1995), p. 72

[9] According to Nassar, 1993, migrants from those three countries to the EU represent more than 80 percent of Arab migrants to the EU.

[10] In Italy's regularization campaigns of 1986 and 1990, Maghrebians were by far the largest group, numbering 124247 out of the total regularized (321349).

The First South-South Migration Trend

Libya has been a pole of attraction for foreign labor, that were employed in nearly all sectors of the economy (notably construction) as oil revenues fueled phenomenal growth in government revenues and related investments in development projects. As a result in the country's 1973 census, there were nearly 200000 foreign nationals in Libya, compromising 8.8 percent of the total population. In 1975, expatriate workers alone numbered more than 260000 and constituted nearly 33 percent of the country's labor force. By 1983, Libya's Secretariat of Planning estimated that half of Libya's population was constituted of foreigners. While the vast majority of these were Egyptians and Asians, some originated from other North African countries. The number of Maghrebians in Libya is reported to have grown during the first half of the 1980s, as a consequence of continuing restrictions in Europe. Tunisians were estimated to be 15 percent of Libya's total population in 1983. In August-September 1985, Libya expelled thousands of expatriate workers, including 32000 Tunisians, 7000 Egyptians and several thousands from Mauritania, Mali and Niger, in retaliation against labor politically opposed to Libya and as part of an effort to reduce the outflow of hard currency in the form of worker remittances. In late 1987, Libya's diplomatic relations with Tunisia were restored, and in early 1988 the frontiers with Egypt were reopened. New migration flows followed. By March 1988, some 30,000 Tunisians had arrived in search of work. Subsequently an estimated 10,000 are reported to have returned home after failing to find employment. Table 2 summarizes the aforementioned trends.

The potential for international migration within North Africa is likely to continue to grow with the creation in 1989 of the Arab Maghreb Union which has as a stated priority the promotion of the free movement of citizens among member states (Russell and Teitelbaum, 1992, p.: 17-18). Hence, the first trend shows that migration has increased and is expected to increase as a result of two institutional developments. The first is the creation of the Arab Maghreb Union with its provision on the facilitation of labor movement and the second is the restrictions imposed by European countries on migration inflows from Morocco, Tunisia and Algeria which diverted migration flows from their countries to Libya. The review also revealed that migration movements are highly sensitive to political circumstances which, if not taken into consideration, can result in the wrong explanation of the related data.

The Second South-South Migration Trend

While the Gulf has been the major pole of attraction for international migration within the MENA region, it has not been the only destination of note. Jordan has been a labor importing as well as an exporting country (what is commonly known as migration replacement[11]). As of the early 1980s, between a third and two fifths of its own labor force was working abroad whereas it hosted some 120,000 domestic and service workers. However, as economic conditions in Jordan worsened during the latter half of the 1980s, immigration appears to have slowed down or declined (Russell and Teitelbaum, 1992, pp. 24-26). The trend continued in the early 1990s as a result of the Gulf governments' reactions to the supporting role of the Jordanian government to the Iraqi's government in its invasion to Kuwait. This situation was exacerbated by the rising levels of unemployment due to the massive returns of population from the Gulf and deteriorating economic conditions associated with the loss of worker remittances. For example, following the Gulf crisis, the unemployment rate increased from 2 percent in the second half of the seventies to 8 percent in 1981. Some projections indicate that it reached 25 percent by the end of the eighties. Also the returnees presented a real burden on the budgets of these countries to provide housing, schooling and other social services. In Jordan, the increase in cost of water supplies as a consequence of the return migrants during the Gulf crisis was estimated at RJ 90 million. Meanwhile the estimated cost to absorb the returnee students was RJ 5.4 million in higher education and RJ 13.3 million in primary education (Nassar, 1994). Other countries that have shared the migration replacement phenomenon were Iraq and Yemen, though now the economic conditions do not allow them either to export or to import labor.

The Third South-South Migration Trend

The Arab oil embargo in 1973, the quadrupling of oil prices and the significant increase in the revenues of oil exporting countries launched ambitious socio-economic development plans in the Gulf oil exporting countries to complete the buildings of their infrastructure, to expand social service institutions and to enhance economic development in general. With these new objectives their demand on labor intensified a migration wave which started in the first half of the seventies. At least until 1990, the predominant direction of international migration within the MENA region was to the six member states of the Gulf Cooperation Council (GCC) for employment opportunities associated with increased government and private spending fueled by the high oil prices in the 1970s. In 1970, there were approximately 884,000 in the Gulf; five years later, the number of migrant workers had more than doubled, to nearly 1.9 million. By 1985, there were an estimated 7.2 million foreigners in the Gulf of whom 5.1 million were migrant workers, constituting on average over 70 percent of the Gulf labor force (Russell and Teitelbaum, 1992, p. 24).

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[11] Migration replacement means that the country is at the same time a labor importing as well as a labor exporting country. Jordan, Iraq and Yemen are examples of these countries. Syrians and Egyptians are replacing medium and low-level manpower in all previous countries who have migrated to the oil rich countries or who left during the first Gulf war.

The largest stocks of foreign nationals in the Gulf in 1985 were in Saudi Arabia (4.5 million), followed by the United Arab Emirates and Kuwait (with 1 million each), and another 640,000 in Oman, Qatar, and Bahrain altogether. These figures do not include the migrants to Iraq, which prior to its invasion of Kuwait, was estimated at 1 to 3 million migrant workers, mostly Egyptians.

The occupational structure of Arab migrant labor changed in the following decades. In the fifties and early sixties most Egyptian migrants were professionals: doctors, teachers and engineers. However in the seventies all kinds of occupations were needed to satisfy the needs of rapid economic development. In Kuwait and Saudi Arabia the share of the top occupational categories such as engineers or physicians and the share of the lowest occupational categories were relatively high (Nassar, 1994). However as evident from limited data available most of the migrant labor has been concentrated in non-tradable service activities. This trend continues until today. For example, as of 1985 the largest proportion of migrant labor in the GCC region are employed in the financial, personal, and community service sectors of the economy (30 percent), followed by construction (29 percent) and followed by wholesale and retail trade (14 percent).

One of the major changes in migration to the Middle East over the past 20 years has been the shift from Arab to South and Southeast Asian source countries. From the beginnings of the oil industry in the 1930s to the mid 1970s, migrants to the Gulf and elsewhere in the Middle East were predominantly Arabs. After the introduction of Egypt's "open door" policy (Infitah) in 1973, Egypt became a major labor exporter[12]. Beginning in the mid 1970s, however, as the combined result of labor demand, cost, and political factors, Asian began to swell the ranks of migrants to the Middle East. In 1970, non-Arabs were only 12 percent of all workers in the Gulf; by 1980, they were 41 percent. By 1985, 63 percent of the Gulf migrants were Asians. In other words, over the past 15 years, South and Southeast Asians have come to dominate Middle Eastern migration streams representing another form of migration diversion, however, this time from Arab flows to the GCC to non-Arab flows. Such diversion represents a great threat for the Arab migrants in the MENA region.

One of the debates before the invasion of Iraq to Kuwait concerned whether or not migration to the Gulf declined in the late 1980s, as the result of declining oil prices and increasing economic stringency. The commonly held view is that it did. However, a close reading of the limited evidence suggests that, while there was certainly a slowdown in labor demand in the Gulf, the feared massive declines in the overall numbers of migrants did not materialize. Indeed, data from the ILO Asian Migration Project show that the average annual number of Asian migrants registered in their home countries increased between 1981 and 1987, and the Gulf continued to be their major destination. In Kuwait alone there were over 144,000 more Asian migrants present in July 1990 than in 1985. Iraq's invasion of Kuwait in August 1990 profoundly affected the trends just described and illustrates the volatility that often characterizes international migration (for a summary of such trends see Table 3). Within the following nine months, some 2 million people, many of them foreign workers had been displaced from Kuwait, Iraq, and Saudi Arabia. In Egypt one million workers returned, in Jordan 300000, in Lebanon 260000 and in Sudan 300000. The increase in return migration was accompanied by a domestic labor market crisis where the unemployment rates rose dramatically in the traditional labor sending countries. In Egypt the unemployment rate rose from 7 percent in 1986 to 14.7 percent in 1991 (Nassar, 1994)[13]. Most of the "evacuees," as the Egyptian and Asian workers were called, were repatriated to their home countries. With the return of most Kuwaitis and the commencement of reconstruction, some foreign workers, such as Filipino, began to return to the Gulf. Indeed, the total number exceeded the highest total for any month in 1990. While Saudi Arabia continued to attract the largest numbers, over 1,000 went to Kuwait in May 1991 alone. Similarly, Egyptians are reported to have begun returning to Iraq (Russell and Teitelbaum, 1992, pp.: 24-26).

3.3. Trends of Trade

South-North Trade

It is clear that major goods and services trade of the Middle East is with the outside world, with energy and other raw material the predominating exports (as evident in Table 5). Further, the region is not particularly coherent in terms of its likely external trade patterns. With the opening of the former USSR countries in the east of the MENA region are likely to develop their trade to the east whereas

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[12] In Egypt, emigration became a constitutional right in 1971, exit visas were abolished in 1973, and a Ministry of Emigrant Affairs was established to address the needs of Egyptians abroad. A parallel exchange rate was adopted for encouraging remittances. The government exempted migrants from paying taxes on income earned abroad and abolished a law requiring migrants to transfer a minimum of 10 percent of earnings to Egypt at the overvalued official exchange rate. In Jordan, the government allowed migrants to postpone their military service until the age of 37 if they obtained a work permit from another country (See Shafik, 1992, pp. 17-18).

[13] Saudi Arabia expelled some 750000 Yemeni workers in October 1990, after the Government of Yemen came out in support of Iraq. Moreover, before the war, there were an estimated 450000 Palestinians in Kuwait and smaller but sizable communities in Saudi Arabia and other GCC countries. By the time of the allied offensive, as many as three quarters of the Palestinians had fled to Jordan, where many hold citizenship. This figure includes 120000 expelled from Saudi Arabia and 15000 expelled from the UAE and smaller Gulf States. The war further displaced between 750000 and 850000 workers from a number of other countries, including Egypt, India, Pakistan, and the Philippines, to name only a few. In Kuwait alone, it is estimated that between 1.4 and 1.6 million, or up to 94 percent of the pre-invasion population, had fled by the end of hostilities.

countries in the Northern MENA will be more oriented to Europe (Fischer, 1993, p. 440).

The Southern Mediterranean MENA countries trade intensively with the EU so that the percentage of exports in some of those countries reaches between 50-70 percent as evident from Table 5. Hence any kind of regional trade agreement with the EU represents for some countries something very similar to integrating with the whole world economy. Recently there has been a new initiative from the EU intending to have a large free trade area that compromises the 15 EU countries together with a large subset of the MENA countries including Egypt, Jordan, Lebanon, Syria, Morocco, Algeria and Libya. The EU's Mediterranean Basin Initiative contains incentives not only for closer economic ties between the EU countries and those in the southern and eastern Mediterranean, but also for closer ties among the latter group of countries. Morocco, Tunisia, Jordan, and Egypt have already signed association agreements with the EU, and Algeria, Syria and Lebanon are in the midst of negotiations[14]. The liberalization schedule under these agreements is spread over 12 years for industrial goods, while full liberalization does not apply to agriculture and services. The Mediterranean Basin Initiative was mainly designed to strengthen trade ties amongst the Northern and Southern Mediterranean countries. As trade is strengthened migratory pressures are expected to be relaxed. Moreover, the Initiative did not include any provision concerning movement of labor. The only provision, which mentioned such an aspect, was confining the liberalization of trade in services to each party's GATS commitments, and since there was mode 4 that was concerned with the temporary movement of labor, both the EU and the Southern Mediterranean MENA countries were very conservative in their commitments. This reminds us of the policy prescriptions mentioned in Section two which emphasize that policy makers have a firm belief in the substitution type of relationship between trade and migration.

South-South Trade

In the MENA region, the process of regional integration has been going on since the 1960s. These efforts have not been successful and in practice have been limited to a series of preferential trade agreements characterized by limited coverage and the absence of specific timetables (Zarrouk and Zallio, 2000, p. 1). The scale of intra regional merchandise trade is limited and amounts to only some 7-8 percent of total exports and imports (see Table 6). This compares to over 60 percent in the case of the EU, over 30 percent in Asia and around 20 percent in the Western Hemisphere. For no country in the region does intra MENA trade amount to more than 25 percent of total trade, and the unweighted average share of intra MENA trade is under 10 percent. With the exception of

mineral fuels, there is no category of commodities for which intra MENA trade is very important (see El-Erian and Fisher, 1996: pp.8-9). On the other hand, most of these countries are highly integrated with the western societies and are characterized by low performance in the productive sectors and very limited diversification of products (Nassar, 1994: 36).

The nature of trade relation in the MENA region among the Arab rich and Arab poor countries follows a certain pattern that has existed over years and is difficult to change due to institutional, historical and other factors. Trade relations among Arab countries have suffered from similarity of resource endowments, lack of diversification of products exchanged, domination of oil and oil products exports (more than 50 percent of the early 1990s intra-Arab exports were oil) and similar export structures. The failure to extend trade relations has been emphasized by the lack of exports enhancing institutions and infrastructure, such as the lack of banking and insurance facilitates, weak telecommunications and transport infrastructure; cultural effects as the demonstration effect which biased the import structures towards goods produced in the west; the colonization effect which biased the export and producing structures towards the demand of the west in terms of producing agricultural and raw materials; and finally wrong domestic policies which favored import substitution and self sufficiency measures (Nassar, 1994: pp. 17-18). Moreover, the greater proximity of the Maghreb countries to Europe than to the Mashreq, will keep intra-regional trade limited. Also, the lack of coordination has been the main theme of any trade integration trials among Arab countries of the MENA region.

Moreover, the domestic policies adopted in different MENA countries have exacerbated the problems. Emphasis on complementarity was following the approach of free trade agreements and common markets between the Arab countries, where many Arab countries adopted, for long periods, a socialist economic system with significant restrictions on free trade. Thus the lack of an effective market mechanism became a significant barrier for the implementation of Arab economic integration. Similarly the emphasis on the free trade approach in Arab economic integration relies on an exportable surplus of goods and services, which did not exist for most Arab countries due to their poor productive sectors (especially the industrial sector). Even in the agricultural sector, self-sufficiency rates are very low. This explains the low potential for intra-regional trade (Nassar, 1994: 31).

To summarize, on the intra regional trade front, MENA is remarkably unintegrated, in terms of both the extent of trade interactions within the region, and the absence of an effective framework or institutions responsible for formulating and implementing rules and policies to influence, regulate and supervise trade relations. Nonetheless, while countries of the region will continue to trade mostly with non-regional partners, the current levels of trade within the

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[14] For a short review of the preceding agreements governing trade relations between the EU and the Southern Mediterranean MENA countries, see Nassar, 1993.

region are below the levels that would be attained if economic relations among the countries of the region were more free.

4. Analysis of the Trade-Migration Relationship in the MENA Context

The question that follows is what kind of relationship, if any, exists between the migration and trade patterns in the MENA region. According to the knowledge of the authors, the studies undertaken to answer this question for the countries concerned were rather absent with the exception of a few studies that dealt with the issue such as Shafik (1992). On the one hand, the region has been characterized as one of the least trade integrated regions in the world and the integration of some of its countries with countries of the EU has been relatively high. On the other hand labor mobility has been exceptionally high, both within the MENA and from some of its countries to some of the EU countries, making remittances from migrant labor have exceed the value of regional trade in goods as well as official capital flows. Table 7 reveals the importance of remittances in the four countries by relating it to their total exports.

To answer the question of the relationship between trade and migration, data available on workers' remittances have been used as a crude proxy for the number of migrants and a correlation index for the four countries under study has been calculated between such crude proxy and their exports to the world over the period 1992-1999. The results failed to reveal any clear trend: the correlation coefficient for Egyptian workers' remittances between 1992 and 1998 and its total exports was -0.7, whereas that of Morocco was -0.15 and that of Jordan and Tunisia was 0.9. In other words, it was highly negative in one case suggesting substitutionability, neutral in another and highly positive suggesting complementarity in two other cases. On a rather disaggregated and a more accurate level where some data were available from SOEPMI on the number of net foreign population in one country by their nationality a correlation index between exports of a specific country (Morocco) to another country (France and the Netherlands) and net population flows from the former country to the latter was calculated. The results obtained were as follows: -0.2 in the case of France and 0.05 in the case of the Netherlands suggesting a rather neutral relationship between trade and migration which is compared to the neutral case obtained in the aggregated crude version of the correlation index. The bottom line reached on such crude measures in addition to the aforementioned trends is that the relation between trade and migration is rather ambiguous[15] in both contexts: the South-South context represented in the relationship between Egypt and Jordan and the Gulf countries and between Tunisia and Morocco in their relationship with the EU countries. Such an ambiguous relationship was expected due to a number of factors. For example there are voluminous variables that should be controlled for, however the paucity of data made such a task impossible (see section two for some of such variables)[16]. The aggregation nature of data included (total exports of the country with total flows of migration[17] even if between two specific countries) can lead to obscure results due to the negligence of non-tradables. Even if data on migration were available, the main variable is not the number of emigrants but rather their participation ratios which differs significantly across the receiving countries.

Explaining such Results

Explaining the relationship between trade and migration in the context of the theoretical framework identified in Section 2 might represent an incorrect approach for understanding their relationship in the case of the four countries identified for a number of reasons. First, the assumptions of the Heckscher-Ohlin model are not applicable to reality where most of the markets in the real world are identified to be either operating under monopolistic competition or oligopoly, and hence economies of scale are the norm rather than constant returns to scale. Second, even if we impose the more realistic assumptions of economies of scale and imperfect competition, the determination of the relationship depends on special characteristics of the model used for analysis and since the paper does not apply a specific model, theoretical foundations remain short of identifying the relationship. Third, the inability to control for the large number of variables needed to specify the exact relationship between trade and migration in the context of the MENA region due to their institutional nature such as culture, political sensitivity, etc. Fourth, the failure of the model to include the role of the non-tradable sector, which is highly evident in the South-South context. Nevertheless, a humble trial is undertaken to explain the relationship between those two variables in the case of our four countries.

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[15] Other researchers have reached a rather similar conclusion in the context of the South-South relationship within MENA. Shafik has reached that the relationship between trade and migration is rather neutral. See Shafik (1992).

[16] For example regarding the question of extensive migration costs and their impact on migration, Adams (1991) argues that in the MENA region migration costs are substantial and have a negative impact on migration flows. He finds that the average cost of migrating from rural Egypt to Iraq - including the subsistence cost required for the two-month period that was necessary on average to find a job in Iraq - was close to U.S. $500. Because of the cost of obtaining a number of expensive permits, the migration cost to Saudi Arabia was about U.S. $1,000 or twice the cost of migrating to Iraq. These figures are extremely high considering that the average monthly wage for the people surveyed was only U.S. $65. Thus, the migration cost to Saudi Arabia (Iraq) was equivalent to a fifteen (eight) month salary for these (potential) emigrants, a sum which is not easy to accumulate at such a low income level. A study on Morocco (World Bank, 1994) has shown that Moroccan emigrants are essentially not coming from the income group below the poverty level, which suggests that constraints associated with financing of migration costs (and possibly associated with low skill levels as well) may be binding. A similar finding is obtained by Freeman (1993) and Funkhouse (1992) (Not in references) for migration from El Salvador to the U.S.

[17] For problems encountered in dealing with migration and remittances data see (Russell and Teitelbaum, 1992, pp. 29-30)

The South-North Context

As argued in Section Two the policy makers in the industrialized world believe firmly in the substitution type relationship between trade and migration. Hence a large part of the political thought behind NAFTA and the EU-Mediterranean Basin Initiative is to control migration by enhancing trade (and investment). However, this type of causality is not likely to materialize for several reasons:

1. Trade Policy Loopholes

Trade policy in most industrialized countries is heavily influenced by domestic interest groups concerned about their own economic well being. The outcome of domestic political debates on trade is often a policy structure that – unintentionally—damages the development potential of the same countries to which concessionary assistance and trade preferences are provided, as these domestic interests undesirably seek to restrict access to "their" markets for many goods for which low wage countries offer powerful competition (For a similar argument see Russell and Teitelbaum, 1992, pp. 34). This is evident in the EU-Mediterranean Initiative, which has excluded agriculture and textiles from its domain[18]. As such, the substitution type of relationship is not likely to materialize but this does not imply that the opposite complementarity relationship will dominate. As a result, the domestic policies driven by political forces in the North have unintended negative impacts on the South, paradoxically operating in a way that neutralizes the positive effects of foreign policies directed toward the same developing countries.

2. The Inter-Industry Type of Trade

The trade between countries of the South (Tunisia and Morocco) and countries of the North has been of inter-industry trade type (see Havrylyshyn and Kunzel, 1997, pp. 23). Such kind of trade reduces the possibility of any complementarity that might arise between trade and migration, as it is the case with intra-industry trade. But on the other hand it does not imply a substitution type of relationship especially when constraints on expansion of the exports of sensitive commodities are drastic as explained above. Despite the fact that some might argue that the Hekscher-Ohlin model is highly applicable to explain the South-North trade, the fact that the North is protectionist towards the products that enjoy comparative advantage in the South destroys the mechanism of factor price equalization through decreasing the wedge of wage differentials—proof of which can bee seen in the Common Agriculture Policy of the EU—which is very important for the model to function.

The South-South Context

1. Nature of Developmental Policies adopted

As revealed in Section Three, the part related to the trends in the South-South Migration, migration from countries like Egypt and Jordan to the Gulf countries has been concentrated in the non-tradable sector. This has been mainly due to the developmental policies adopted in countries like Egypt and Jordan, which have opted for import substitution strategies leading to a neglect of exportable commodities. Even though the four countries shifted gears to announced export led strategies, such initiatives were fake and ended up eroding the competitive edges they could have acquired in the world market. Domestic distortions resided in both policies (such as tariffs and quotas) and in institutions (bureaucratic hassles, lack of internationally accepted standards, and costly transport and communications services). The end result was vulnerable economies with a poor infrastructure of exportation[19]. On the other hand, Gulf countries have relatively open economies with almost zero tariff rates and non-tariff barriers are absent. The combination of the two models led to the inability of countries like Egypt and Jordan to satisfy the needs of the Gulf countries of imports of tradable goods. This has been exacerbated by the large wedge of income differences between the two sets of countries which resulted in the mismatching of the low priced (and quality) exportables of Egypt and Jordan to meet the needs of the Gulf residents characterized by high quality (and price). The problem has been intensified and a viscous circle was created where the remittances from the migrant labor contributed significantly to windfall gains in the labor sending countries creating some kind of Dutch disease where production is merely devoted to the production of non tradables versus tradables. Hence, Rodrik's argument mentioned in section two applies to the case of Gulf countries in their trade and migration relationship in general, however, with certain reservations on such relationships with Egypt and Jordan. Gulf countries, described to be relatively open countries welcomed trade as well as immigrants. However, Gulf countries are not trading much with Egypt and Jordan due to the inability of such countries to satisfy the demand of the Gulf citizens as a result of the loss of their competitiveness. On the other hand, Gulf countries have substituted MENA labor migrants by South East Asian migrants as they are cheaper and create less political sensitivity.

2. The Demographic and Cultural Characteristics

The demographic characteristics of countries like Egypt and Jordan imply that they are overpopulated whereas those of Gulf countries meant that they are under populated. The windfall gains of oil prices fueled the developmental plans of the Gulf area but it had insufficient domestic labor to undertake such plans. The

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[18] However it is not an exception. For example, Even explicitly preferential trade provisions such as the Caribbean Basin Initiative and the Lome Conventions often explicitly exclude or sharply limit labor intensive products (such as shoes, garments, labor intensive agricultural products) for which the less developed countries have an obvious comparative advantage.

[19] For a similar argument see World Bank, 1995, p. 21.

solution was importing Arabic speaking labor that were able to take care of the needs of the non-tradable sector. By that time and due to the political friction and social unrest between different nationalities, such labor was substituted for by Asian labor when possible (e.g. in business and health activities).

3. Asymmetric Institutions governing Trade and Migration

In the sending countries several laws were enacted that promote labor migration whereas the import substitution strategies did not enhance exports. On the receiving end, the Gulf countries were open to trade and the interested domestic groups did not amend, till lately, the open immigration policies of their governments[20]. Hence, we ended up with an asymmetrical relationship in the two flows, that of goods compared with that of labor.

5. Conclusion

The study revealed that both the South-South migration as well as the South-North migration can be hardly correlated to trade flows in any deterministic behavior.

To overcome the chronic economic problems faced by most of the countries in the MENA region especially those related to the labor market and the unemployment problem and to make use of the conventional wisdom of trade as a substitution for migration, several policies need to be adopted on the local, regional and international levels.

On the local level, Southern Mediterranean MENA countries need to implement a number of drastic changes in their policies. Given the protectionist attitude towards immigrants and trade flows, the solution lies in domestic development. Hence the first step consists of smoothing out the mismatch between job seeker profiles and market needs. Upgrading programs must be introduced to achieve the necessary competitive retraining of labor. Sectoral changes are also a must. Overvaluation of domestic currencies that resulted in the misallocation of resources by favoring capital-intensive projects rather than labor intensive ones should be redirected. In other words, the structure of incentives should be revised to provide the right environment for allocating resources. Finally, strengthening the entrepreneurial spirit in the educational system is needed to allow the shift toward a more diversified specialized labor force. Achieving such goals is capable of producing a labor force that is capable of meeting the challenges faced domestically to produce the right type of products that can be exported and at the same time create the right skills needed by the hosting countries in case of migration.

On the regional level, a better coordination of migration policies and industrial planning is needed within the MENA region. This will help to achieve a better allocation of resources. Hence, the Great Arab Free Trade Area (GAFTA) project should address the migration issues and industrial planning which according to our knowledge is not included under its context or any other context. In the case of the North-South trade and migration relations, Southern countries should exert pressure to enact the movement of temporary labor to capitalize on their comparative advantage in trade in services issues even if on a temporary GATS style.

On the international level, the mode 4 of the Services' Provision that is being performed through temporary labor movements should be better addressed and pushed for by developing countries in general, with special emphasis on populous developing countries. Moreover the system of GSP (General System of Preferences) should be better addressed to meet the needs of developing countries if trade is really looked at as a substitute for migration.

Academic ideas that have addressed the need for an International Organization for Migration (Bhagwati, 1998) should be looked at more seriously and then maybe a joint committee or at least a working group under the context of the World Trade Organization and the International Labor Organization should investigate more deeply the exact relationship between trade and migration where member states will be more willing to provide data which will further enhance our understanding of the exact relationship, if any[21].

The future research agenda should address issues like the impact of national policies toward immigration and it constituting an impediment to trade in services in the receiving countries. There is also more to be known about the indirect effects of migrant-importing strategies on the subsequent economic trends and trade position of these countries in selected industries. For sending areas, there is little documentation of the economic and trade consequences in countries that have followed an explicit or implicit policy of training skilled workers for international export (e.g. the Philippines, Sri Lanka, Barbados). Finally, there is room to assess the trade potential of developing new labor-intensive services such as health care in these countries.

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[20] Despite policies depriving migrants from benefits such as housing, education and health care and restricting the duration of migrants stay through visas, work contracts and other policies, all such policies were not efficient enough to substantially affect the migration flows. The absence of strong unions in the oil exporting countries meant that the importation of labor did not face opposition from local interests (see Shafik, 1992, pp. 15-20).

[21] As mentioned by some commentators: There are close connections between migration and international economic conditions, both as causes and as consequences of these flows. Migration and trade, in particular, are deeply entwined, and the interactions between them operate in both directions. Migration may facilitate and stimulate trade between sending and receiving areas, but may also give rise to trade protectionism. Over the long run, economic development resulting from foreign investment and export-led growth may reduce pressures for emigration, but in the shorter term such development may increase these pressures (Russel and Teitelbaum, 1992, p. 42).

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Table 1: Some Demographic Features of the Southern Mediterranean MENA Countries

	Child Mortality per 1,000 (1998)	Infant Mortality per 1,000 (1998)	Fertility Rate (1998)	Population Average Annual Growth Rate (1990-99)
Egypt	59	49	3.2	1.9
Jordan	31	27	4.1	1.0
Morocco	61	49	3.0	1.8
Tunisia	32	28	2.2	1.6
Germany	6	5	1.4	0.4
France	5	5	1.8	0.5
USA	NA	7	2.0	0.9
U.K.	7	6	1.7	0.2

Source: World Bank Development Report (2000)

Table 2: Summary of the Net Migration Inflows to Libya: 1971-1995

1971-1975	1976-1980	1981-1985	1985-1987	1988 -1995
Rising	Rising	Rising	Declining	Rising

Table 3: Summary of the Net Migration Inflows to Gulf Countries: 1971-1995

1971-1975	1976-1980	1981-1985	1985-1990	1991	1992 -1995
Rising	Rising	Rising	Rising	Declining	Rising

Table 4: Geographic Destination of Trade of Mediterranean Non-Member Countries (MNCs), 1994 (% of total exports)

	Exporter								Importer				
	Algeria	Egypt	Israel	Jordan	Lebanon	Morocco	Syria	Tunisia	EU	USA	ROW	MNCs	World
Algeria	0.00	0.10	0.00	0.00	0.00	1.20	0.00	1.30	71.0	17.1	9.20	2.60	100.0
Egypt	1.10	0.00	3.30	0.80	0.60	0.20	1.00	0.40	59.0	10.5	23.00	7.50	100.0
Israel	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	30.0	31.0	38.90	0.10	100.0
Jordan	1.60	0.70	0.00	0.00	2.10	0.10	3.20	0.50	9.1	2.6	80.10	8.20	100.0
Lebanon	0.40	2.60	0.00	3.10	0.00	0.80	0.00	0.50	13.0	3.2	76.20	7.40	100.0
Morocco	2.00	0.10	0.00	0.10	0.10	0.00	0.10	0.80	74.0	3.5	19.30	3.10	100.0
Syria	0.80	0.50	0.00	2.10	0.00	0.50	0.00	0.70	57.5	2.2	35.60	4.60	100.0
Tunisia	2.90	0.30	0.00	0.30	0.10	0.60	0.30	0.00	79.4	1.2	14.60	4.70	100.0
MNCs	8.80	4.40	3.30	6.40	2.90	3.40	4.60	4.20	-	-	-	-	-

Source: P. Petri (1997), "Trade Strategies for the Southern Mediterranean", OECD Technical papers, No. 127, Paris: OECD, p. 30.

Table 5: Percentage of Exports to the EU Out of Total Exports: 1993-1999

	1993	1994	1995	1996	1997	1998	1999
Egypt	55	44	45	46	41	38	34
Morocco	79	46	42	42	40	38	72
Tunisia	79	80	82	80	79	80	82
Jordan	3	4	5	7	10	9	8

Source: Direction of Trade Statistics Yearbook, 2000

Table 6: Percentage of Exports to the Middle East* Out of Total Exports: 1993-1999

	1993	1994	1995	1996	1997	1998	1999
Egypt	19	11	11	12	11	16	11
Morocco	9	5	4	4	4	3	3
Tunisia	7	5	5	6	7	6	6
Jordan	33	32	36	38	22	21	22

Notes: *Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria, UAE, Yemen
Source: Direction of Trade Statistics Yearbook (2000)

Table 7. Ratio of Remittances to Exports: 1992-1997

	Egypt	Morocco	Tunisia	Jordan
1992	2.00	0.54	0.14	0.69
1993	2.52	0.64	0.12	0.83
1994	1.06	0.33	0.14	0.77
1995	0.94	0.29	0.12	0.70
1996	0.88	0.31	0.13	0.85
1997	0.94	0.27	0.12	0.90
1998	1.08	0.28	0.12	0.86
1999	0.91	0.26	0.13	0.91

Source: Calculated by the authors from the Direction of Trade Statistics (UNCTAD several issues) and International Financial Statistics (IMF several issues)

Appendix:
Table 1: Total Exports of Arab Countries (f.o.b) 1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999	Average rate of change 1994-98	Rate of change 1999
Jordan	1,136	1,433	1,467	1,505	1,476	1,483	6.8	0.5
U.A.E.	27,358	28,908	33,596	34,013	31,072	35,839	3.2	15.3
Bahrain	1,429	1,658	1,543	1,669	1,576	1,535	2.5	-2.6
Tunisia	4,637	5,469	5,511	5,569	5,758	5,881	5.6	2.1
Algeria	8,886	10,258	13,204	13,820	10,055	12,452	3.1	23.8
Djibouti	56	38	40	43	59	69	1.2	17.0
Saudi Arabia	42,614	50,041	60,728	60,732	38,822	48,356	-2.3	24.6
Sudan	524	556	620	594	596	780	3.3	30.9
Syria	3,058	3,575	4,008	3,924	2,897	3,464	-1.3	19.6
Somalia	143	169	188	178	182	187	6.3	2.3
Iraq	382	424	503	2,331	3,976	5,128	79.6	29.0
Oman	5,545	6,068	7,346	7,931	5,519	7,250	-0.1	31.4
Qatar	3,213	3,481	3,833	4,652	5,010	6,570	11.7	31.1
Kuwait	11,230	12,781	14,889	14,227	9,553	12,219	-4.0	27.9
Lebanon	643	830	1,018	642	661	677	0.7	2.4
Libya	7,416	8,777	9,531	9,779	6,376	7,165	-3.7	12.4
Egypt	3,473	3,450	3,540	3,919	3,206	3,549	-2.0	10.7
Morocco	3,971	4,712	4,745	4,677	7,144	7,373	15.8	3.2
Mauritania	436	564	551	525	556	515	6.3	-7.4
Yemen	203	794	1,965	2,504	1,497	2,381	64.8	59.0
Total	126,355	143,986	168,823	173,234	135,992	162,873	1.9	19.8

Source: Unified Arab Economic Report (2000)

Table 2: Total Imports of Arab Countries (c.i.f) 1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999	Average rate of change 1994-98	Rate of change 1999
Jordan	3,381	3,696	4,293	4,102	3,829	3,717	3.2	-2.9
U.A.E.	22,689	23,481	25,832	26,614	30,524	32,458	7.7	6.3
Bahrain	2,556	2,386	2,489	2,618	2,837	2,351	2.6	-17.2
Tunisia	6,563	7,892	7,693	7,966	8,354	8,498	6.2	1.7
Algeria	9,150	10,100	9,090	8,130	8,545	9,092	-1.7	6.4
Djibouti	261	227	221	224	264	291	0.3	10.2
Saudi Arabia	23,351	28,087	27,765	28,743	30,013	28,032	6.5	-6.6
Sudan	1,161	1,184	1,504	1,580	1,925	1,415	13.5	-26.5
Syria	5,455	4,698	5,368	4,819	3,887	3,832	-8.1	-1.4
Somalia	309	276	294	316	337	360	2.3	6.8
Iraq	499	616	492	765	903	1,229	16.0	36.1
Oman	4,014	4,378	4,728	5,191	5,826	4,801	9.8	-17.6
Qatar	1,991	3,398	2,584	4,010	5,200	6,840	27.1	31.5
Kuwait	6,680	7,784	8,373	8,246	8,616	7,616	6.6	-11.6
Lebanon	5,416	7,307	7,559	7,457	7,060	6,207	6.8	-12.1
Libya	7,158	6,684	7,727	7,799	6,492	5,563	-2.4	-14.3
Egypt	9,587	11,758	13,040	13,245	16,537	16,023	14.6	-3.1
Morocco	7,168	8,533	8,256	7,875	10,274	10,805	9.4	5.2
Mauritania	558	638	631	601	615	580	2.5	-5.8
Yemen	507	646	1,497	2,014	2,167	2,003	43.8	-7.6
Total	118,453	133,770	139,436	142,314	154,206	151,711	6.8	-1.6

Source: Unified Arab Economic Report (2000)

Table 3: Intra Arab Exports (f.o.b) 1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999	Average rate of change 1994-98	Rate of change 1999
Jordan	482	644	685	782	659	602	8.1	-8.7
U.A.E.	1,136	1,417	1,776	1,911	2,108	2,172	16.7	3.1
Bahrain	439	553	553	556	537	530	5.2	-1.4
Tunisia	381	499	420	422	390	407	0.6	4.3
Algeria	247	243	222	231	146	259	-12.2	76.8
Djibouti	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Saudi Arabia	3,778	4,872	5,978	6,542	4,938	5,023	6.9	1.7
Sudan	201	174	240	203	245	255	5.0	4.3
Syria	931	932	801	1,023	805	727	-3.6	-9.7
Somalia	85	118	115	131	166	169	18.1	2.3
Iraq	379	411	461	384	307	396	-5.1	29.0
Oman	652	674	742	976	747	958	3.5	28.2
Qatar	308	308	231	304	235	309	-6.5	31.1
Kuwait	310	311	361	408	400	412	6.6	3.0
Lebanon	358	512	640	315	324	295	-2.5	-9.0
Libya	549	566	476	597	455	460	-4.6	1.1
Egypt	512	480	498	496	884	762	14.7	-13.8
Morocco	327	378	344	297	285	296	-3.4	3.7
Mauritania	2	1	3	5	6	6	43.7	-7.4
Yemen	98	94	146	93	165	172	13.9	4.3
Total	11,174	13,185	14,693	15,674	13,802	14,209	5.4	2.9

Source: Unified Arab Economic Report (2000)

Table 4: Intra Arab Imports (c.i.f)1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999	Average rate of change 1994-98	Rate of change 1999
Jordan	759	868	1,075	963	736	803	-0.8	9.1
U.A.E.	1,180	1,375	1,406	1,395	1,540	1,590	6.9	3.3
Bahrain	336	362	356	371	380	397	3.1	4.5
Tunisia	351	492	581	505	419	494	4.5	18.0
Algeria	396	331	-	-	-	-	-	-
Djibouti	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Saudi Arabia	1,426	1,623	1,883	1,785	1,981	1,781	8.6	-10.1
Sudan	293	311	344	407	530	354	16.0	-33.2
Syria	342	367	414	340	306	318	-2.7	4.0
Somalia	23	32	36	41	52	55	22.9	6.8
Iraq	170	303	153	235	175	238	0.7	36.1
Oman	1,274	1,234	1,289	1,363	1,343	1,386	1.3	3.2
Qatar	322	322	449	414	487	641	10.9	31.5
Kuwait	802	952	1,033	1,080	1,057	1,018	7.1	-3.7
Lebanon	601	580	932	692	609	558	0.3	-8.4
Libya	347	428	440	558	514	419	10.3	-18.4
Egypt	341	451	510	692	896	1,010	27.4	12.7
Morocco	756	766	832	891	666	897	-3.1	34.7
Mauritania	28	32	37	35	36	34	6.1	-5.8
Yemen	131	212	412	548	639	747	48.7	16.9
Total	9,877	11,042	12,438	12,674	12,624	12,924	6.3	2.4

Source: Unified Arab Economic Report (2000)

Table 5: Trade Balance of Arab Countries1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999*
Jordan	-1,578	-1,516	-2,001	-1,813	-1,602	-1,460
U.A.E.	6,731	7,561	10,112	9,817	3,323	6,335
Bahrain	119.7	626	665	604	28	719
Tunisia	-1,567	1,567	1,989	1,761	1,956	2,151
Algeria	-260	160	4,130	5,690	1,510	3,360
Djibouti	-180.7	-169	-161	161-	-181	-195
Saudi Arabia	21,289	24,259	35,207	34,202	11,189	22,638
Sudan	-521	-510	-719	-827	-1,136	-475
Syria	-1,275	-114	-337	454	-178	216
Somalia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Iraq	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Oman	1,529	1,685	2,611	2,439	-317	2,416
Qatar	1,299	533	1,248	863	1,959	4,962
Kuwait	4,657	5,579	6,997	6,534	1,903	5,568
Lebanon	-4,804	5,740	-5,926	-6,274	-5,858	-5,083
Libya	909	2,700	2,506	2,688	474	2,062
Egypt	-5,888	7,791	-8,202	-8,631	-10,214	-9,928
Morocco	-2,107	2,482	-2,193	-1,864	-2,319	-2,554
Mauritania	47	127	14	57	11	23
Yemen	274	148	-30	132	-700	25
Total	18,674	23,067	42,161	41,692	-4,314	26,485

Notes: *estimated

Source: Unified Arab Economic Report (2000)

Table 6: Net Income and Services Balance of Arab Countries 1994-1999 (US$ million)

	1994	1995	1996	1997	1998	1999*
Jordan	-146	-184	-52	-9	-77	-150
U.A.E.	-362	415	-171	-104	-656	-772
Bahrain	-45	-9	28	-233	-89	-320
Tunisia	279	509	503	646	712	895
Algeria	-2,980	-3,500	-3,750	-3,300	-3,650	-4,580
Djibouti	88	103	94	97	108	115
Saudi Arabia	-13,073	-12,968	-19,013	-18,608	-9,385	-10,363
Sudan	-161	-50	-144	-129	-185	-297
Syria	-107	-206	-245	-492	-295	-504
Somalia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Iraq	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Oman	-918	-871	-938	-1,035	-1,204	-1,199
Qatar	-1,801	2,692	-2,495	-2,542	-2,415	-2,790
Kuwait	54	901	1,600	2,908	2,085	1,494
Lebanon	10	42	19	-149	-222	-198
Libya	-611	-501	-700	-595	-599	-1,057
Egypt	2,342	3,664	4,493	3,863	2,772	3,938
Morocco	-887	-1,034	-348	-429	-169	148
Mauritania	-201	-216	-161	-207	-180	-167
Yemen	-1,141	-1,069	-1,051	-1,100	-805	-1,236
Total	-19,663	-17,673	-22,334	21,420	-14,257	-17,044

Notes: *estimated
Source: Unified Arab Economic Report (2000)