

IS THERE A NEW VISION FOR MAGHREB ECONOMIC INTEGRATION?

VOLUME I: MAIN REPORT
(IN TWO VOLUMES)



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(In Two Volumes) Volume I: Main Report

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EXECUTIVE SUMMARY

1. Introduction

Past attempts at implementing the Maghreb¹ regional economic integration project left the region largely with just that—a project. Researchers and policymakers have debated the merits, obstacles and reasons behind the disappointing record of regional economic integration, but mostly questions remain. Those questions are the subject of this report. Can the future be any different from the past? How can Maghreb policymakers shape their reform agenda in the medium term to reap the potential of regional integration? What role can service sector reforms play? What does the evidence say in terms of the potential gains from regional economic integration in the Maghreb?

The search for answers in the Maghreb become more pressing as global competition has stiffened and as economic growth has lagged behind the growth of the labor force. In recent years, countries of the region have made important strides in the direction of future prosperity. Stable macroeconomic conditions, some progress on economic reform, and ongoing trade integration with the European Union (EU) have increased foreign investment, leading to a significant rise in per capita incomes. Yet, the three countries still face a daunting challenge. They need to build momentum in policy reforms for sustained reduction in unemployment through accelerated growth.

The magnitude of this challenge is evidenced by two facts. First, if the three countries were to maintain their 4 to 5 percent real GDP growth rates of the past five years, they would require more than 20 years to reach the present per capita income levels of the lower-tier OECD countries. Second, although unemployment has declined, it remains unacceptably high- 18 percent in Algeria, 11 percent in Morocco (19 percent in urban areas), and 14 percent in Tunisia. Youth unemployment exceeds 20 percent in all three countries.

Regional integration could contribute to higher growth for two key reasons. First, there are scale and competition effects. Removal of trade barriers serves as a market enlargement when separate national markets move toward integration. This allows firms to benefit from scale, and it stimulates investment for which market size is important. Removing barriers also forces firms from member countries to compete more closely with each other, possibly inducing efficiency improvements. Maghreb integration would create a regional market of more than 75 million consumers, similar in size to many leading trading nations and sufficiently large to exploit economies of scale and make the region more attractive for foreign investment. Second, regional integration would reduce the so-called hub-and-spoke effects between the EU and the Maghreb. These emerge when a large country or a region (the hub) signs bilateral trade agreements with several small countries (the spokes).

¹ The Maghreb referred to in this report is limited to Algeria, Morocco and Tunisia. Data availability did not allow the inclusion of Libya and Mauritania, the two other members of the Maghreb Union.

The report argues that assessing the benefits from regional integration can best be done in the context of the broader issues of economic integration in the world economy and more specifically with the main trading partner, the European Union.

Based on empirical evidence the paper finds that there is limited potential for intraregional merchandise trade integration in the Maghreb. Due to data limitations, the marginal returns to regional service integration in the three countries (Tunisia, Algeria and Morocco) cannot be estimated. But drawing on available data the report illustrates that deeper economic integration (through service sector liberalization and investment climate reforms aimed at strengthening market competition and contestability) and wider integration (with the EU) can have a substantial impact on regional economic growth, trade and FDI in the Maghreb, bringing greater economic gains than would be derived from merchandise trade liberalization alone.

In the Maghreb, reforms in the service sectors could facilitate entry of new domestic and foreign firms, improving access to new technologies and generating employment opportunities for both skilled and unskilled labor. Service policy reforms (or the lack of thereof) help explain the differences in trade performance and FDI flows around the world. This proposition is supported by econometric evidence that assesses the links between investment, trade, service sector reforms and economic growth in Eastern and Central European countries (Eschenbach and Hoekman, 2005). The report also alerts that benefits from service liberalization are not automatic. Service liberalization requires complementary policies and effective regulation, ranging from prudential regulation to pro-competitive regulation in sectors such as telecommunications.

2. Trade and FDI in the Maghreb: In spite of recent export performance, intraregional trade remains low

Maghreb intraregional trade remains limited and compares unfavorably with other regional blocs. Merchandise trade within the Maghreb (as a share of total merchandise trade) is the lowest among comparator regional trading blocs. In addition, intraregional trade in the Maghreb has declined from already a small starting base in 1990 (2 percent of total merchandised trade) to 1.2 percent in 2004.

Despite recent export performance, Maghreb countries remain poorly integrated in the global economy. Over the last few years, Maghreb countries lowered both trade and non-trade barriers and increased their trade integration. However, the contribution of non-oil exports to GDP was about 16.8 percent in 2004 compared with 41 percent in East Asia and 32 percent in the EU remaining less than one third of the more dynamic regions of Europe and Asia (Figure 1). Within the Maghreb region, the contribution of non-oil exports to GDP varied widely – from about 1 percent in Algeria to nearly 30 percent in Tunisia in 2004.

Foreign direct investment into Maghreb countries, while on increasing trend, is also lower than comparator countries. In the 1990s the level of inward FDI in the Maghreb was significantly higher than in Central and Eastern European countries (CEEC). But the transition from socialist to market-led economies, with heavy privatization programs involving sales to foreign investors, led to increased FDI into the CEECs. By 2004, FDI stock to GDP in the Maghreb countries was lower than in the CEECs. While still lower than comparators, inward FDI to the Maghreb has increased in the 1990s. Tunisia has attracted more FDI relative to its size compared to Algeria and Morocco. Tunisia's stock of FDI on average has exceeded 66 percent of its GDP since the 1990s compared to 25 percent in Morocco and 7 percent for Algeria. The stock of FDI to GDP in Algeria has remained stagnant over this period, rising slightly after 2000. In 2004, Tunisia held FDI stock worth nearly 78 percent of GDP, relative to 45 percent and 11 percent in Morocco and Algeria respectively.

While the track record of intraregional trade has been undoubtedly disappointing, a closer look to recent trends helps in nuancing this overall gloomy picture. At least for Morocco and Tunisia we have observed signs of export diversification and dynamism, but overall competitiveness has remained weak.

- ***Signs of export diversification.*** High level of market and product concentration is a source of vulnerability for the Maghreb economies. But there has been a positive improvement in international competitiveness of Morocco and Tunisia in recent years, which has had an expansionary impact on their exports. There are signs of export diversification for Morocco and Tunisia, especially since the 1990s (figure 3). In Tunisia, market diversification has brought the product concentration index to a level 60 percent lower in 2004 than the one that existed in 1980. A closer look to Maghreb's manufacturing exports reveals some diversification into high to medium-intensity of technological use in manufacturing (particularly for Morocco and Tunisia), although the pace of high-tech export diversification is slower than other comparator countries.
- ***Signs of export dynamism.*** Tunisia and Morocco's export performance has been commendable in recent years. Fast growing export products, defined as those with at least an average 10 percent annual increase during the period 1990-2004, represent more than 30 percent of total exports. These include wearing apparel, electrical equipment, footwear and some agriculture products, including vegetable oils. In Tunisia, for example, exports of telecom equipment and insulated wires and cables show a steady increase over the last ten years. More importantly, exports of these dynamic products have consistently increased over the last ten years, suggesting that Maghreb exporters were successful in establishing long-run business relationships with foreign importers. Recent analysis on Maghreb countries' revealed comparative advantage and export specialization also reveals that Tunisia's exports of beverages have a strong comparative advantage in the Maghreb market whereas Algeria displays a strong comparative advantage in the regional market for exports of refined fuels and chemicals.

Contrary to what would be expected, the potential for Maghreb intraregional merchandise trade appears limited. Intuitively one would expect relatively high potential for intraregional merchandise trade, given the low levels of Maghreb intraregional trade. However, according to recent empirical evidence, the potential for Maghreb intraregional merchandise trade appears limited. Using a panel gravity trade model drawing on a sample of 170 countries over the period 1980-2004, we find that, on average, Maghreb countries are over-trading with each other. The potential for intra Maghreb FDI also appears limited. While the model suggests that Algeria has over-invested in Morocco by 2 percent of Morocco's GDP relative to what is predicted by the model, Tunisia is receiving less-than predicted FDI from its neighbors Algeria and Morocco (equivalent to 0.33 and 0.4 percent of Tunisia's GDP, respectively).

A number of factors may have affected the prospects of Maghreb intraregional merchandise trade. These include: low intraregional trade complementarity reflecting similarities in trade structures (particularly Morocco and Tunisia); small markets; low export diversification; little integration into global production chains, which in turn has constrained the diversification of exports and limited the expansion of high valued added manufacturing activities.

Improved trade prospects in the Maghreb depend on furthering trade policy reforms, including the reduction of tariffs and non-tariff barriers and the simplification and gradual harmonization of current trade agreements. Despite the recent vigorous performance of Tunisian and Moroccan exports, their penetration in external markets has merely kept pace with the world's increase in exports. In fact, the impressive recent export performance disguises export vulnerabilities which are the consequence of the still high level of trade protectionism. This protective blanket has converted the Maghreb countries into

one of the ten most highly protected regional markets in the world in terms of the simple average of Most-Favored Nation (MFN) tariffs.

But the process of trade expansion not only depends on trade policy reforms; it also involves a phase of investment supply response that is in turn influenced by the elimination of ‘behind the border’ barriers and the quality of the investment climate. The investment climate refers to the burden of regulations upon business activity, the transaction costs encountered in trade-related business activities such as clearing goods from customs and shipping goods overseas, the expenses involved in routine business operations for telecommunications, and electricity and the cost of finance. The investment climate affects both domestic and foreign firms. The location of multinationals is crucially affected by the scope for effective sourcing of inputs and the ability to move inputs quickly and cheaply across national boundaries. Behind-the-border barriers that increase production costs, such as weak transport infrastructure and limited competition in the provision of backbone services, reduces the Maghreb region’s attractiveness to multinational enterprises when it comes to investment and input sourcing decisions.

3. From shallow integration to deeper and wider integration

The first part of the report illustrates that prospects for a regional strategy based on merchandise product market integration to deliver benefits are weak, partly owing to the mixed progress in advancing policy reforms affecting trade and investment. The second part of the report shows that deeper economic integration (focused on service liberalization and investment climate reforms) and wider integration (with the EU) has the potential to generate more substantial economic gains than would be obtained from regional integration of goods markets alone.

Economic integration can be regarded as a continuum from ‘shallow’ integration (based on the removal of import tariffs and quantitative restrictions) to ‘deep’ integration. The term ‘deep integration’ refers to explicit government actions to reduce the market-segmenting effect of domestic regulatory policies and regulations, other than the tariffs and formal non-tariff barriers. These include other policies and regulations ‘at the border’, such as customs clearance and certification that imports satisfy domestic standards of quality control. They also include ‘behind the border’ policies and regulations that impose a burden upon business activity and affect market contestability. By *‘deeper integration’* we refer to domestic policy reforms that aim at improving the overall investment climate; and service sector reforms affecting trade in services and the efficient provision of key backbone services (such as finance, transport, telecommunications, energy and water). By *‘wider integration’*, we designate schemes which allow integration of Maghreb countries not only among themselves but also within broader geographical areas such as the European Union.

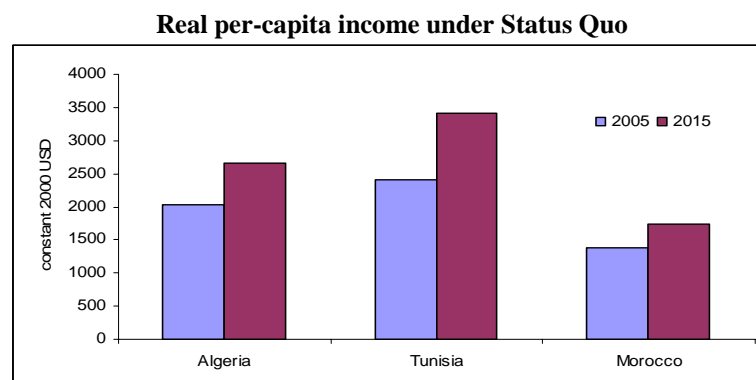
For the purposes of the analysis, ‘deeper integration’ is proxied by a move toward service liberalization and ‘wider integration’ is measured by the impact of RTA between the Maghreb and the EU. More specifically the following scenarios are considered:

- *‘Shallow integration’*, that is the formation of a regional trade agreement (RTA), in which most tariffs and other barriers to trade are eliminated for intraregional merchandise trade;
- *‘Wider integration’*, in which Maghreb countries form a regional merchandise trading bloc with the EU (this scenario will be compared to the gains of each country’s unilateral integration with the EU);
- *‘Deeper integration’*, in which case Maghreb countries form move toward service sector liberalization and investment climate reforms;
- *‘Deeper and wider integration’*, in which Maghreb countries form a regional trading bloc with the EU and also move toward service sector liberalization and investment climate reforms.

It should be noted, however, that the report does not assess the marginal gains of regional cooperation in the service sectors. This analysis is hampered by the absence of detailed data on services trade and investment by sector, the absence of regionally comparable CGE (computable general equilibrium) models, and the lack of updated and disaggregated input-output tables for the three Maghreb countries. There is much work still to be done on identifying where regional cooperation can promote national services reforms or generate "scale" effects for the countries concerned. Indeed, service policies are likely to positively affect trade with all partners (and not just with the other Maghreb countries).

Scenario 1. Maintaining the status quo

In the absence of further efforts to integrate the Maghreb economies, real GDP per-capita growth between 2005 and 2015 (based on average annual per-capita growth rates as observed between 2000 and 2004) would increase by 30, 41 and 27 percent (in constant 2000 USD) for Algeria, Tunisia and Morocco respectively.



Scenario 2. Merchandise Trade Regional Integration: Shallow versus Wider Integration

Scenario 2(a) Shallow integration: Maghreb RTA

This scenario assesses the economic gains from a Maghreb regional integration scheme focused on merchandise trade. Since typical Regional Trading Arrangements (RTA) focus on merchandise trade, the quantitative models and proxies that we use to assess the impact of RTA capture the effects of merchandise trade integration. Drawing on the results from panel regression analysis reflecting worldwide experience the report estimates the annual average impact of RTA on income growth (income is measured by real GDP).

Impact on per capita income. Given the limited prospects of intraregional merchandise trade, it is not surprising that the gains from integrating merchandise goods markets are very small: 0.01 additional percentage points of per-capita annual growth on average in each Maghreb country. Real GDP per-capita in 2015 would be very similar to what is shown for Scenario 1. These gains from a 'shallow integration' can be compared to the gains from a 'wider integration' with the EU.

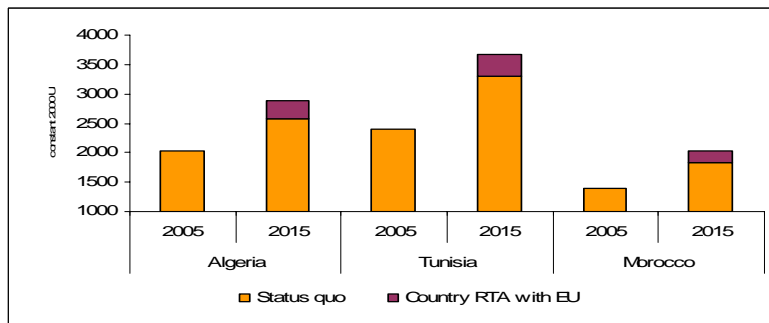
Scenario 2(b) Wider Integration: Maghreb regional merchandise trade integration with the EU

In this scenario, the report compares the gains if Maghreb countries were to individually join the EU; compared to a scenario where the Maghreb countries form a regional trading bloc and then join the EU as a group.

Maghreb countries unilaterally forming a bilateral trade agreement with the EU (reflecting merchandise trade liberalization) would yield economic gains through access to the larger EU market. If each Maghreb country could form an RTA with the EU, it would generate one percentage point of additional growth for each country when compared with the growth rate in Scenario 1, raising real per capita GDP in 2015 over 2005 by an additional 15 percent in Algeria, 16 percent in Morocco and 14 percent in Tunisia. The total sum of the Maghreb countries' per capita real GDP would rise by an additional 15 percent over the same period compared to the status quo.

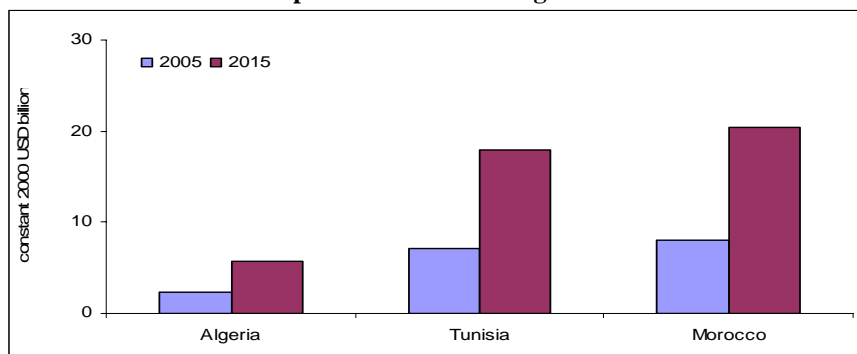
Maghreb countries forming a joint regional trading bloc with the EU (reflecting merchandise trade liberalization) would raise real per-capita GDP of the three Maghreb countries in total by an additional 22 percent between 2005 and 2015 relative to the status quo, which is 7 percentage points greater than the sum of per-capita income of the three Maghreb countries joining the EU unilaterally. Dividing the gains to the Maghreb using income weights from 2004, an RTA with EU is expected to increase per-capita income by an additional 27 percent in Algeria, 16 percent in Tunisia and 22 percent in Morocco between 2005 and 2015.

Real per Capita Income: each individual Maghreb country signing RTA with the EU



Impact on non-oil exports. Integrating the good markets of Maghreb countries will have a marginal impact on real non-oil export value: between 2005 and 2015, real non-oil export values would increase by 3 percent in each Maghreb country. However, if the Maghreb forms a trading bloc with the EU, this will expand the market size substantially: between 2005 and 2015, real non-oil export value would increase by nearly 2.5 times in each Maghreb country.

Non-oil Exports Value from Maghreb-EU RTA



Scenario 3. Deeper Integration: Service Liberalization and Investment Climate Reforms

Given the limited magnitude and potential for intra-Maghreb merchandise trade, deeper integration approaches are needed. One option is to focus on integration with a particular focus on the service sectors

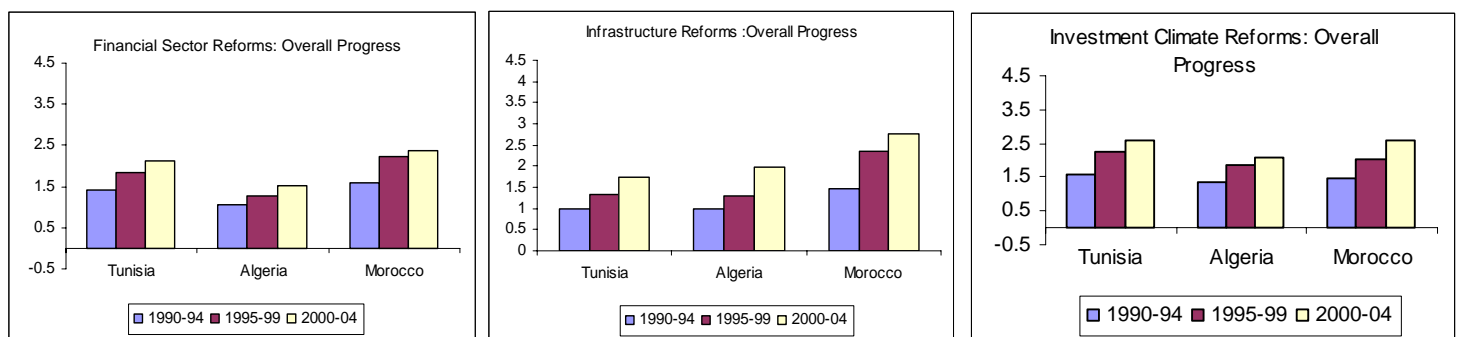
which have the potential to generate gains that would be a multiple of those that could be obtained from preferential regional merchandised trade liberalization.

Data on trade in commercial services in the Maghreb show that they are not significant exporters or importers in world trade (See Figures 10 and 11). Barriers to trade in services in Maghreb countries are clearly important. Several country studies have shown that domestic distortions inhibiting export expansion in the Maghreb reside in the inefficient regulation and lack of competition which generate costly and low quality services. This translates into higher insurance premiums and high port service costs as well as low-quality transport and lack of storage facilities.

The practice of liberalization shows that in general it is difficult to separate domestic liberalization from cross-border liberalization of services. Measurement of services liberalization tends also to lump together both domestic and cross-border liberalization. Therefore, this scenario examines whether policy reforms which consist of liberalizing cross-border services as well as reforming the domestic policies and regulations for services would matter for increased domestic private investment and FDI in the Maghreb.

Maghreb’s reform progress in liberalizing service sectors and improving the overall investment climate has been mixed. Service sector reforms cover a mix of deregulation (dismantling barriers to entry and the promotion of competition) and improved regulation (putting in place an appropriate legal environment, strengthening regulatory agencies and increasing their independence). Infrastructure service reforms include reforms that aim at increasing the efficiency of providing regulated infrastructure services: (i) allowing entry of new domestic and foreign providers; (ii) where feasible, the opening the domestic market to imports of such services; and (iii) the establishment of an independent regulator, which is a key determinant of regulatory effectiveness. Investment climate reforms include progress on privatization, governance and enterprise restructuring, price liberalization, trade and foreign exchange system and competition policy. Morocco is ahead in reforming the financial and infrastructure sector. Tunisia has made the highest progress in reforming its overall investment climate. Algeria lags behind Tunisia and Morocco in reforming the investment climate.

Maghreb’s Progress in Reforming the Service Sectors (Financial & Infrastructure Sectors) and Investment Climate



Note. The reform progress indices range from 0 to 4.3 (where the maximum value of the index, 4.3, illustrates that countries’ service sector policies and investment climate are approaching “best practice” standards).

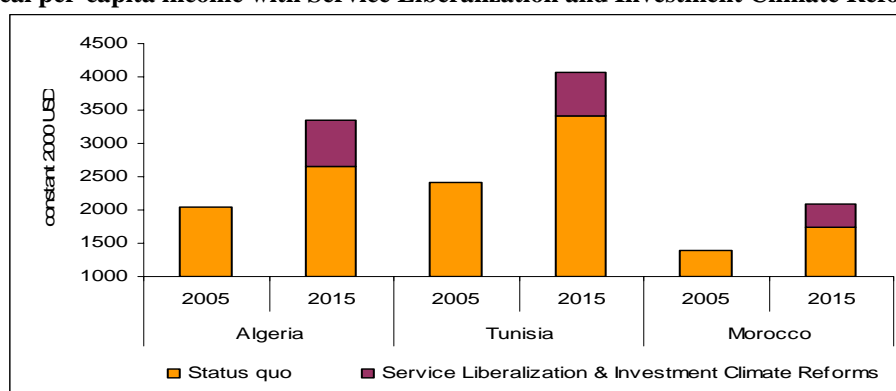
Results from a panel growth regression reveal that a one unit point increase in the progress reform index in the infrastructure, financial sectors and the investment climate is associated with an increase in GDP per-capita growth rate of 2 percent (holding inflation and the change in investment to GDP ratio constant). It is interesting to note that the growth impact of service policy reforms in the Maghreb is lower compared to the outcomes in other Eastern European countries which appear to gain the most from the reform progress.

Impact of Unit Increase in Service Reform Index on Annual Per-Capita Real GDP Growth (%)

	Infrastructure	financial services	investment climate
Maghreb (MGB)	2.08	2.20	2.06
South-East Europe (SEE)	3.77	5.84	7.35
Central and Eastern Europe (CEE)	2.90	4.00	5.87
Former Soviet Union (FSU)	11.04	11.08	9.66

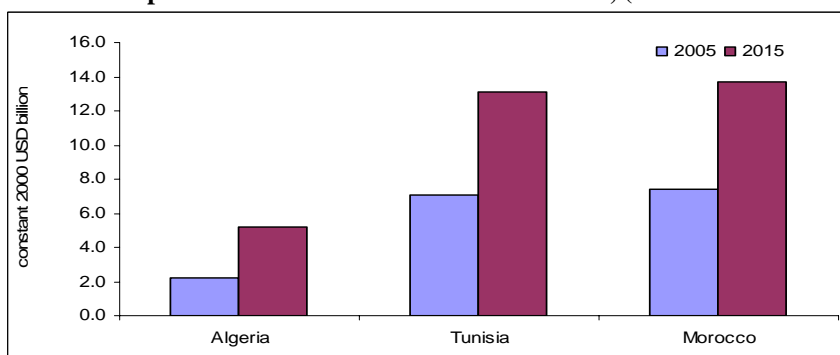
Impact on per capita income. Assuming that each of the Maghreb countries gradually reforms its service sectors and its regulatory framework to achieve complete service liberalization and an investment climate that is in line with international best practice by 2015 (i.e, the reform index reaches its maximum value of 4.3 by 2015) real per-capita GDP between 2005 and 2015 would rise an additional 34, 27 and 24 percent for Algeria, Morocco and Tunisia respectively, compared to the growth rate described in Scenario 1.

Real per-capita income with Service Liberalization and Investment Climate Reforms



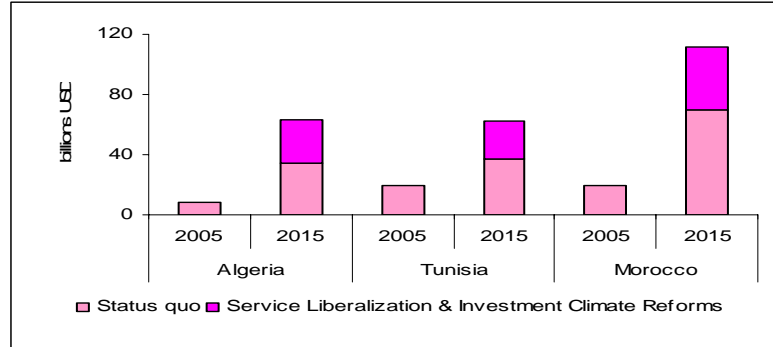
Impact on exports. With gradual service liberalization (completed by 2015), real non-oil exports value between 2005 and 2015 of Algeria, Tunisia and Morocco would grow by 138.1, 85.8 and 85.7 percent respectively.

Non-oil Exports Value with Service Sector Reforms, (in constant 2000 US\$)



Impact on FDI. A unit increase in the progress reform index on financial service sector and investment climate index respectively rises on average, the stock of FDI stock into the Maghreb countries by 6.7 and 6.0 percentage points respectively. Using the average growth rate observed between 1994 and 2004, the level of FDI stock between 2005 and 2015 in the absence of service sector reforms is expected to grow by 301, 96 and 248 percent for Algeria, Morocco and Tunisia respectively. Assuming a progressive implementation of service reforms completing by 2015, the level of FDI stock between 2005 and 2015 is anticipated to rise by an additional 342, 128 and 211 percent for Algeria, Morocco and Tunisia respectively, compared to the growth predicted without further reforms.

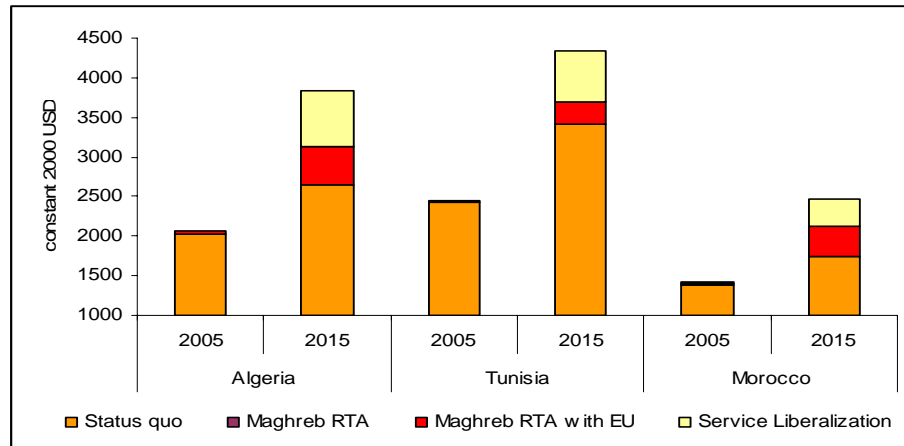
FDI stock (billions USD) with Service Liberalization and Investment Climate Reforms



Scenario 4. Deeper and wider integration

This scenario assumes that the Maghreb countries form a trading bloc with the EU and in addition, they deepen integration efforts, by gradual liberalization of services and by furthering investment climate reforms to achieve international best practice by 2015. The expected average annual income per-capita growth between 2005 and 2015 is 6.2, 5.8 and 5.7 percent for Algeria, Tunisia and Morocco respectively. Per-capita real GDP between 2005 and 2015 would rise an additional 57, 38 and 51 percent for Algeria, Morocco and Tunisia respectively, compared to the growth rate reported in Scenario 1. This calculated additional growth may overstate the potential gains as the report assumes that the benefits from scenario 2 (integration with EU) and scenario 3 are additive, which may not be the case as some of the channels which produce the gains are partly the same in the two scenarios.

Per-Capita Income with Maghreb RTA, EU RTA, and Service Reforms



4. The way forward: toward open regionalism

The disappointing track record of Maghreb intraregional merchandise trade is explained by a number of factors, including the small size of the markets, low trade complementarity, non-dynamic and poorly diversified exports.

When contemplating regional integration efforts, the Maghreb's ultimate objective is to reap the gains from trade arising from comparative advantage, scale economies, import competition, knowledge spillovers, and FDI flows. Besides the reduction of tariffs or quotas, a multitude of non-tariff barriers increase transaction costs. The report recommends taking a fresh look to regionalism and proposes an

‘open regionalism’. The objective should be to achieve deeper integration so as to remove a wider range of policy distortions gradually over time. From a political economy viewpoint, an advantage of the proposed open regionalism is that it provides a compelling long-term vision (full economic integration with the region and global markets) but that it can be implemented selectively and gradually.

In principle, multilateral integration through the WTO would be preferable to regional integration. The reason is that it minimizes trade diversion, increases transparency for traders, and it gives countries recourse to the dispute settlement mechanisms of the WTO. On the other hand, there are also important arguments in favor of a parallel process of both regional integration and global integration. This paper proposes the Maghreb countries to pursue a type of ‘open regionalism’ focusing on “wider” integration with the rest of the world, including the EU, and on “deeper” integration (through service policy reforms).

The pursuit of ‘open regionalism’ would imply that the Maghreb countries’ regulatory frameworks are in line with international best practice. For instance, this deeper market integration process does not necessarily require the full adoption of the *EU acquis communautaire*, but it does require a targeted removal of tariff and non-tariff barriers to facilitate trade in goods and services and the adoption of domestic reforms to improve the investment climate and the cost-effectiveness of backbone service sectors (such as transports, telecoms, financial services). The idea is that multilateral commitments are topped up by regional integration in sectors where the GATS framework is poorly developed or where multilateral negotiations are progressing slowly (e.g. air transport and electricity).

A strategy focused on reforming the services sectors while pursuing wider integration with the EU offers the greatest economic potential. Geographical and cultural proximity to the EU markets are an important source of comparative advantage for the Maghreb countries. Removing non-tariff barriers to these markets –including inefficiencies in the backbone services- is critical to exploit these advantages. Achieving the full gains of deeper regional integration will require the effective adoption regulatory reforms at the national level (to achieve economic efficiency) and a high degree of regulatory cooperation at the cross-border level.

INTRODUCTION

Past attempts at implementing the Maghreb² regional economic integration project left the region largely with just that—a project. Researchers and policymakers have debated the merits, obstacles and reasons behind the disappointing record of regional economic integration, but mostly questions remain. Those questions are the subject of this report. Can the future be any different from the past? How can Maghreb policymakers shape their reform agenda in the medium term to reap the potential of regional integration? What role can service sector reforms play? What does the evidence say in terms of the potential gains from regional economic integration in the Maghreb?

The search for answers in the Maghreb become more pressing as global competition has stiffened and as economic growth has lagged behind the growth of the labor force. In recent years, countries of the region have made important strides in the direction of future prosperity. Stable macroeconomic conditions, some progress on economic reform, and ongoing trade integration with the European Union (EU) have increased foreign investment, leading to a significant rise in per capita incomes. Yet, the three countries still face a daunting challenge. They need to build momentum in policy reforms for sustained reduction in unemployment through accelerated growth.

The magnitude of this challenge is evidenced by two facts. First, if the three countries were to maintain their 4 to 5 percent real GDP growth rates of the past five years, they would require more than 20 years to reach the present per capita income levels of the lower-tier OECD countries. Second, although unemployment has declined, it remains unacceptably high- 18 percent in Algeria, 11 percent in Morocco (19 percent in urban areas), and 14 percent in Tunisia. Youth unemployment exceeds 20 percent in all three countries.

Regional integration could contribute to higher growth for two key reasons. First, there are scale and competition effects. Removal of trade barriers serves as a market enlargement when separate national markets move toward integration. This allows firms to benefit from scale, and it stimulates investment for which market size is important. Removing barriers also forces firms from member countries to compete more closely with each other, possibly inducing efficiency improvements. Maghreb integration would create a regional market of more than 75 million consumers, similar in size to many leading trading nations and sufficiently large to exploit economies of scale and make the region more attractive for foreign investment. Second, regional integration would reduce the so-called hub-and-spoke effects between the EU and the Maghreb. These emerge when a large country or a region (the hub) signs bilateral trade agreements with several small countries (the spokes).

The report provides some evidence of the limited potential for intraregional merchandise trade integration in the Maghreb. Due to data limitations, the marginal returns to regional integration in services in the three countries under review (Tunisia, Algeria and Morocco) cannot be estimated. Drawing on available data, this report illustrates that deeper economic integration (through service policy reforms) and wider integration (with the EU) can have a substantial impact on regional economic growth, trade and FDI in the Maghreb. Service policy reforms (or the lack of thereof) help explain the differences in trade performance and FDI flows around the world. This proposition is supported by econometric evidence that assesses the links between investment, trade, service sector reforms and economic growth in Eastern and Central European countries (Eschenbach and Hoekman, 2005). In the Maghreb, reforms in the service sectors could facilitate entry of new domestic and foreign firms, improving access to new technologies and generating employment opportunities for both skilled and unskilled labor.

² The Maghreb referred to in this report is limited to Algeria, Morocco and Tunisia. Data availability did not allow the inclusion of Libya and Mauritania, the two other members of the Maghreb Union.

The report also alerts that benefits from deeper economic integration are no means automatic. Several worldwide studies have argued that weaknesses in the investment climate not only hinder a country's imports and inward foreign direct investment, they also deter exports from enterprises operating in the domestic economy (World Bank, 2005). Service liberalization requires complementary policies and effective regulation, ranging from prudential regulation to pro-competitive regulation in telecommunications.

The concluding message emerging from the analysis is that a strategy focusing on service sector and investment climate reforms aimed at facilitating market competition and contestability would improve growth, trade and investment performance in the Maghreb, bringing greater economic gains than would be derived from merchandise trade liberalization alone.

The impetus of this report stems from renewed interest in the Maghreb countries in discussing the potential gains from alternative economic integration strategies. A number of regional initiatives took place in 2005, namely (i) a Maghreb Round Table, that took place in Gammarrh, Tunisia, on May 2005, where obstacles and merits to deeper regional trade integration were debated among the participants; and (ii) a Maghreb regional conference on trade facilitation, that took place in Algiers on November 2005, where the participants discussed options to improve intra-regional trade and reform the service sectors. In February 2006, the Bank received an explicit request from the president of the Arab Monetary Union to provide empirical evidence on the potential gains to economic integration. In addition, the World Bank Chief Economist for the Middle East and North Africa Region presented a shorter version of this report in an international seminar entitled "The Cost of Non-Maghreb" that took place in Madrid, Spain, in 25-26 May 2006. The seminar participants included politicians, private sector representatives and intellectuals. The report is a contribution to this on-going debate in the Maghreb among key decision makers and business representatives. An important element of such debate is a clear understanding of the implications and benefits of further integration with regional, European and global markets.

The report is structured as follows. The first chapter examines the prospects of regional integration based on merchandise trade liberalization. It does so by performing a detailed quantitative analysis of Maghreb's trade and investment patterns and performance. The chapter also assesses Maghreb countries' trade and investment potential, drawing on panel trade and investment gravity models. The second chapter identifies policy barriers, relative performance and progress made by Maghreb countries in investment climate and service sector policy reforms. To allow for cross-country comparability, the report draws on the methodology developed by the European Central Bank for Reconstruction and Development (EBRD) to construct policy reform indexes for the Maghreb countries. The third chapter aims at estimating the economic gains from deeper and wider integration. The final section of the report summarizes the main conclusions and policy implications drawn from the analysis.

CHAPTER 1 . WHAT DO MERCHANDISE TRADE AND INVESTMENT PATTERNS REVEAL ABOUT PROSPECTS FOR REGIONAL INTEGRATION IN THE MAGHREB?

1.1. INTRODUCTION

Regional integration has product dimensions (goods and services) and factor dimensions (labor and capital flows), with some traditional substitution effects. But the globalization of production and the emergence of intra-industry trade can make factors and products complementary (World Bank, 2003). This chapter focuses on trade and investment patterns. Due to data limitations, intra-regional labor flows are not examined in the report.

Some conceptual issues

The literature on regional integration provides relevant empirical evidence on the criteria for successful regional trade agreements (De Melo et al, 1993; Winters, 1996; Schiff, 2001; and World Bank 1999, 2000 and 2005). A brief review of these criteria is provided below.

Volume of trade. Long before the recent wave of PTAs, Lipsey (1960) put forward the hypothesis of ‘natural trading partners’, suggesting that the higher the proportion of trade within the region, and the lower the proportion with the rest of the world, the more likely is a regional agreement to raise welfare. Summers (1990) also argued that to the extent that regional trading blocs are created between countries that already trade disproportionately with each other, the risk of trade diversion is significantly reduced. A statistical measure that is typically used to determine whether the actual volume of trade is higher or lower than expected, given the relative size of markets for imports, is the ‘*trade intensity index*’. If the index value is greater than unity for any given country it indicates that it trades more with its trading partners than would be expected given the relative size of neighboring markets. An upward trend in the index may reinforce prospects for further regional integration, while a decreasing trend would diminish such prospects (Braga et al, 1994; Anderson and Blackhurst, 1993)

Trade complementarity. Schiff (2001) argues that the volume of trade does not necessarily provide an objective measure of the extent to which trading partners are ‘natural’. The author proposes a definition of a natural trading partners characterized by complementarity. If a country imports what its trading partner exports, the author concludes that the hypothesis of ‘natural trading partner’ is likely to hold. Proponents of the trade complementarity argument utilize statistical measures such as the ‘*trade complementarity index*’. The higher the observed values of the trade complementarity index the more likely is that a proposed regional trade agreement will succeed (Michaely, 1996).

Export competition. A substantial empirical literature focuses on the degree of competition of exports (Yeats, 1998; Yeats, 1996; Ng and Yeats, 2003). The literature draws on the ‘*revealed comparative advantage index*’ to compare countries’ comparative advantage profiles. Countries with different comparative advantage profiles should, in principle, have more opportunities to trade with each other compared with those with similar comparative advantage profiles.

Export concentration. The empirical literature also refers to the impact of export diversification (or concentration) on the relative degree of success (or failure) of regional trade agreements. Yeats (1998)

states that countries with highly concentrated exports may experience a relatively high degree of vulnerability, owing to instability in export earnings, that could reduce a country's ability to consistently maintain financial commitments required by regional agreements.

Intra-industry trade. Trade theory and empirical studies also point to extra benefits of intra-industry trade in comparison with traditional inter-industry trade. Intra-industry trade, exploiting the advantages of exchanges in differentiated products, has the potential to tap increasing returns to scale leading to faster export growth (Krugman and Helpman, 1989). An important prerequisite for the growth of intra-industry trade is the country's ability to integrate into international production chains. In turn, a robust expansion of intra-industry trade is often an indication that a country is successful in attracting foreign investors.

Geographical proximity. While the natural trading partner hypothesis has proven to be a popular argument, it is based solely on the volume of trade. It ignores the impact of trade logistics costs and other competitiveness considerations, which are all-important factors that can determine the success or failure of a PTA. Wonnacott and Lutz (1989) and later Deardoff and Stern (1994) present a modified version of a natural trading partner hypothesis by incorporating location and transportation costs. Also Rauch (2001) focuses on the importance of information costs that are related to physical and cultural distances.

Trade policy and institutional determinants of trade. The volume of trade itself is also affected by trade policy. The more restrictive the trade policy regime is, the less likely is a regional agreement to raise welfare. Recent research in international economics points at the relevance of barriers to trade other than tariffs and quotas. Obstfeld and Rogoff (2000) highlight the possible role of unobserved barriers to trade that raise transaction costs for trading partners, and are related to the overall business and governance environment. Wei (2000) argues that the effectiveness of domestic institutions and policies in securing and enforcing property rights in economic exchange is an important determinant of trade costs, and ultimately, of the overall level of trade.

Objective and Scope

The main objective of this chapter is, then, to evaluate whether Maghreb fulfils the above-mentioned criteria (as defined by empirical evidence), which are deemed to be important prerequisites for the success of regional trade agreements. The chapter focuses on trade and investment outcomes (drawing on historical and recent trends) and utilizes a number of quantitative indices and regression analysis to quantify the potential for intra-region merchandise trade and foreign investment. The next chapter will address policy stances (including trade policy, trade facilitation and overall investment climate) and how these affect the prospects for Maghreb regional integration.

This chapter addresses the following questions:

- (i) How integrated into the world economy is the Maghreb? How does intraregional trade and FDI patterns compare with other countries at similar levels of economic development?;
- (ii) Are Maghreb economies interdependent? Does the region's economic growth co-move with its main trading partners?;
- (iii) Is the Maghreb's export product-mix diverse enough to support regional merchandise trade integration?; How complementary are the Maghreb countries' respective import-export structures? ;
- (iv) What do Maghreb's comparative advantages reveal about the prospects for regional trade integration?

- (v) What is the Maghreb's trade and FDI potential after controlling for relevant factors that are associated with volume of trade and investment?

To answer these questions the chapter draws on the following methodological approach:

- (i) examining Maghreb merchandise trade and investment patterns in historical and cross-country perspective;
- (ii) computing several quantitative indices and statistical measures to quantify the relative 'strengths' and 'weaknesses' in the region's prospects for regional integration; and
- (iii) performing empirical analysis based on panel gravity models to assess the potential for merchandise trade and investment within and outside the region. This chapter deals solely with static effects. Many economists have argued that the benefits of regional integration agreements stem from dynamic gains, such as enhanced credibility of reform efforts. These issues, however, are not the focus of this report.

The chapter is structured as follows. First, it reviews trade and investment patterns of the Maghreb countries over the course of the last fifteen years. Second, the chapter proceeds to compute statistical measures to test the hypothesis of whether or not Maghreb countries are 'natural trading partners'. These include trade intensity ratios, export diversification indices, trade complementarity measures and intra-industry trade ratios. Lastly, the chapter assesses prospects of regional merchandise trade and investment drawing on panel gravity models.

1.2. OVERVIEW OF TRADE AND FOREIGN INVESTMENT PATTERNS

Small markets

Maghreb' market size is relatively small compared to other successful regional trading blocs. The economic size of the Maghreb region³ was less than 1 percent of world's total income in 2004 and its population was slightly about 1 percent of world's total population. By contrast, NAFTA countries' market size represented about 24 percent of world' total income in 2004. For the European Union (EU 15) it was close to 20 percent of world's total income and their population was about 6 percent of total world's population.

Table 1.1. Maghreb vs. comparators: regional market size, 1980-2004

region	share of World GDP (constant 2000 PPP), (in percent)		share of World GDP (constant 2000 USD), (in percent)		share of World population (%)	
	1980	2004	1980	2004	1980	2004
ASEAN5	2.46	3.41	0.96	1.55	5.79	6.09
CEE	0.44	1.74	0.22	1.00	1.43	1.04
EU15	25.00	19.37	28.53	24.15	8.01	6.03
MGB	0.77	0.74	0.35	0.36	1.00	1.13
NAFTA	25.76	24.11	33.39	34.67	7.21	6.75

NAFTA=United States, Canada, Mexico; MGB= Algeria, Morocco, Tunisia); CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republics); ASEAN 5= Malaysia, Thailand, Indonesia, Philippines and Singapore; EU-15=Spain, France, Belgium, Germany, Denmark, Greece, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden and United Kingdom. Source: World Development Indicators, 2005.

Similar Trade Structures

Countries in the Maghreb region share similar trade structures. Algeria, Morocco and Tunisia are all labor-abundant countries and, albeit to different degrees, they all exploit natural resources. Algeria has huge reserves of natural gas and other hydrocarbons and is the largest supplier of natural gas to the European Union. Tunisia has also an oil-sector although its importance in the country's economy has decreased over time and it constitutes less than one-third of its exports. Morocco is the world's largest exporter of phosphates. Tunisia's and Morocco's export manufacturing sectors are, by order of importance, the clothing and textiles industry; agri-food industries and building materials (cement, lime, plaster, glass). They also have small but growing electrical and mechanical industries.

Table 1.2 Overview of Trade Aspects of Maghreb Countries, 2004

Countries	WTO status	Population (millions)	GDP (US\$ millions)	GDP per capita (US\$)	Goods and services (US\$ millions)		Trade openness ratio (percent)	Total Export Share (percent)	
					Exports	Imports		Oil	Non-oil
Algeria	no	32.4	84649.0	2616.0	34070.2	21814.0	66.0	92.4	7.6
Tunisia	1990	9.9	28184.7	2837.6	13308.3	14099.1	92.5	7.0	93.0
Morocco	1987	29.8	50030.8	1677.5	16632.2	19859.8	72.4	2.7	97.3

Source: World Development Indicators, UN Comtrade, World Economic Outlook, 2005. Note: trade balance is the ratio of the sum of imports and exports to GDP

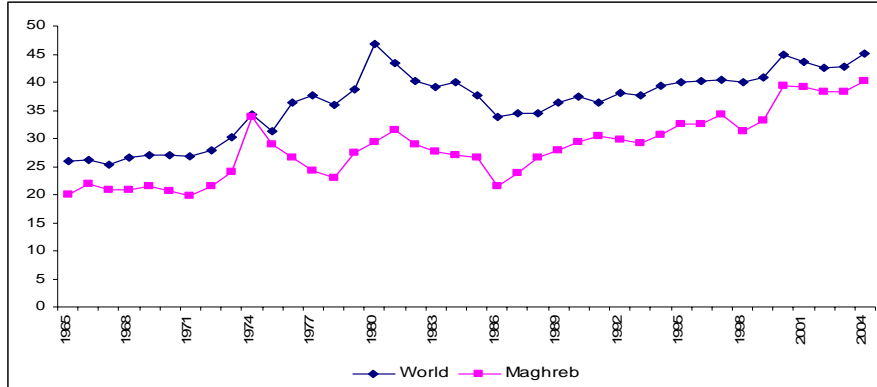
But there are also some important differences among the Maghreb countries. Algeria has the largest population and economy size in the region and is a net oil-exporter, whereas Tunisia and Morocco are net oil-importers. Algeria is not yet a member of WTO. Like many other resource-abundant countries, it has a very small share of non-oil exports (Table 1.1). By contrast, Tunisia and Morocco exhibit greater trade openness (measured by the sum of imports and exports to GDP) and both are members of WTO. Such openness, however, has been import biased. Non-oil exports have been increasingly falling short of imports, implying increasing trade balance deficits (World Bank, 2005).

³ The Maghreb region referred to in this report is limited to Algeria, Morocco and Tunisia. Data availability did not allow inclusion of Libya and Mauritania, the two other members of the Maghreb Union.

Weak trade integration, albeit increasing

In spite of the recent acceleration in trade integration, Maghreb countries remain poorly integrated in the global economy. Over the past decade, Maghreb countries lowered both trade and non-trade barriers and increased their trade integration. As a result, the value of exports of goods and services has grown on average by 4 percent in the Maghreb, roughly in line with world market growth. Figure 1.1 shows that Maghreb's trade integration accelerated since the late 1990s owing to a strong export performance in Tunisia and Algeria (the increase in Algeria's trade integration is driven by rising oil exports to GDP).

Figure 1.1 Maghreb vs. the World: Trade Integration, 1964-2004



Source: World Development Indicators, 2005. Note: Trade Integration as total exports of goods and services as share of GDP.

Maghreb's share of non-oil exports in GDP remains lower than in any other region. The contribution of non-oil exports to GDP was about 16.8 percent in 2004 compared with 41 percent in East Asia and 32 percent in the EU remaining less than one third of the more dynamic regions of Europe and Asia (Figure 1.2). Within the Maghreb region, however, the contribution of non-oil exports to GDP varied widely – from about 1 percent in Algeria to nearly 30 percent in Tunisia in 2004 (Figure 1.3).

Figure 1.2 Maghreb vs. comparators: non-oil exports to GDP (in percent), 1980-2004

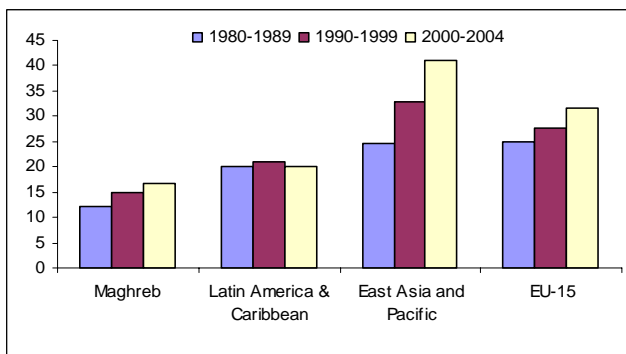
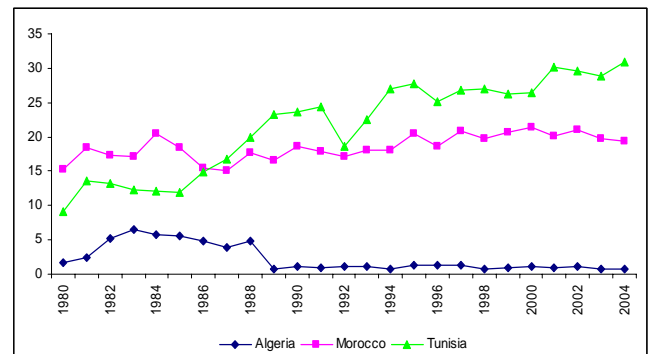


Figure 1.3 Maghreb non-oil export to GDP (in percent), 1980-2004

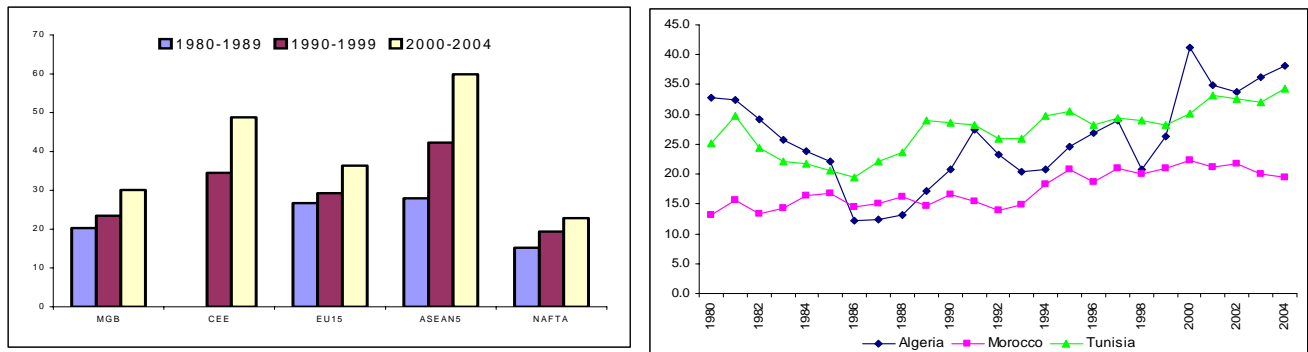


Source: Authors' calculations, based on World Economic Outlook data, 2005

Underperforming merchandise trade

Maghreb's merchandise export performance relative to the size of the region's economies is weaker than other regional trading blocs. Maghreb's merchandise exports (as a percent of GDP) are lower than more dynamic regions such as the ASEAN5 countries and the Central Eastern European countries (Figure 1.4). By 2004, merchandise exports represented 38.2, 34.4 and 19.5 percent of GDP in Algeria, Tunisia and Morocco, respectively (Figure 1.5). Algeria's merchandise exports are mainly driven by fuel exports. Excluding fuel exports from the analysis, Tunisia's merchandise export performance has been consistently the highest within the Maghreb region.

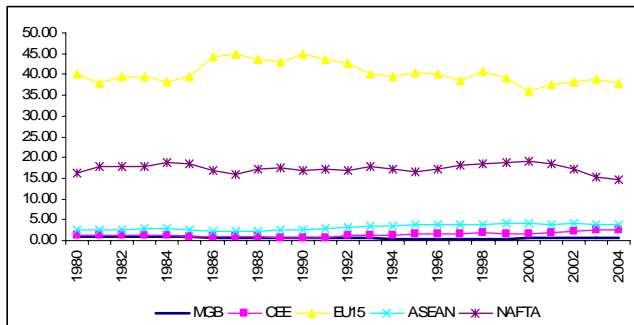
Figure 1.4 Maghreb vs. comparators: merchandise exports (% of GDP) **Figure 1.5** Maghreb merchandise exports (% of GDP)



Source: Authors' calculations using World Development Indicators, 2005

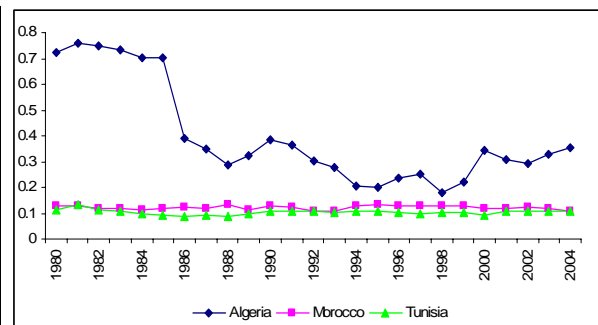
Maghreb's market share of global merchandise exports is low and declining. Another perspective is provided by examining how the share of world merchandise trade accounts for the Maghreb countries and how it has evolved over time. Figures 1.6 and 1.7 illustrate that the Maghreb region experienced a decline in the world share of exports, owing to Algeria's falling share and the stagnant shares for Tunisia and Morocco.

Figure 1.6 Maghreb vs. Comparators: Market Share of World Merchandise Exports (in percent), 1980-2004



Source: Authors' calculations using World Development Indicators, 2005

Figure 1.7 Maghreb: Share of World Merchandise Exports (in percent), 1980-2004

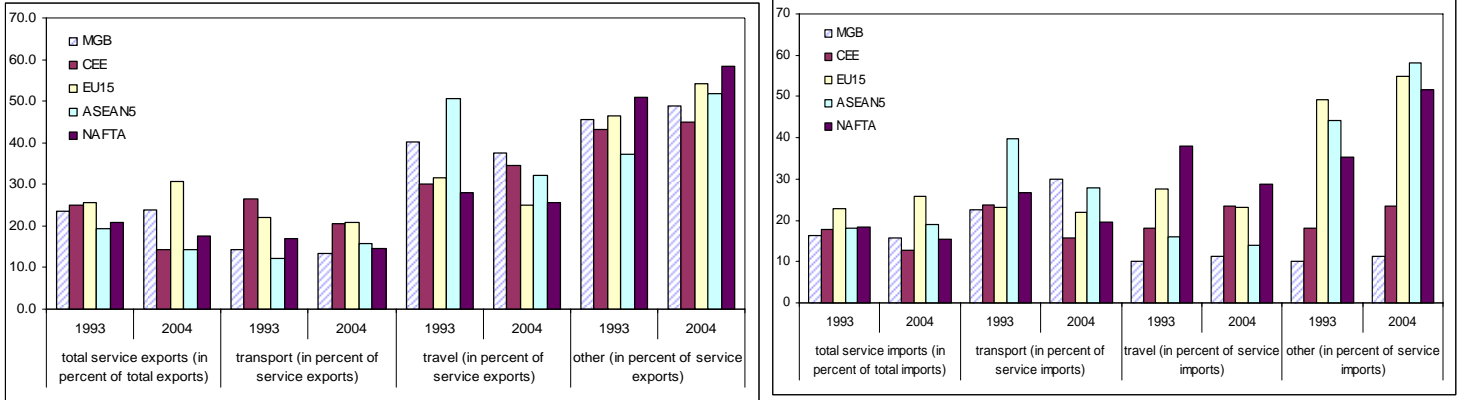


Trade in Services: mixed performance

The share of services in GDP in Morocco and Tunisia is in line with other countries at similar income levels, although Algeria's steady decline in services trade drags down the regional average. Between 2000 and 2004, services accounted for 48 percent of GDP on average in the Maghreb. The decline in Maghreb's share of services in GDP since the late 1990s is explained by the steady decrease in the share of services in Algeria, an oil-rich country.

Maghreb's services trade performance, with the exception of tourism and transport, is weaker than other regional trading blocs. Maghreb's overall trade performance in services is in line with other regional blocs. In 2004, Maghreb's service exports accounted for 23 percent of total exports, compared to 25 percent in Central and Eastern European countries and 26 percent in EU-15 countries. Tourism (travel) makes up the bulk of Maghreb's service exports, although the share of tourism in total service exports fell from 45.7 of total service exports in 1990 to 37.6 percent in 2004. Maghreb's trade in other services (such as telecommunications, financial and business services), account for a much lower share of total trade than other regions (Figures 1.8 and 1.9).

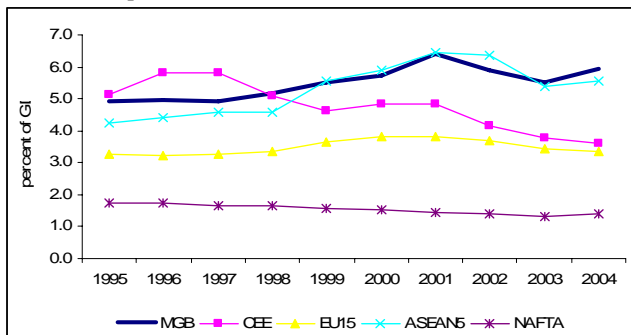
Figure 1.8 Maghreb vs comparators: Service Exports (in percent), 1993-2004 **Figure 1.9 Maghreb vs. comparators: Service Imports (in percent), 1993-2004**



Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia).
Source: World Economic Outlook, 2005.

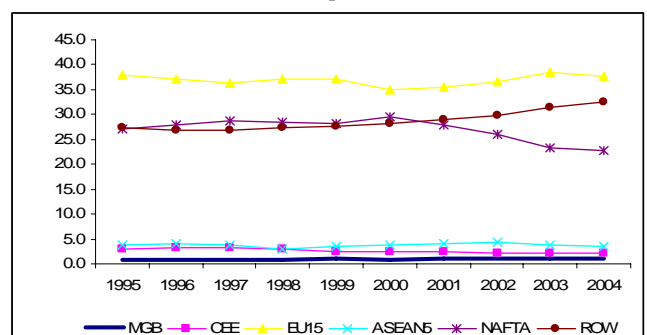
Regional tourism receipts are high relative to the size of the Maghreb economies, but their market share of global tourism trade remains small. The region's average share of tourism receipts to GDP fluctuated between 5 and 6 percent of GDP from 1995 to 2004 (Figure 1.10). With 6 million foreign tourists in 2004 (0.8 percent of the world total), tourism plays a key role in Tunisia's economy. In 2004, earnings from tourism amounted to approximately 2.3 billion dinars (7 percent of GDP). Tourists come mainly from France, Germany, Lybia and Algeria. In absolute values, Maghreb received much less tourism receipts than other regional trading blocs. Maghreb's total tourism receipts in 2004 amounted to about 7 billion USD, whereas ASEAN-5 and CEE countries received about 22 US\$ billion and 13 US\$ billion respectively. Also, while world tourism trade has expanded five times over the last two decades, Maghreb's market share still amounts to a very small share of global tourism trade, increasing slightly to 1.16 percent in 2004 from 0.83 in 1995 (Figure 1.11).

Figure 1.10 Maghreb vs. Comparators: Tourism Receipts as Share of GDP (in percent) , 1995-2004



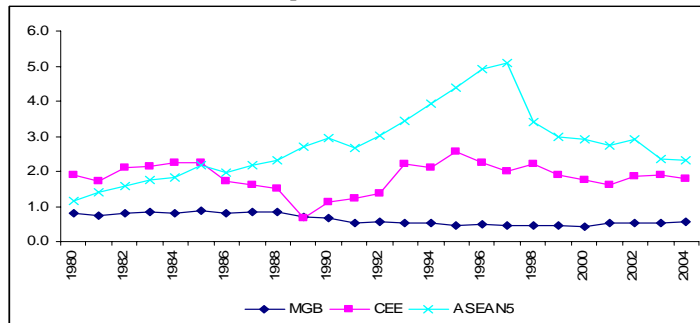
Source: Author's calculations using World Development Indicators, 2005.

Figure 1.11 Maghreb vs. Comparators: Market Share of World Tourism Trade (in percent) , 1995-2004



Maghreb's market share in global trade of non-tourism services is small and declining. The region's market share in world trade of non-tourism services has fluctuated between 1 and 0.5 percent. Compare this figure with the one for CEE countries, whose market share of global exports of non-tourism services has fluctuated around 2 percent during the last twenty five years. In addition, while Maghreb has losing market share over time, East Asian countries have more than doubled their world market shares from the 1980s (Figure 1.12).

Figure 1.12 Maghreb vs. comparators: Share of global non-tourism export services (in percent), 1980-2004

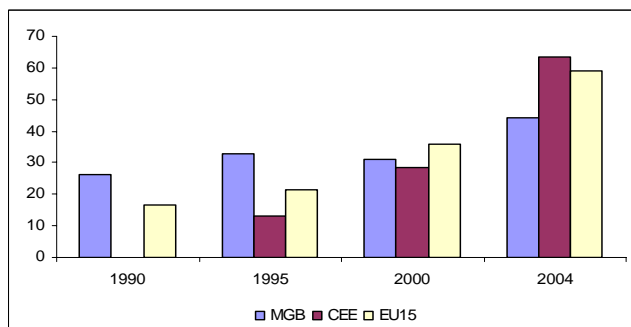


Source: World Development Indicators, 2005

Increasing FDI, albeit lower than Central and Eastern Europe

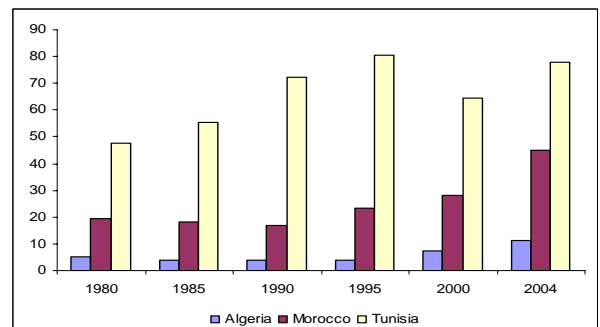
Foreign direct investment into the Maghreb countries has increased steadily since the late 1990s, although it remains lower than comparator countries in Central and Eastern Europe. In the 1990s, the level of inward FDI in the Maghreb was significantly higher than in Central and Eastern European countries (CEEC). But the transition from socialist to market-led economies, with heavy privatization programs involving sales to foreign investors, led to increased FDI flows into CEECs. By 2004, FDI stock to GDP in the Maghreb countries was significantly lower than in the CEECs (Figure 1.13). While still less than comparators, inward FDI to the Maghreb increased in the 1990s. Since then, Tunisia and Morocco have attracted FDI inflows averaging 2 percent of GDP. Relative to its size, Tunisia has attracted more FDI than Algeria or Morocco. Tunisia's stock of FDI on average has exceeded 66 percent of its GDP since the 1980s, compared with 25 percent for Morocco and 7 percent for Algeria. In 2004, Tunisia held FDI stock worth nearly 78 percent of GDP, compared with 45 percent in Morocco and 11 percent in Algeria (Figure 1.14). The stock of FDI to GDP in Algeria has been stagnant, rising slightly since the late nineties. In Morocco, FDI stock has actually increased from less than 17 percent of GDP at the end of the 1990s to an average of 45 percent of GDP in 2004.

Figure 1.13 Maghreb vs. comparators: FDI stock to GDP (in percent)



Source: World Development Indicators, 2005

Figure 1.14 Maghreb: FDI stock to GDP (in percent)



Inward FDI into Maghreb display high concentration in terms of geographical origin although the sectoral decomposition varies across the region. The main foreign investors in the Maghreb are from the European Union, mainly from France, Spain, the United Kingdom, Germany and Italy, and to a lesser extent, from the United States. Oil has played a large role in attracting FDI to Algeria and Tunisia. Non-oil FDI inflows are negligible in Algeria. In Tunisia, non-oil FDI inflows did not rise much until 1998, despite many initiatives to encourage it. However, since 1998, the main focus of FDI has been on manufacturing. After the cement sector, the textiles industry has attracted the most foreign investment, followed by shoes and leather, vehicle parts, electronics, pharmaceuticals, food, and computer software. In Morocco, FDI to the industrial sector accounted for 20 percent of total FDI. The three largest affiliates of foreign transnational corporations in the Moroccan industrial sector were engaged in non-metallic mineral, electrical and electronic equipment and food production (UNCTAD, 2005).

FDI in services is still low in the Maghreb although in Morocco is growing in importance. Given that services trade often requires proximity between service provider and consumer, FDI is an important mode of international trade in services. Moroccan FDI inflows are growing rapidly and shifting into the new sectors of telecommunications, tourism, and insurance services. In 2004, over 70 percent of the total FDI inflows to Morocco went into services. Foreign investment in the tourism sector amounted to more than 11 percent of total FDI inflows. More than a third of Morocco's FDI stock is concentrated in the telecommunications sector. Other sectors, like financial services, remain relatively closed to FDI. In Tunisia, service activities accounted for only 11 percent of total FDI inflows and 14 percent of the number of enterprises with foreign participation. Tourism and travel services accounted for 80 percent of Tunisia's service exports. Trade in non-tourism services remains at a disadvantage in Maghreb countries because of weak foreign participation in the provision of services. The barriers to foreign direct investment are still numerous in service activities, in contrast to the policy in effect in industry. The next chapter discusses in greater detail regulatory barriers to trade and investment in services in the Maghreb.

1.3. ARE MAGHREB COUNTRIES 'NATURAL TRADING PARTNERS'?

The previous section showed that Maghreb countries are still poorly integrated into the global economy. But how integrated are among themselves? Econometric analysis shows that there is a long-term relationship among Maghreb's economies. Empirical results from the Johansen-Juselius (1989) tests of co-integration reveal a long-run equilibrium relationship binding the economies of the three Maghreb countries (See Annex). The presence of a long-run relation among the three Maghreb's economies, however, does not necessarily mean that there is potential for intraregional trade. This co-integration relationship could be very well the result of the common dependence of Maghreb countries on third markets (the European Union). This section draws on the trade literature and a variety of statistical measures to explore whether the Maghreb countries are 'natural trading partners.

Low Volume of Intraregional Trade

The 'natural trading partner' hypothesis, based on the trade volume approach, suggests that members of a regional agreement should trade disproportionately with each other in order to be a successful bloc. As it will be shown below, this criterion is not fulfilled by the Maghreb region.

While the value of intraregional merchandise trade has nearly tripled since the 1980s, its share of total Maghreb trade has declined since the early nineties. In addition, intraregional trade declined from 2 percent of total merchandise trade in 1990 (already a low starting base) to 1.2 percent in 2004 (see Figures 1.15 to 1.18). By contrast, among other regional groupings intraregional trade has increased, in many cases dramatically, as in the Andean Pact, ASEAN and NAFTA countries (Figure 1.19).

Figure 1.15 Maghreb: Intraregional Merchandise Imports (in percent of Total Merchandise Imports)

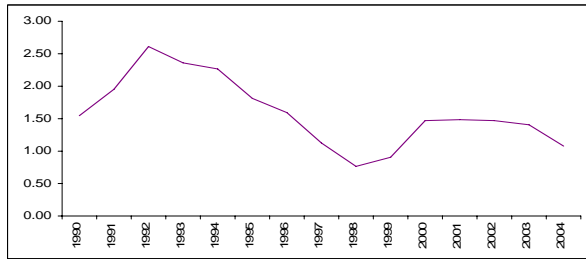


Figure 1.16. Maghreb: Intraregional Merchandise Imports Value (in USD billion)

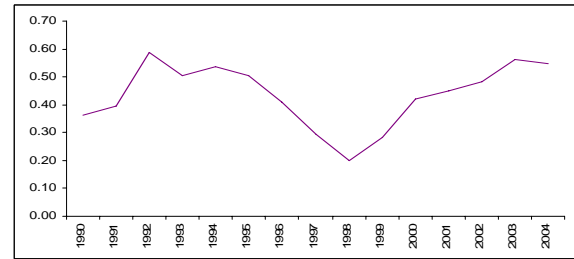


Figure 1.17 Maghreb Intraregional Merchandise Exports (percent of total Merchandise Exports), 1980-2004

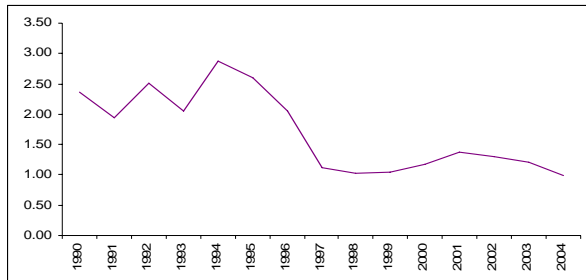
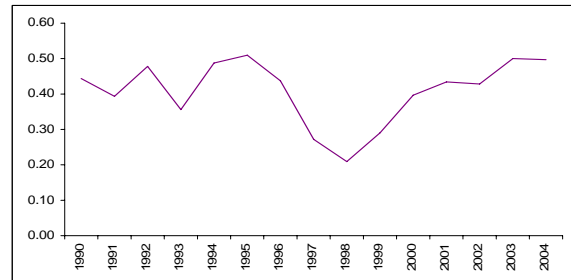


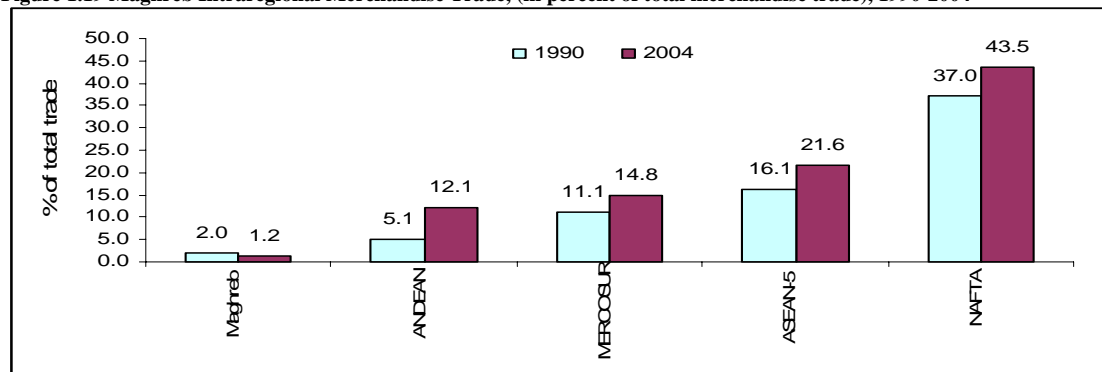
Figure 1.18 Maghreb Intraregional Merchandise Export Value (in USD billion), 1980-2004



Source: International Monetary Fund, Direction of Trade Statistics, 2005

Maghreb intraregional trade remains low and compares unfavorably with other regional blocs. Maghreb intraregional trade remains at low levels, despite many formal agreements to promote such trade. Merchandise trade within the Maghreb (as a share of total merchandise trade) is the lowest among comparator regional trading blocs (Figure 1.19). Members of successful regional arrangements, such as the European Union and NAFTA, had much higher levels of intra-regional trade than Maghreb's current levels. At the inception of the EU, intraregional trade was about 65 percent, and among NAFTA members it was around 41 percent. Prior to the formal launch of MERCOSUR in 1991, its share of intra-regional trade stood at 14 percent. Similarly, in ASEAN, a relatively high level of regional trade among member countries at the launching of their regional trading arrangements – 16 percent- provided the necessary impetus for further regional integration.

Figure 1.19 Maghreb Intraregional Merchandise Trade, (in percent of total merchandise trade), 1990-2004



Source: Authors' estimations based on UN Comtrade data. ASEAN 5= Malaysia, Thailand, Indonesia, Philippines and Singapore. SEE= Southern East European countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia and Montenegro). CEE= Central East European countries (Poland, Hungary, Czech Republic, Slovak Republic and Slovenia)

Such a low base of intra-regional merchandise trade, much lower than any successful regional grouping, may be evidence that the Maghreb countries are not ‘natural trading partners’. As we will see below, there are other factors that work against prospects for increased intraregional merchandise trade integration. These include: high export concentration; small markets, low trade complementarity, high competition for similar export markets; low intra-industry trade and little integration into global production chains, which in turn constrains the diversification of exports and limits the expansion of high value-added manufacturing activities.

Low and Declining Trade Intensity

The trade intensity index is used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade. The trade intensity index is defined as the share of one country’s exports going to a partner divided by the share of world exports going to the partner (see Annex for technical details). If the trade intensity index (TII) value is above or below unity, the countries have greater or smaller bilateral trade flows than would be expected based on the two partners’ share in world trade. For those trading partners that have TIIs greater than unity, their trade relationship can be defined as ‘intensive’ (that is, the countries trade more than would be expected given the relative size of the market for imports). An analysis of the changes in TII over time can show whether two countries are experiencing an increased or decreased tendency to trade with one another. An increasing TII may reinforce prospects for further regional integration, while a decreasing trend would diminish such prospects (See Braga et al, 1994; and Anderson et Blackhurst, 1993; for an application of the TII within the context of regional trade agreements).

The downward trend in Maghreb’s trade intensity suggests that the Maghreb countries are increasingly marketing their products outside the region. Maghreb countries registered trade intensity indices above unity during 1990-2004 implying that bilateral trade is larger than would be expected given the Maghreb region’s importance in world trade. However, with the exception of Tunisia, there appears to be a downward trend in trade intensity within the region over the past decade. This declining trend in trade intensity suggests that the Maghreb countries are increasingly marketing their products outside the region and is also a factor working against prospects for regional trade integration (Figures 1.20 and 1.21). In contrast, intra-region trade intensity among the ASEAN 5 countries is considerably higher and exhibits an upward trend (Figures 1.22 and 1.23).

Figure 1.20 Maghreb: Intra regional Trade Intensity, 1990-2004

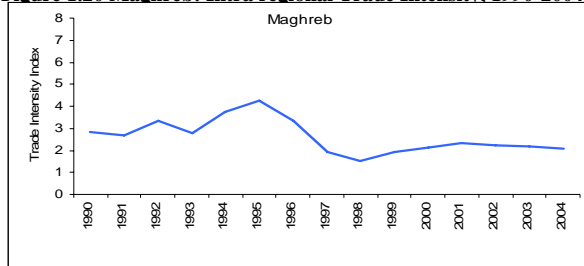


Figure 1.21 Maghreb: Intraregional Trade Intensity, 1990-2004

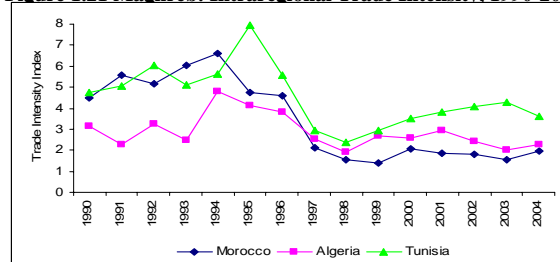


Figure 1.22 ASEAN: Intraregional Trade Intensity, 1990-2004

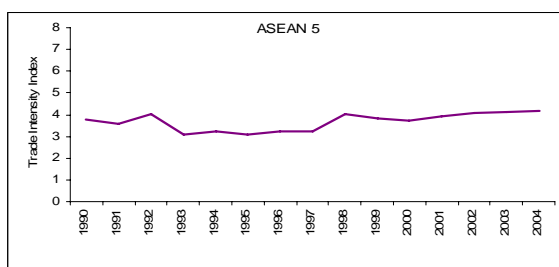
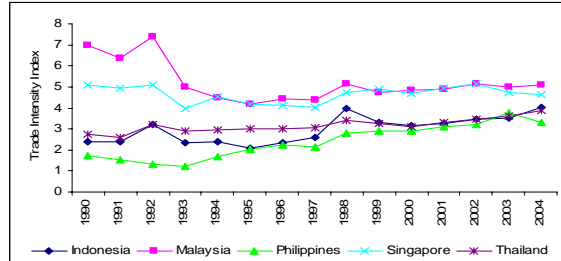


Figure 1.23 ASEAN: Intraregional Trade Intensity, 1990-2004



Source: Authors’ calculation using 1 digit SITC revision 2 data from UN Comtrade

A criticism of trade intensity indexes is that they do not control for factors such as economy's size, geography (a proxy for trade logistics costs), tariff barriers, language, culture and other factors that may influence trade patterns. Later the chapter expands the analysis of intraregional trade potential in the Maghreb drawing on a panel trade-gravity model that takes into account these other determinants of trade flows.

High Market Concentration

Maghreb countries display a high degree of market concentration, with the European Union as the most important trading partner. The geographic destination of trade for the Maghreb region is driven significantly by proximity. The EU is the main source of exports and import destination for the Maghreb countries, constituting over 65 percent of total trade by 2004 while the share of exports going to the EU is 70 percent. The high market concentration points to the vulnerability of the Maghreb region to changes in European market access conditions (see Figures 1.24 to 1.27). Maghreb exports to other MENA countries as a share of total exports from the Maghreb increased from 2 percent in the 1980s to 3 percent in 2004 while the import share expanded from 5 percent in the 1980s to 6 percent by 2004 (see Annex).

Figure 1.24 Maghreb Merchandise Exports (percent of total merchandise exports) Figure 1.25 Maghreb Merchandise Export Value (USD billions)

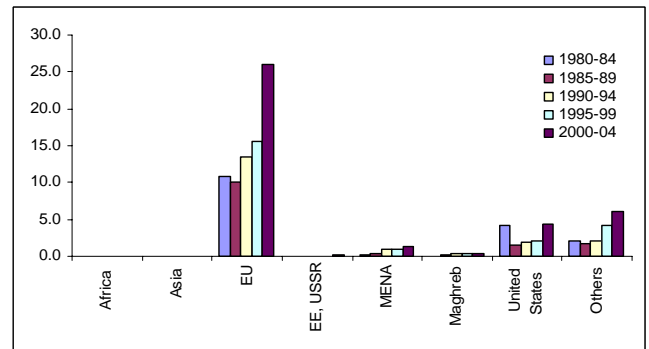
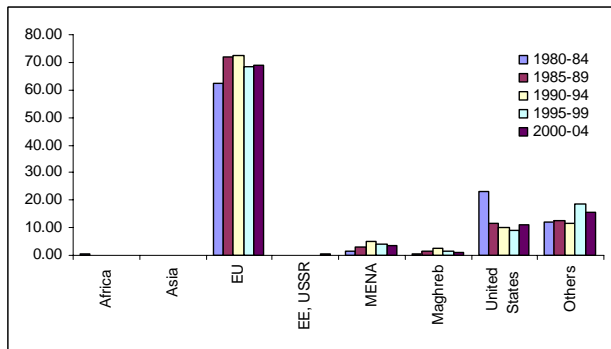
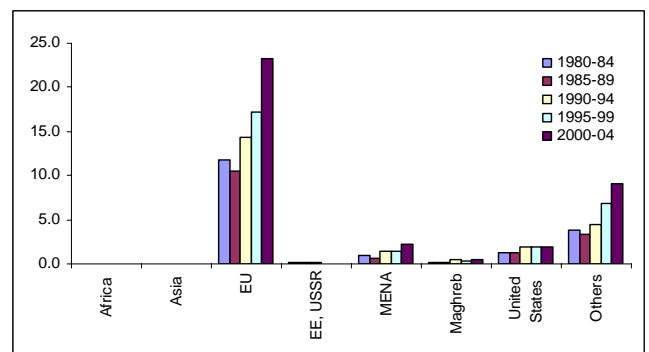
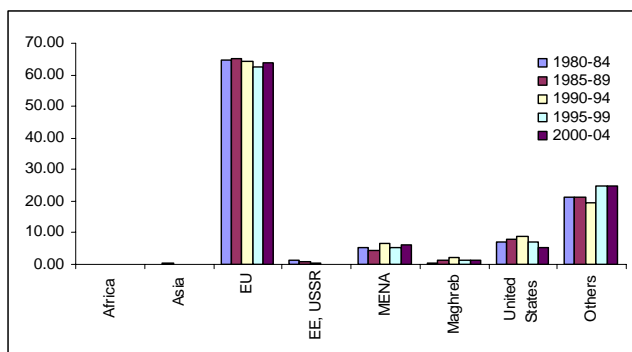


Figure 1.26 Maghreb Merchandise Imports (percent of total merchandise imports) Figure 1.27 Maghreb Merchandise Imports Value (USD billions)



Source: World Development Indicators, 2005

Maghreb's degree of market concentration is higher than other comparator regional groupings. The geographical 'vulnerability' of Maghreb exports while only slightly higher than CEECs, is significantly higher than the market concentration observed in ASEAN, EU15, NAFTA trading blocs (Figure 1.28). Algeria displays the highest geographical concentration of exports in the Maghreb (See Figure 1.29 and Annex for technical details).

Figure 1.28 Maghreb vs. comparators: market concentration, 1980-2004

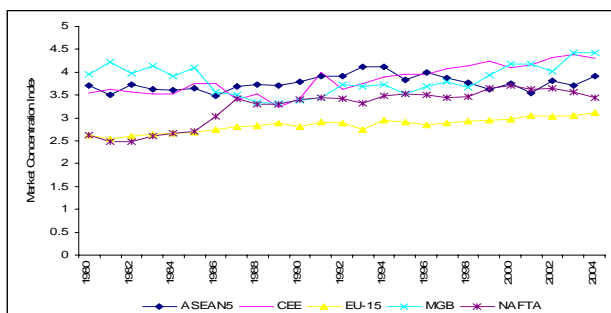
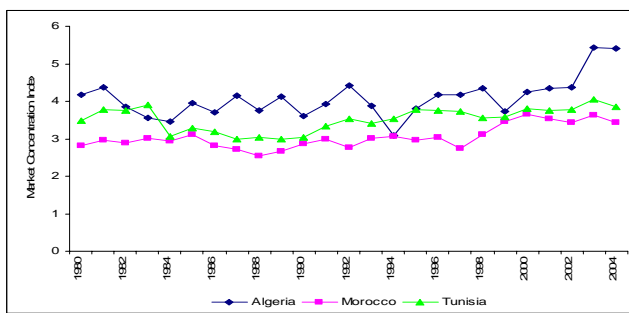


Figure 1.29 Maghreb market concentration, 1980-2004



Source: Authors' calculation based on UN Comtrade using 4 digit SITC, Revision 2.

Econometric analysis corroborates the dependence of Maghreb's economies with their main trading partners. Business cycle fluctuations in Tunisia's and Morocco's main trading partners (France, Italy, Spain) bear a long-run relationship with these countries' economic growth. France, Spain and Italy affect Morocco's non-agriculture economic growth⁴. Figure 1.30 provides the (impulse) response of Tunisia's growth rate to a (one standard deviation) positive shock in France's growth rate. A positive shock to France's growth raises real GDP growth in Tunisia three years after the shock and tapers down after 5 year. A positive shock to Italy's growth (which is currently Morocco's fourth largest export destination) raises non-agriculture growth in Morocco by the second year after the shock and its impact gradually tapers off by the fifth year (Figure 1.31). While recently concluded preferential trade agreements with Turkey (Tunisia, Morocco) and with the United States (Morocco) will tend to contribute to a greater diversification of Maghreb's export markets, Maghreb economies are still highly vulnerable to the business cycle in its main Western European trading partners.

Figure 1.30 Response of Tunisia's non agricultural growth to an increase in France's GDP growth

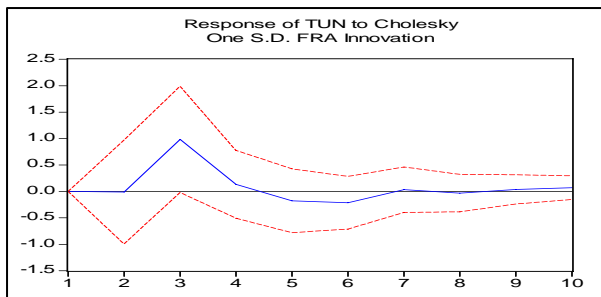
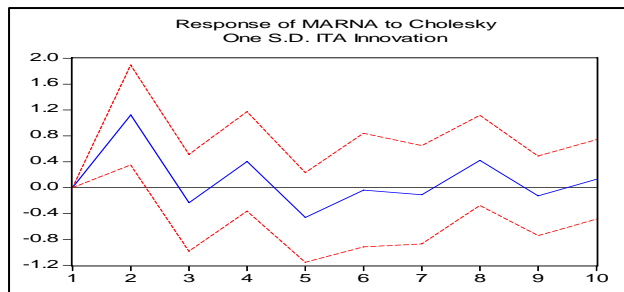


Figure 1.31 Response of Morocco's non-agriculture growth to an increase in Italy's GDP growth



Source: Author's calculation using World Development Indicators, 2005

High Product Concentration

The trade literature argues that the likely success (or failure) of regional trade agreements is partly contingent on the range of products that prospective members have the capacity to export. If the members export a wide range of diversified goods, this is a positive factor. If, by contrast, their exports are highly concentrated, it will limit the prospects of increased regional trade. The underlying assumption is that the higher the level of export diversification, the better the prospects for a successful regional trade agreement. The more diversified a country's exports the greater the range of potential products that can be

⁴ This observation is also based on the outcome of pair-wise Granger causality tests that shows the business cycle fluctuations of Maghreb's main trading partners 'granger cause' Maghreb's non-agriculture growth.

traded with regional partners. If only a limited number of such goods exist, prospective members of a RTA may have to rely heavily on third countries for a higher share of its key imports and as a destination for their major exports, and this would be likely to reduce their commitment to the RTA (Yeats, 1998). There may also be important secondary effects from a high degree of export concentration. Some studies show that countries with highly concentrated exports may experience a relatively high degree of export earnings instability – a factor that makes economic planning difficult. Such instability could reduce a country’s ability to consistently maintain financial commitments required by a regional arrangement.

Several export concentration, or diversification indices, can provide useful insights concerning the prospects for Maghreb intraregional trade. One measure is the *product variety index*, which is simply a count of the number of 3-digit SITC (Standard Industry Trade Classification) products exported. The higher the numeric value of the product variety index, the greater the diversity of products exported. A second measure that has been employed is the so-called ‘*product concentration index*’, computed using the shares of all 3-digit products in a country’s exports, with higher values indicated greater product concentration. A third measure is the ‘*product diversification index*’ which utilizes deviations between the shares of 3-digit SITC products in a country’s exports and their corresponding shares in world trade. The rationale for this approach is that it sets the global structure of trade as a ‘standard’ and seeks to determine how closely it is matched by a country’s exports. A country with a diversification index of zero has an export structure that exactly matches that of world trade. This index ranges between zero and unity, with higher values indicating more concentrated trade structures (See Annex for technical details).

Maghreb countries export a low range of products compared with other regional groupings, although they have increased product variety over time. Maghreb exports seem to be confined to a few products, that is, a small number of products seem to accumulate a significant share of export revenues. Maghreb’s average range of products exported in 2004 was 100, half the range of products exported by other regional trading blocs. NAFTA and EU15 exported over 220 items in 2004. CEE and ASEAN countries also doubled the Maghreb countries in the range of products exported in 2004 (Figure 1.32). The regional average masks differences among Maghreb countries. Looking at more disaggregated country data over recent years, the picture is slightly more encouraging. Tunisia and Morocco increased average product variety (measured by the number of 3-digit SITC items exported) from about 100 to over 150 items over the period 1980-2004 (Figure 1.33).

Figure 1.32. Maghreb vs. comparators: Product Variety Index, 1980-2004

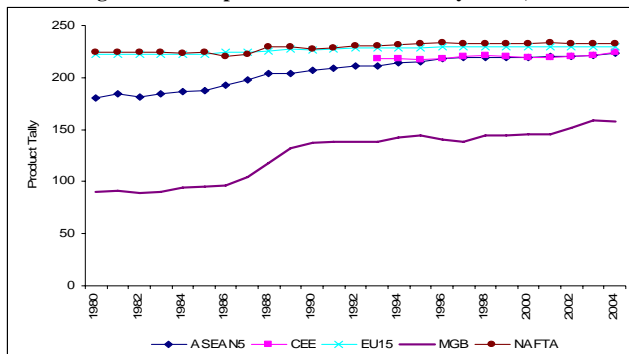
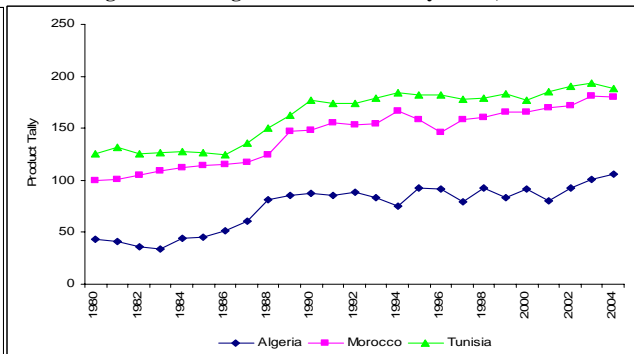


Figure 1.33. Maghreb Product Variety Index, 1980-2004



Source: Authors’ calculation based on UN Comtrade using 3 digit SITC, Revision 2.

The Maghreb economies exhibit a high degree of product concentration which may complicate prospects for increased regional trade- although a closer look to recent trends reveals some signs of export diversification. Maghreb’s product concentration ratio is the highest among comparator regional groupings. In 2004 it stood at 0.35 level compared with 0.1 percent in EU-15 and NAFTA countries (Figure 1.34). Tunisia and Morocco’s exports are still dominated by textiles and apparel. Most exporters specialize in subcontracting and process imported inputs. For Algeria, fuels are by far the largest product

group in its export bundle. High market and product concentration are clearly a source of vulnerability for Maghreb exports and play against future prospects for regional merchandise trade integration.

However, in recent years, there are some signs of export diversification. Tunisia and Morocco have seen a large fall in their product concentration over the last two decades. A positive improvement in international competitiveness of Morocco and Tunisia in recent years has had an expansionary impact on their efforts. Especially since the 1990s, Morocco and Tunisia have shown some signs of export diversification. Tunisia and Morocco managed to bring the product concentration index to a level 60 percent and 20 percent lower, respectively, in 2004 than the one that existed in 1980 (Figure 1.35).

Figure 1.34 Maghreb vs. comparators: Product Concentration, 1980-2004

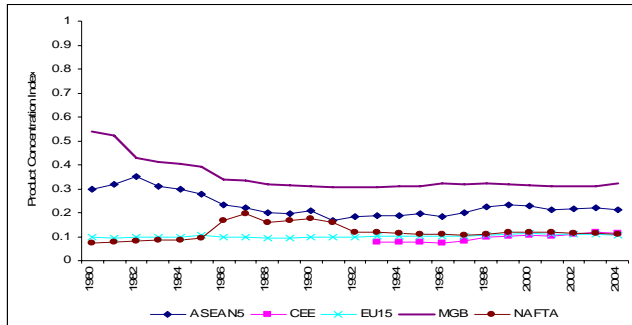
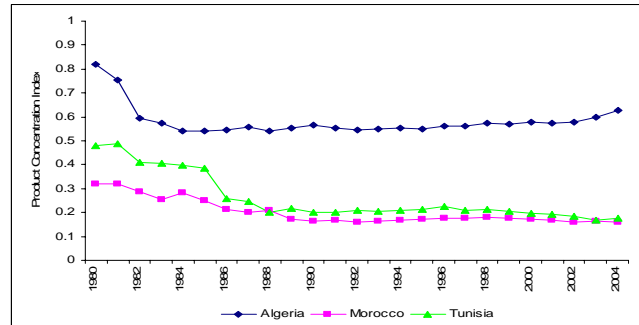


Figure 1.35 Maghreb Product Concentration, 1980-2004



Source: Authors' calculation based on UN Comtrade using 3 digit SITC, Revision 2.

There is however some divergence between manufactured products that are exported to the region and to the rest of the world. Excluding primary products, manufactured products account for the biggest share in Maghreb's merchandise exports to the region and to the rest of the world. Within manufactured products, there is a significant divergence between goods that are exported to the region and goods that are exported to the world (Table 1.3). For example, garments and apparels produced in Morocco and Tunisia are primarily exported to the rest of the world while light manufactured goods are mainly exported to the region. A more disaggregated product composition, using 4-digit SITC, also confirms the skewness of intraregional merchandise trade and the high level of product concentration in the Maghreb (see Annex). In sum, concentration and divergence data for the Maghreb do not auger well for prospects of increased intraregional trade. As we will see below, this divergence can also be discerned from the underlying shift of factor intensities of Maghreb's exports, which have undergone a greater orientation over time toward unskilled and semi-skilled manufacturing products for which the Maghreb countries (particularly Tunisia and Morocco) appear to compete with each other in the EU markets.

Table 1.3 Product Composition of Maghreb's Intra-regional and Extra-Regional Exports, 1990-2004

reporter	year	Food & Live Animals (0)		Beverages & Tobacco (1)		Crude Materials (2)		Minerals & Fuels (3)		Animal & Vegetable Fat (4)		Chemicals and Material (5)		Manufactured Goods (6)		Machinery and Transport Equipment (7)		Misc. Manufactures (8)	
		MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW
Algeria	1990	0.1	0.2	0.1	0.2	0.6	0.2	85.9	96.7	0.0	0.0	1.6	0.6	8.2	1.2	3.4	0.8	0.1	0.1
	2000	0.5	0.1	0.0	0.0	0.6	0.2	84.9	97.4	0.0	0.0	4.3	1.6	8.8	0.4	0.5	0.2	0.3	0.1
	2004	0.9	0.1	0.0	0.0	1.4	0.3	76.0	97.6	0.0	0.0	6.8	1.3	14.3	0.4	0.1	0.1	0.4	0.0
Morocco	1990	16.0	25.3	0.0	0.1	10.7	16.6	6.9	3.1	0.0	1.1	10.7	19.8	37.3	8.7	13.1	4.8	5.3	20.5
	2000	8.5	21.4	0.0	0.1	17.9	9.3	17.7	3.3	0.0	0.1	16.4	12.0	32.4	6.5	4.3	11.1	2.8	36.1
	2004	14.5	18.0	0.0	0.2	10.0	8.6	9.2	1.3	3.8	0.9	24.5	15.2	25.5	6.7	6.2	14.4	6.2	34.6
Tunisia	1990	11.1	6.6	1.3	0.4	0.8	2.4	0.0	17.9	0.0	3.6	18.8	14.3	51.9	10.3	13.1	7.7	2.8	36.7
	2000	4.7	4.3	0.7	0.6	0.5	2.1	0.1	12.1	2.5	3.7	28.3	10.1	32.4	9.2	25.0	13.1	5.8	44.8
	2004	11.9	4.3	1.2	0.6	1.2	1.6	0.1	9.8	2.7	6.1	21.4	8.6	40.5	9.6	17.2	16.8	3.8	42.6

Source: Authors' calculation based on UN Comtrade using SITC Rev 2 at 1 digit level. MGB=share of intra-Maghreb trade (percent), ROW=share of rest of the world trade (in percent).

Similar Factor Intensities

Maghreb merchandise exports share similar factor intensities, particularly Morocco and Tunisia. Main merchandise exports in Tunisia and Morocco (clothing, textile yarns, and floor covers) are labor-intensive in production whereas most Algeria's export products like chemicals, plastic materials, and aluminium, are energy-intensive (Figures 1.36 and 1.37). The analysis of dynamic (fast growing) export products reveals that for Algeria, there is a high percentage of dynamic products that are manufactured by energy-intensive and capital-intensive production methods. Tunisia's and Morocco's most dynamic exports are more labor-intensive (See Annex). As we will see later, Morocco and Tunisia are intensively importing parts and components and using these materials for local assembly of items such as telecommunications equipment, non-electrical machinery and office machinery. These assembly operations are generally labor-intensive in nature.

Figure 1.36 Maghreb Factor Intensity of Merchandise Exports (1990-2004)

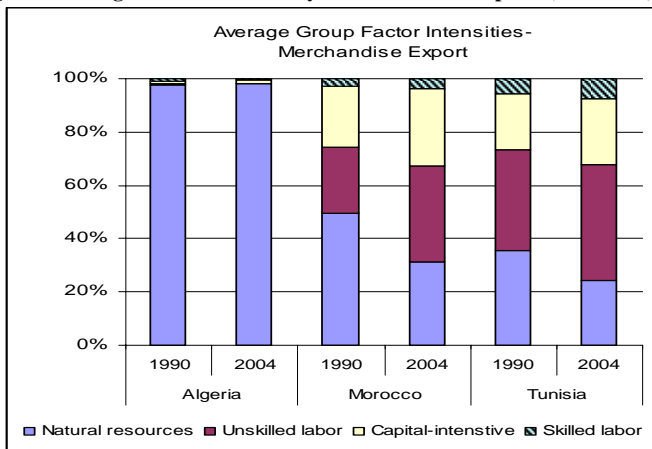
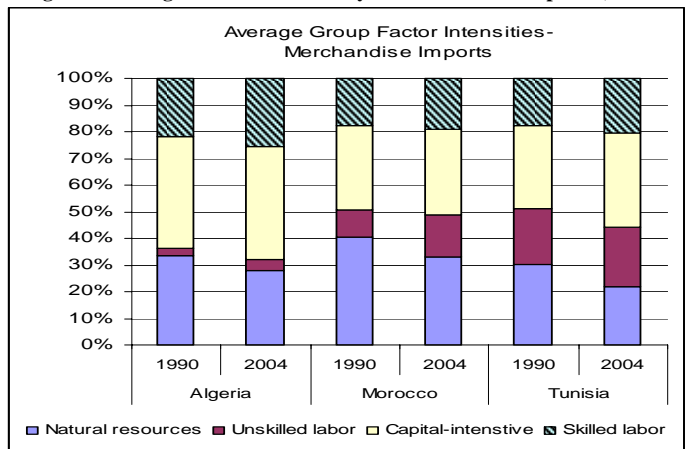


Figure 1.37 Maghreb Factor Intensity of Merchandise Imports (1990-2004)



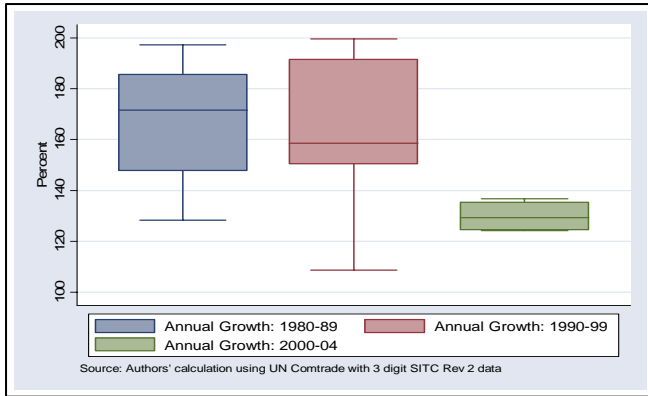
Source: Authors' computations based on World International Trade Statistics (WITS), 2005. Note: Factor intensity content in SITC 4-digit products in revision 1, based on an UNCTAD (1985) methodology

Falling Growth and Shares of Dynamic Products

The ability to increase regional exports is also contingent on the degree to which dynamic exports are incorporated into the regional export mix. Although some products may not constitute a large share of exports in a country, there are several reasons to identify dynamic (fast growing) products in exports. If above average growth in these products continues for an extended period, these items may eventually become an important source of a country's export earnings. In addition, if the dynamic products have specific production characteristics, this could also convey important information on export opportunities in relation to other similar goods. The most straightforward method of identifying dynamic products is to sort products on the basis of their growth rate over a given period. For the purposes of this report, dynamic products are defined as exports that exceed annual growth of 15 percent at the 3-digit level, roughly about twice as fast as overall growth in world exports in the period.

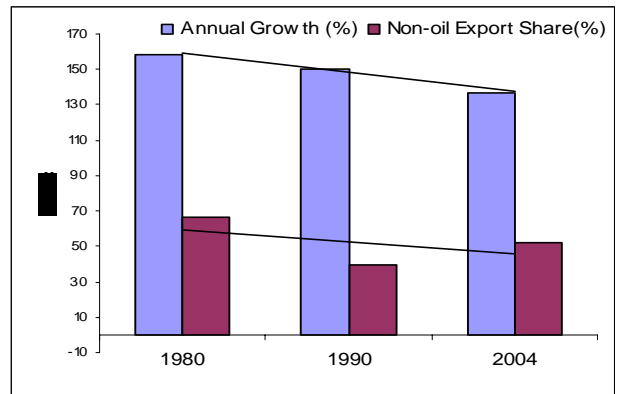
Maghreb countries seem to have been losing their presence in the dynamic products list for the past two decades. Dynamic products accounted for about 63.6 percent of Maghreb's non-oil merchandise exports in 1990 and 52.5 percent in 2004, indicating a falling presence of dynamic export products in total Maghreb exports (Figure 1.35). The period average annual growth rates for dynamic products have been consistently declining: 167 percent in the 1980s, 163 percent in the 1990s, 130 percent between 2000 and 2004, respectively (Figure 1.36).

Figure 1.38 Maghreb Annual Growth of Dynamic Exports (in percent), 1980-2004



Source: Authors' calculations, using UN Comtrade with 3 digit SITC Revision 2 data

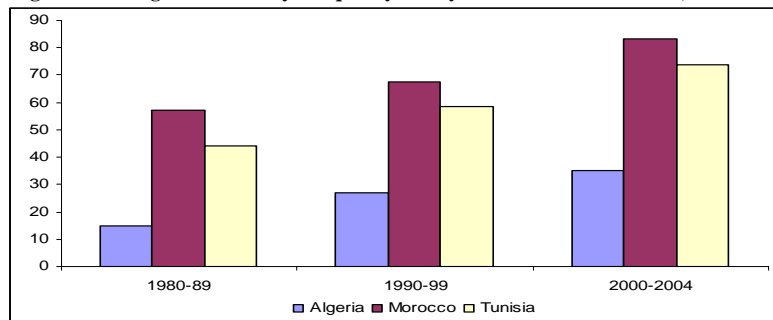
Figure 1.39 Maghreb: Share of Dynamic Products in Non-Oil Exports (in percent), 1980-2004



In the Maghreb, not a single product that accounted for 75 percent of Maghreb countries' growth in exports to the rest of the world is represented in the growth of its regional exports. The extent to which the relative share of regional trade can be increased depends on the extent to which Maghreb countries' dynamic exports are represented in regional trade. In this context, prospects for greater Maghreb intraregional merchandise exports do not appear to be encouraging. The increase in regional trade of some products materialized within the existing exports that are not among these countries' dynamic segments.

A closer look to country disaggregated data in recent years reveals some signs of export dynamism in Morocco and Tunisia and help nuance the overall gloomy picture. Tunisia and Morocco's export performance has been commendable in recent years. Fast growing export products, defined as those with at least an average 15 percent annual increase during the period 1990-2004, represent more than 30 percent of total exports. These include wearing apparel, electrical equipment, and some agriculture products, such as vegetables fats and oils. More importantly, exports of these dynamic products have consistently increased over the past ten years, suggesting that Maghreb exporters were successful in establishing long-run business relationships with foreign importers (See Figure 1.40). The most dynamic exports are electrical wire and cables, in particular, wiring harnesses, and electronic components (see Annex for details). In Tunisia, the electrical and electronic component grew almost twice as fast as the average for all merchandise exports between 2000 and 2004. Most cutting-edge electrical industries are export-oriented, targeting, in particular, the European market which provides them with their inputs. By and large, only those enterprises which have committed themselves to a quality-based approach (i.e. ISO 9000 certified) have been in a position to grasp opportunities for export growth.

Figure 1.40 Maghreb: Country Frequency for Dynamic Non-Oil Products, 2000-2004



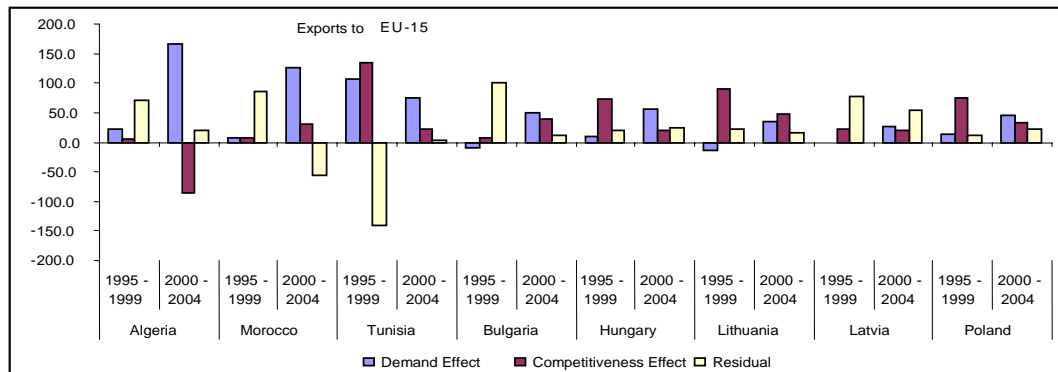
Source: Authors' calculation using UN Comtrade at SITC 3 digit level (Rev. 2).

Export growth driven by global demand rather than by improved competitiveness

It is informative to note whether existing export structures have been a constraint on export growth in the Maghreb as this may play against the region's prospects for trade integration. In this section we decompose changes in the observed patterns of the Maghreb's export performance over the past fifteen years into variations in (i) global demand; or (ii) export competitiveness and product diversification. The index of global demand changes is a constant market share analysis of export performance in a country due to the relative favorable or unfavorable changes in global demand prospects. It indicates how rapidly a country's recent exports would grow relative to world trade if the country just maintained its current market for these products. This approach isolates the influence of change in global demand for specific goods from any changes in the country's market shares or from diversification into new product lines.

Growth of Maghreb's exports to the EU over the past five years has been driven by rising global demand for regional exports rather than by improved competitiveness or product diversification. Since 2000, Maghreb's export growth to the EU is mostly explained by increased demand for its exports (Figure 1.41). Tunisia's export growth to the EU was driven both by rising demand for its exports and by improved competitiveness in the 1990s. In other words, successful export penetration into EU-15 markets has required countries like Tunisia and Poland to exploit any cost-effective advantages they have – in addition to capitalizing on the market advantages that have arisen as a result of income growth. In Morocco, a number of product lines in the apparel sector have been able to gain world market share over the past five years, but they are facing much fiercer international competition since the beginning of 2005, as the quotas that regulated supplies of textiles and clothing to third countries under the Multi-Fiber Arrangement were phased out.

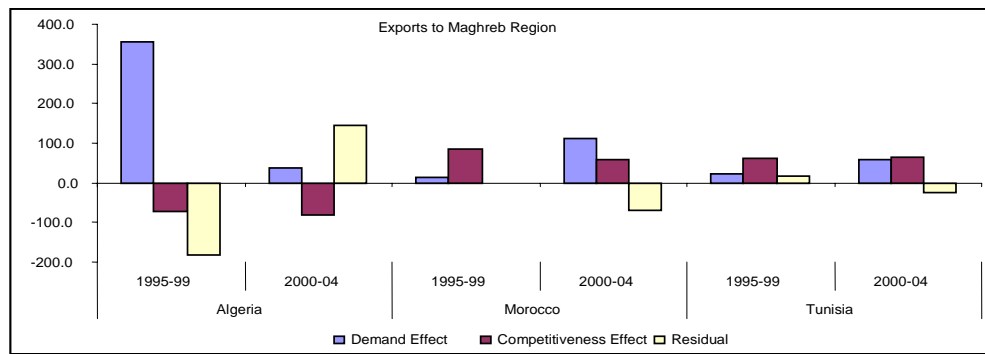
Figure 1.41 Maghreb: Decomposition of Growth in Exports to the EU-15, 1995-2004



Source: Authors calculations' using UN Comtrade data at SITC 3 digit level, Revision.2

Growth in Maghreb intraregional trade has also been largely driven by regional demand for exports. Whereas Morocco and Tunisia also managed to improve their competitiveness in intraregional trade over this period, Algeria did not. Algeria's export growth has been constrained as a result of its limited export product diversification. Overall, these results suggest that factors that typically work in favor of regional trade prospects, such as geographic proximity, have not been predominant in influencing changes in export performance in the Maghreb's countries. These neighboring countries have been able to increase their exports because of higher demand in the more distant markets of the EU-15, rather than among themselves (Figure 1.42).

Figure 1.42 Maghreb's Intra-regional Export Growth Decomposition, 1995-2004



Source: Authors calculations' using UN Comtrade data at SITC 3 digit level, Revision.2

Low trade complementarity

A further question that emerges in the discussion on regional trade prospects is whether the products that the member countries export match the countries' imports from their regional partners. If the type of goods that some Maghreb countries export coincides with the imports of the others, this should be favorable to intraregional trade prospects. If not, it would work against regional merchandise trade integration prospects (Yeats, 1998). This issue of complementarity arises in the trade literature as one of the important elements to validate the 'natural trading partner' hypothesis. The complementarity test consists in assessing if major import requirements of Maghreb countries are 'matched' with what their regional partners export. The complementarity index ranges from zero (when none of the goods exported matches with imports of other countries) to 100 (when export shares perfectly correspond with imports)⁵. Proponents of the index (Michaely, 1994) argue that the higher its value, the more likely a proposed regional trade agreement will succeed. An increasing tendency of the index between two members can also provide some indication of the likely success of their regional integration efforts.

Maghreb countries display low and stagnant trade complementarity in contrast to the high and rising trade complementarity displayed by ASEAN-5 countries. The trade complementarity indexes for the Maghreb countries are low, implying that there is a poor match between each of the countries' exports and the products that they import. The low measured degree of Maghreb trade complementarity is consistent with the observed pattern of similarities in trade structures and in factor intensities of export products among Maghreb countries. Within the Maghreb countries, Tunisia's exports to the region displayed a higher increase in trade complementarity with the region's trade structures over the past twenty years, whereas Morocco's and Algeria's exports to the region were less complementary (Figures 1.43 and 1.44). At the inception of their respective regional trade agreements, the EU15, NAFTA and MERCOSUR countries had considerably higher complementarity ratios than the Maghreb, suggesting that, members of these regional groupings had highly complementary import and export structures. Maghreb's low levels of trade complementarity compared to other regional groupings at the inception of their respective regional trade agreements point to limited prospects for regional trade integration.

⁵ The trade complementarity index has some limitations. First, it takes the existing structure (share) of exports as given and attempts to determine how well it matches a potential partner's imports. This assumes that either existing exports will be diverted to the regional partner, or the country can expand these exports at constant costs. Second, the approach assumes there is something optimal about the existing trade structure, which may not be the case. Third, the complementarity index treats all exports as equals, yet some may have very different associated national policy objectives. Fourth, the influence of distance and transport costs are neglected in the complementarity index (Yeats, 1998)

Figure 1.43 Maghreb Trade Complementarity, 1980-2004

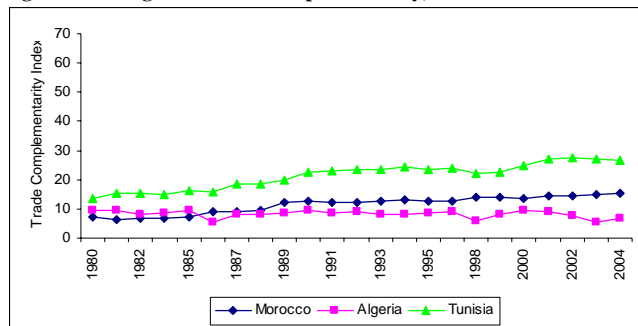
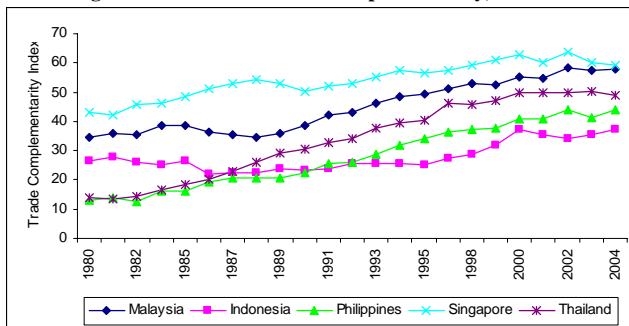


Figure 1.44 ASEAN Trade Complementarity, 1980-2004



Source: Authors' calculation using 4 digit SITC revision 2 data from UN Comtrade

High degree of export competition: similar export profiles

Having 'matching' products is just one aspect of fulfilling the test of complementarity. We also need to look at the countries' relative comparative advantages to determine whether their export structures are complementary or, by contrast, are competing with each other. The trade literature provides empirical evidence suggesting that similar export profiles that compete for similar markets is a negative attribute for the likely success of regional trade agreements (De Melo et al, 1993). The higher the difference in factor endowments, demonstrated by comparative advantages, the greater the prospects for trade among partners (Yeats, 1998).

The revealed comparative advantage (RCA) index can provide some indication as to the degree of export competition among countries. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. It can also provide useful information about potential trade prospects with new partners. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra-industry trade is involved. Countries with dissimilar RCA profiles could have more opportunities to trade. If the RCA value is less than unity (which indicates that the share of a particular product in a country's exports is less than the corresponding world trade share) implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country has a revealed comparative advantage in the item⁶.

Maghreb exports exhibit similar comparative advantage profiles indicating that exports compete with each other. Export competition between Morocco and Tunisia seems to emerge primarily in similar product categories (namely, textile and apparel exports), which occupy the major share in each of their comparative advantages⁷. Tunisia and Morocco have comparative advantage in the production and exports of some manufactured goods (clothing, leather, and electronic components). The production of these export goods is relatively labor-intensive (typically drawing on large quantities of low-cost, low-skilled labor) and low to medium intensity of technological use. Algeria has a strong comparative advantage for the petroleum group, and also for refined fuels and chemicals that utilize petroleum inputs. Maghreb countries do not have a comparative advantage in capital-intensive intermediate goods (machinery and equipment) which they all import from third countries.

⁶ Interpretation of RCA profiles should be read with care. They may overestimate 'true' comparative advantage of some countries, as they do not take into account external and domestic trade constraints (tariffs, non-tariffs barriers, exchange rate misalignment, and so) that may distort an individual 'real' country's export competitiveness.

⁷ It should be noted, however, that product differentiation can provide for complementarities even in textile and apparel. But this can only be established at a further disaggregation (for example at HS6-digit level), which is beyond the scope of this report.

A closer look at dynamic non-oil products by Maghreb countries at the 4 digit SITC level reveals that only a few items have a comparative advantage and their shares of total export are small. Among Morocco's 30 fastest growing products between 2000 and 2004 with RCAs greater than one, only one category of products (mineral tars) exceeds 2 percent of total merchandise exports in 2004 while all others contribute less than one percent. None of Tunisia's top 30 dynamic products over the same period exceeds 0.5 percent of total merchandise exports in 2004 and less than a quarter have an RCA greater than one. The story for Algeria is similar, where non-oil dynamic products contribute marginally to total exports and only a handful of products have an RCA greater than unity (See Annex).

Low intraindustry trade and little participation in global production sharing

Intra-industry trade, the fastest rising portion of global trade, allows countries to specialize in production chains and seek comparative advantage in specific parts of those chains. It also allows to reach economies of scale with higher productivity and lower cost. Its level can thus be considered to indicate a country's ability to exploit trade integration opportunities more fully. The *intra-industry trade index* (also known as the Grubel-Lloyd index) measures the magnitude of intra-industry flows in total manufacturing trade. The higher the index, the larger the proportion of intra-industry trade in total merchandise trade. The index ranges from 0, implying an absence of intra-industry trade, to 100 – indicating a fully integrated manufacturing trade⁸.

Maghreb countries display low levels of intra-industry trade, although slowly rising, particularly for Tunisia and Morocco. Maghreb's levels of intra-industry trade are low compared to the levels attained by other regional groupings such as ASEAN-5 and NAFTA countries. Maghreb's share of intra-industry trade is low for all manufactures, at over 20 percent in 2004. Compare that figure with an intra-industry share of over 70 percent for NAFTA, and 69 percent for ASEAN countries in 2004 (Figure 1.41) Within the Maghreb, Algeria displays the lowest extent of intra-industry integration and Tunisia the highest. With the exception of Algeria, both Morocco and Tunisia have slowly increased their levels of intra-industry trade over time. Not surprisingly, Maghreb intra-industry levels are lower for global trade than for regional trade (Figures 1.45 and 1.46). Overall, one should expect that countries exhibit larger amounts of IIT within a unified trade or geographical area for proximity reasons. As Balassa and Bauwens (1987) explain, the cost of trading differentiated products increases with distance. This hypothesis is confirmed for the Maghreb region.

Figure 1.45 Maghreb vs. Comparators: Intra-Industry Trade, 1990-2004

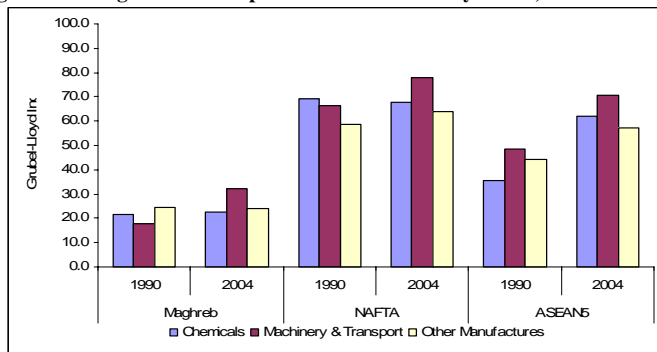
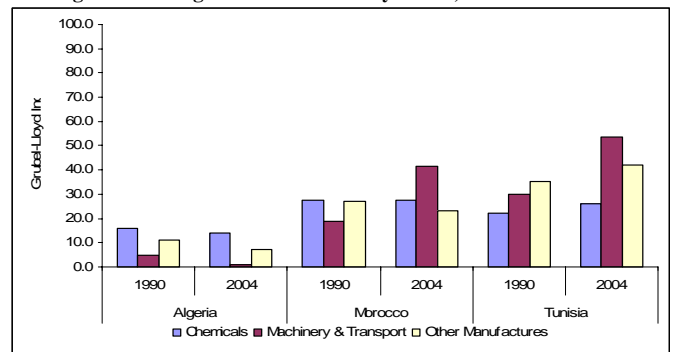


Figure 1.46 Maghreb: Intra-Industry Trade, 1990-2004



Source: Authors' calculation using UN Comtrade at SITC 4-digit level (Revision 2)

⁸ The Grubel and Lloyd index has often been criticized as being downward by the degree of trade imbalance (the larger the trade imbalance, the larger the net trade, hence the smaller the intra-industry trade index). Although adjustments to intra-industry trade indices do exist, no adjustment in the trade imbalance has conclusively been calculated without presenting shortcomings of their own. We use the unadjusted aggregation measure calculated at the two-digit SITC level.

While Maghreb's intra-industry trade has slightly increased for machinery and transport goods from 1990 to 2004, it still remains much lower than in other regional groupings. Advances in intra-industry trade over the period were mainly due to increases in intra-industry trade in machinery and transportation goods in Morocco and Tunisia (Figures 1.47 and 1.48).

Figure 1.47 Maghreb vs. Comparators: Intra-Industry Trade by Product, 1990-2004

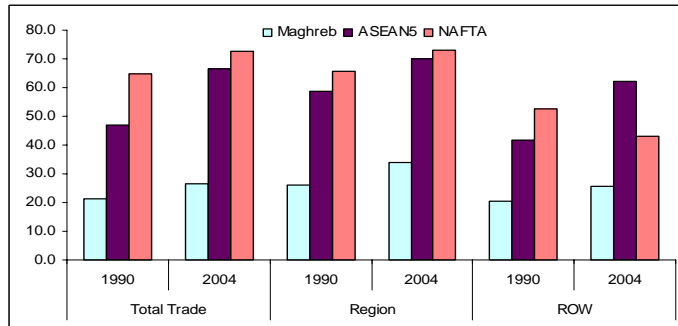
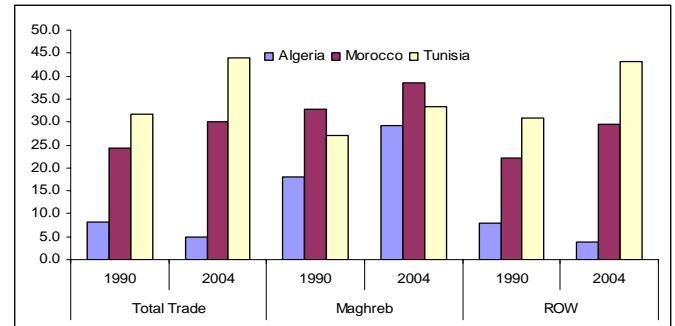


Figure 1.48 Maghreb Intra-Industry Trade by Product, 1990-2004



Source: Authors' calculation using UN Comtrade at SITC 4-digit level (Revision 2)

The Maghreb countries participate little in global production sharing: exports of parts and components are low, albeit rising. An activity closely related to intra-industry trade involves global production sharing and international trade in parts and components. Trade in parts and components accounts for at least 30 percent of world trade in manufactured goods and that global production sharing, in which several countries complete different stages of a manufacturing process, has grown considerably faster than overall trade in manufactures (Yeats, 1998). Maghreb countries export primarily low-value finished goods, and importing parts and components for a large manufacturing base (See Figures 1.49 and 1.50). Within the Maghreb countries, Tunisia's exports of parts and components (as percent of total exports) are the highest and are growing fast. Export growth in parts and components is currently centered on headlamps, and automotive components, thanks to the proximity of the European motor vehicle market for within many Tunisian enterprises subcontract.

Figure 1.49 Maghreb vs. Comparators: Trade in Parts & Components,

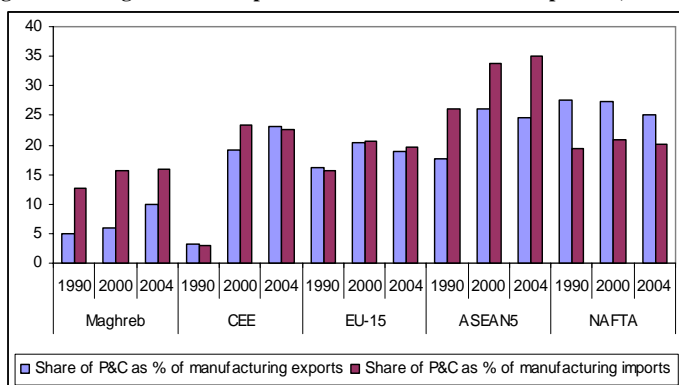
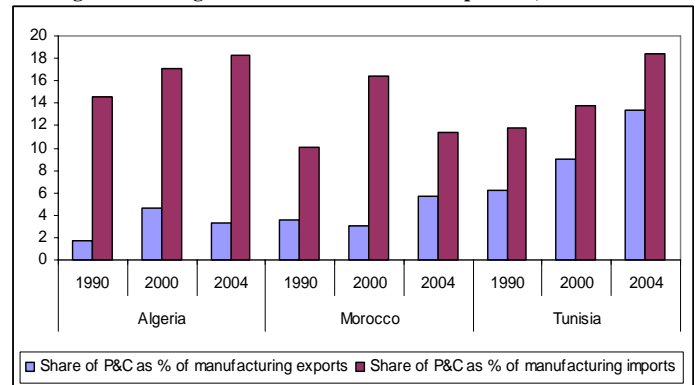


Figure 1.50 Maghreb: Trade in Parts & Components, 1990-2004



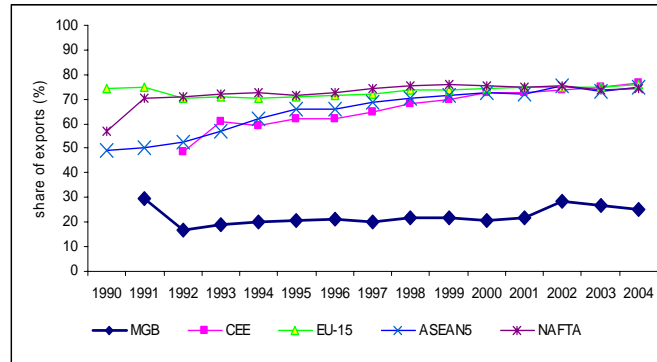
Source: Authors calculations based on UN COMTRADE using SITC Rev 2 at 4 digit level. Manufactured exports are products code 6 to 8

Low export sophistication, albeit slowly rising

Maghreb's merchandise exports have lower intensity of technological use than other regional trading blocs. Overall Maghreb's performance still falls short of the ASEAN5 and CEE countries where hi-tech

exports as a share of total merchandise have risen close to 20 percentage points between 1990 and 2004 (Figure 1.52). In recent years, however, Tunisia and Morocco show some recent export diversification into high-to-medium intensity of technological use (Figures 1.54 to 1.56).

Figure 1.51 Maghreb vs. comparators: High-Tech Exports
(in percent of total merchandise exports), 1990-2004



Note. Degree of technological intensity follows OECD definition.
Source: Authors' calculations using UN Comtrade data

By 2004, the share of high-technology products in total merchandise exports for Tunisia and Morocco was in line with other countries at similar levels of income. The 'export sophistication score' is constructed by Lall et al (2005). The authors consider that export products are more 'sophisticated' the higher the average value of its characteristics that allow high wage producers to compete in world markets. The export sophistication score provided to each product are averaged to create an index at the country level, which is then related against the country's real per-capita income (See Figure 1.56).

Figure 1.52 Maghreb High Tech Exports & GDP per capita, 2004

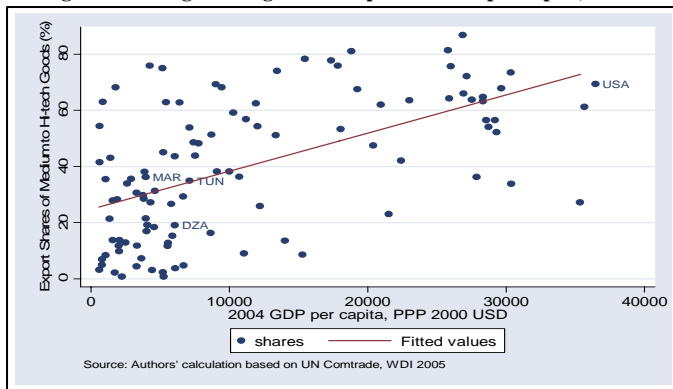
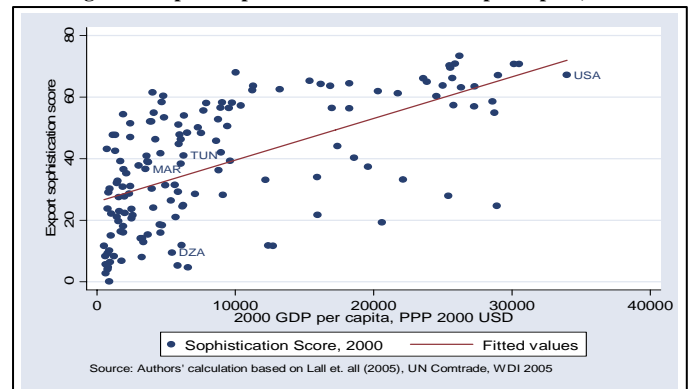


Figure 1.53 Maghreb: Export Sophistication Score & GDP per capita, 2004



To summarize: low trade complementarity, high export concentration and competition in export structures, combined with the low levels of export diversification, all of these factors suggest daunting challenges for increased regional merchandise trade in the Maghreb. At the same time, a closer look to recent trends reveals some signs of export diversification and dynamism, particularly in Tunisia and Morocco. An important policy question concerning prospects for regional integration is whether there is potential for increased intraregional merchandise trade after accounting for other factors deterring trade, such as market size, geographical and cultural proximity and tariff barriers. The next section addresses this question.

1.4. POTENTIAL FOR INTRAREGIONAL MERCHANDISE TRADE AND FDI IN THE MAGHREB

While the preceding analysis, based on actual merchandise trade trends, has revealed limited prospects for regional integration, it is also informative to assess whether the Maghreb countries, given the size of their economies, their geographical and cultural proximity, their current tariff levels, export to the region as much as could be expected. This section draws on a panel-gravity trade model to take into account the above-mentioned factors when identifying the potential for intraregional merchandise trade.

The Gravity Model: Some conceptual and methodological issues

Starting in the 1860s, when H. Carey first applied Newtonian Physics to the study of human behavior, the so-called ‘gravity model’ has been widely used in social sciences. The gravity model for international trade was first developed by Tinbergen (1962). In its basic form, the amount of trade between two countries is assumed to be increasing in their sizes, as measured by national incomes, and decreasing in the cost of trade between them (measured by the distance between their economic centers). Since then, the trade literature achieved progress in explaining various types of inter-regional and international trade flows. The popularity of gravity models was highlighted by Eichengreen and Irwin (1998) who called it the ‘workhorse of empirical studies of regional integration’. However, others soon realized that the perceived empirical success of the gravity model came without a great deal of analysis regarding its econometric properties (Frankel et al, 1998). The controversies surrounding the gravity model have been somewhat alleviated recently (see Feenstra et al, 2001, for different theoretical justifications of the gravity model).

The methodological approach followed in this section is derived from the simple idea of applying some kind of average behavior drawn from country data over time. It is not based on specific simulations of how the various factors affecting the level of trade interact and affect the economic performance for individual Maghreb countries. Such an approach would have required the construction of dynamic computable equilibrium models for each country. These models are data-intensive and require far more time and resources than were available for the preparation of this report. Instead, the chapter draws on statistical relationships emerging from worldwide experience (as reflected in panel regressions) that show the ‘typical’ impact of trade determinants on bilateral trade flows, and assuming that these effects would also apply on average to the Maghreb countries.

Standard gravity models, based on cross-section data, tend to produce biased estimates, tending to overestimate trade between low-trade countries and to underestimate it between high-trade countries. The primary source of this bias is the failure of cross-sectional gravity models to account for the pairwise heterogeneity of bilateral relationships. To address this problem, we adopt a two-way fixed effects model in which country-pair and period dummies are used to reflect the bilateral relationship between trading partners⁹.

⁹ Interpretation of empirical results of gravity models – both in the literature and in this report- must be done with care. In part, this stems from the complexity of the reality that is being model econometrically. Institutional and other policy-related variables are not exogenous; rather such variables are often endogenous and directly related to the level of trade itself. Data availability limits the inclusion of instrumental variables to adequately capture the role of these institutional factors in the panel gravity trade model constructed for the purposes of this report.

Limited Intra-regional Merchandise Trade potential

This section draws on empirical results from a panel gravity-trade model covering 170 countries and spanning over the period 1980-2004. The main determinants of trade included in the model are the following: geographical and cultural proximity, market size, competitiveness (proxied by the real effective exchange rate) and level of external tariffs. The model also controls for countries that are landlocked or islands.

Contrary to what might be expected, the potential for Maghreb intraregional merchandise trade appears limited. One might assume high potential given the present low levels of intraregional merchandise trade. However, the empirical results derived from the panel gravity-trade model suggest that the Maghreb countries are over-trading with each other. Put it differently, the actual level of Maghreb intraregional merchandise trade is higher than expected after controlling for all the main factors that matter for trade (see Annex for details on the model specification and results). Table 1.4 provides estimates of Maghreb intraregional merchandise trade potential. Trade potential is estimated as the difference between the ‘predicted’ level of trade and the actual trade flows (expressed as the share of merchandise exports in the country’s GDP) over the period 1980-2004. A negative sign indicates export more than what the panel gravity-trade model predicts.

Table 1.4: Intra-Maghreb Merchandise Trade Potential, 1980-2004
(in percent of GDP) annual average

	Algeria	Morocco	Tunisia
Exports to			
Algeria	n/a	-0.07	-0.54
Tunisia	-0.16	-0.11	n/a
Morocco	-0.18	n/a	-0.11

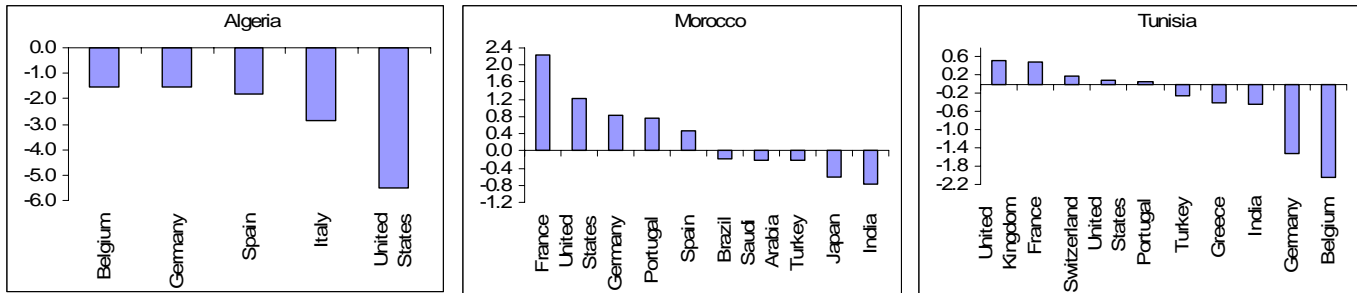
Source: Authors’ calculation using results of the panel gravity trade regression with 1980-2004 data. Note: Negative coefficients imply that a country is over-exporting to its trading partner, i.e. the actual trade flows exceed the predicted values.

Since these results are somewhat counterintuitive, given the actual low base of intraregional merchandise trade, we investigate the model further. Yet, even after running several robustness checks and tried alternative variations in the model specification, the outcomes hold. We also run the model drawing on data from the most recent period (2000-2004). Still, the model shows limited intraregional merchandise trade potential, with the exception of Morocco’s exports to Algeria (during 2000-2004 Morocco’s actual exports to Algeria were on average 15 million USD lower per year than potential). We then ask whether other regional trading blocs are also over-trading. The model reveals considerable heterogeneity of trade potential across regional trading blocs. Unlike results for the Maghreb, we find evidence of intraregional trade potential among MERCOSUR and ANDEAN pact partners. For example, Argentina is found to be under-trading with two of its regional partners (Chile and Uruguay). Ecuador is also found to be under-trading with its ANDEAN pact partners. Finally, we investigate the relative average contributions of each of the determinants of Maghreb’s intraregional merchandise trade potential. The size of bilateral GDP seems to play the largest role in predicting the level of intraregional trade, compared with the relative contributions of other factors included in the model (such as common language, distance, colonial history, similarity of economies’ size, real effective exchange rate, import tariffs, time, and country-specific effects).

While the potential for intraregional merchandise trade appear limited, the model reveals untapped trade potential with countries outside the region. The model shows potential for increased trade with the United States, France, Germany, Portugal and Spain in Morocco. The recent free-trade agreement between USA and Morocco (signed in 2004 and in implementation since July 2005) can potentially contribute to greater exports from Morocco to the US. There is also potential for increased merchandise

trade between Tunisia and United Kingdom, France, Switzerland, the United States and Portugal (See Annex for details).

Figure 1.54: Maghreb Merchandise Trade Potential (in percent of GDP) with the rest of the world (annual average)



Note: Author's calculation using gravity trade model with 1980 to 2004 data on merchandise trade (expressed in percent of GDP). Note: Negative coefficients imply that a country is over-exporting to its trading partner, i.e. the actual trade flows exceed the predicted values.

Limited Intra-regional FDI Potential

The potential for intraregional FDI also appears limited. According to empirical results from the panel-gravity FDI model, the potential for intra Maghreb FDI also appears limited (see Table 1.5 below and Annex for model specifications and results). While the model suggests that Algeria has over-invested in Morocco by 2 percent of Morocco's GDP relative to what is predicted by the model, Tunisia is receiving less-than predicted FDI from its neighbors Algeria and Morocco (equivalent to 0.33 and 0.4 percent of Tunisia's GDP, respectively).

Table 1.5: Maghreb FDI stock potential (percent of GDP) from countries outside the region, annual average

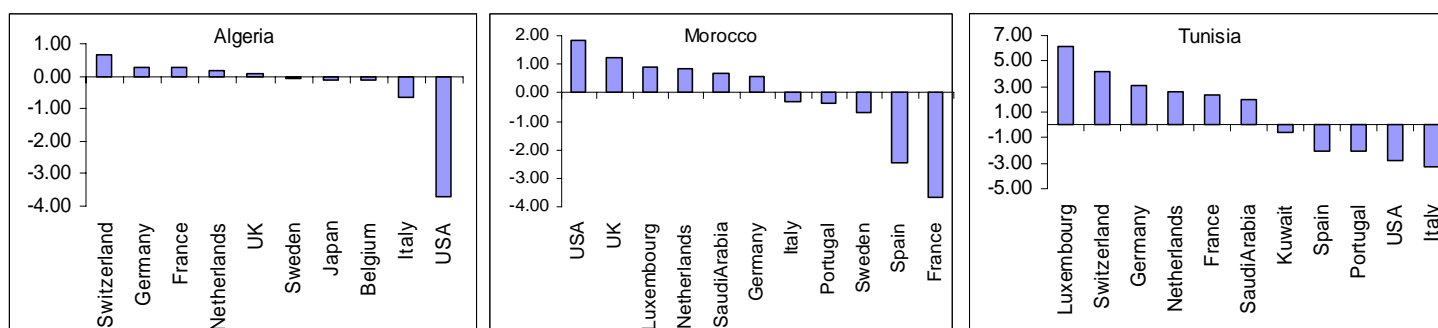
	Algeria	Morocco	Tunisia
Under (+) / Over (-) Investment Into:			
Algeria	n/a	0.01	0.02
Morocco	-0.02	n/a	-0.01
Tunisia	0.33	0.40	n/a

Source: Author's calculation using results of gravity FDI regression with 2002 data.

Note: Negative coefficients imply that a country is over-investing in the host country i.e. the actual FDI stock exceeds the predicted values.

At the same time there is untapped potential for inward foreign investment from outside the region. The model suggests that for all Maghreb countries, there is untapped potential for FDI originating from Germany. For Morocco and Tunisia, there is also FDI potential originating from the Netherlands. By contrast, the United States appears to have made more direct investments in Algeria than predicted by the model. Similarly, FDI originating from Spain is greater than predicted in Morocco and Tunisia (See Annex for details).

Figure 1.55: Maghreb FDI Stock Potential from countries outside the region (percent of GDP)



Source: Author's calculation using results of gravity FDI regression with 2002 data using sample of countries with existing investment in the Maghreb .
 Note: Negative coefficients imply that a country is over-investing in the host country i.e. the actual FDI stock exceed the predicted values.

1.5. CONCLUSIONS

The analysis carried out in this chapter, using various criteria of the ‘natural trading partner’ hypothesis, provides some empirical evidence suggesting that the Maghreb countries are only moderately ‘natural trading partners’. A variety of statistical measures evaluating historical and recent trade patterns among the Maghreb countries point to daunting challenges for increased intraregional merchandise trade in the Maghreb.

First, the ‘*volume of trade*’ criterion for ‘natural trading partners’ suggests that the Maghreb countries fall short of meeting it. Intraregional merchandise trade is very low compared with other regional trading blocs. The volume of trade within the region is also lower than expected given the countries’ share in world’s trade. Second, ‘*geographical proximity*’ does not play an important role. Maghreb countries, in spite of their proximity, demonstrate an increasing tendency to trade intensively with partners outside the region, mainly with European partners. As we will see in the next chapter, high tariff barriers, lack of adequate infrastructure and means of transportation all increase the cost of trade between Maghreb countries and erode the competitive advantage of proximity. Third, Maghreb countries exhibit low levels of ‘*trade complementarity*’ – another criterion of the natural trading partner hypothesis. Maghreb countries’ more efficient exports (defined by RCA indices greater than one) do not complement the other regional members’ major import requirements.

Mirroring the low trade complementarity among the Maghreb countries is the highly *competing* nature of their trade, particularly for Tunisia and Morocco. These countries are competitors in their export markets in a narrow range of products (dominated by textile and apparel exports) which may further inhibit the prospects of increased regional merchandise trade. The evidence also suggests that the most dynamic exports in the Maghreb are not present in the intraregional export bundle and are actually competing with each other in third markets (mainly, in the European Union).

The track record of regional integration has been undoubtedly disappointing. Maghreb countries are trading little with each other and are not well integrated into global production networks. Foreign capital flows into the region, while increasing, are still lower than comparator countries in other regions of the world. Empirical evidence based on available data suggests that intraregional trade and FDI is not less than would be expected, given fundamentals.

The future, however, seems more promising. A closer look to recently evolving trends help nuance this overall gloomy picture. Over the past decade, Tunisia and Morocco have attracted larger FDI inflows,

averaging 2 percent of GDP. The static analysis based on actual investment patterns reveals untapped potential for additional FDI originating from countries outside the region. Turning to recent merchandise trade patterns, two encouraging trends emerge. First, there are some signs of export diversification. In Tunisia, improved export competitiveness brought the product concentration index in 2004 to a level 20 percent lower than in the 1980s. There appears to be some diversification into high to medium intensity of technological use in manufactured goods exported by Morocco and Tunisia, although the pace of diversification is still slower than competitor countries in Central and Eastern Europe and East Asia. Second, there are also some signs of export dynamism. Fast-growing export products (defined as those with at least an average 15 percent annual increase during 1990-2004) represent more than 30 percent of total exports in Tunisia and Morocco. Third, recent empirical evidence suggests that there might be untapped trade potential for Maghreb exports to other countries outside the region.

While a regional integration strategy based solely on preferential merchandise trade liberalization does not seem propitious, there are alternative options that could be explored. As we will see in the next chapter, a promising option is deeper integration (through service policy reforms) and wider integration with the main trading partner, the EU. This strategy will help expand regional trade and investment by reducing domestic production and trade costs.

CHAPTER 2 : IDENTIFYING POLICY BARRIERS TO TRADE AND INVESTMENT IN THE MAGHREB

2.1. INTRODUCTION

The first chapter showed that actual and potential merchandise trade and investment is low in the Maghreb and that the prospects for a regional strategy based on merchandise product market integration to deliver growth are weak.

Why is regional integration so low in the Maghreb? This chapter tries to identify key policy and regulatory barriers that hinder trade and investment prospects. A first reason behind the low level of regional integration is related to political economy constraints. The low level of regional integration, to some extent, reflects the revealed preferences of the Maghreb policymakers, who have tended to pursue trade reforms autonomously and/or in the framework of North-South regional integration, first and foremost with the EU. The absence of a sustained political process towards regional cooperation has often led to vague plans for economic integration. Existing regional trade agreements, often lacking implementation measures, are rarely put into practice. In some cases, the scope for regional integration is completely constricted (border crossings between Morocco and Algeria remain closed).

A second reason for the lack of regional integration is related to the uneven progress in policy reforms that affect trade and investment prospects. Trade protection remains high in the Maghreb. Despite some lowering of tariffs and non-tariff barriers over the last decade, remain very high relative to nearly all other countries. This high level of trade protection has contributed to limited intra-Maghreb trade flows. International evidence suggests that successful regional agreements are associated with low external tariffs (World Bank 2005). With high external tariffs, incentives are skewed towards the production of import competing goods and away from exports. Also, exporters have to pay high duties on imported inputs, which constrain their ability to compete on regional and world markets. Given the limited effective product coverage of existing regional trade agreements, a large proportion of intra-regional trade faces very high duties.

The removal of tariffs and quotas is only one element of the overall costs of trade and investment. The extent to which firms, both domestic and foreign, trade and invest in the Maghreb countries is crucially determined by the business climate. Whereas there has been substantial progress in some areas of the business climate, the Maghreb countries still compare unfavorably with other countries in a number of key policy areas. For example, recent Investment Climate Surveys show that Morocco rates well in terms of the number of procedures and the time to start-up a new business but the costs of business start-up are higher than in many other countries in the region. Both Morocco and Tunisia are ranked considerably behind other countries in terms of exit regulations and there remain problems with enforcement of contracts in Morocco.

A third reason pertains to the limited progress in reforming the service sectors. Inefficient provision of services also acts as a major constraint to trade and FDI flows in the region. Many industrial sectors may well be currently facing negative rates of effective protection since tariffs on industrial goods are being removed with the principal trading partner (the EU) whilst constraints remain which raise the price of service inputs. Producers and exports will find it hard to compete with firms in other countries that are able to use more efficiently provided services inputs. Indeed, the liberalization of services may be

necessary for industrial sectors to be able to fully benefit from the direct opportunities that are made available by the removal of trade barriers.

Before moving into the specific scope of the analysis performed in the chapter, the next section aims at providing a succinct conceptual discussion on the specific nature of services.

Some conceptual issues on the specific nature of services and their link to trade and investment

The specific nature of services. One of the main differences between services and goods is that the production of the service and its consumption are simultaneous and requires interaction between the consumer and the supplier. Four modes of delivery are recognized by the General Agreement on Trade in Services (GATS), under the auspices of the World Trade Organization: (i) Mode 1, commercial presence, whereby the producer comes to the consumer (i.e. bank branches or retail outlets). This involves rights of establishment and the flow of foreign direct investment; (ii) Mode 2, consumption abroad, whereby the consumer moves to the producer (i.e. tourism, port services, airport services); (iii) Mode 3, cross-border supply, where neither the producer or the consumer moves (e.g. back-office or computer-based customer services that can be transacted online); and (iv) Mode 4, presence of natural persons, which involves labor mobility and migration (i.e. construction services). The relative importance of the different modes varies between sectors (i.e. mode 2 is essential for tourism but not for construction services).

Whereas the main trade barriers for goods are tariffs and quotas enforced at national borders, restrictions to trade and investment in services are ‘behind-the-border’ laws, regulations and administrative procedures. These tend to be targeted at the service provider, rather than at the service itself. Therefore, cross-border service liberalization requires a wide range of domestic policy reforms. These include: rights of establishment (i.e. for foreign banks to set up branches); (ii) rules for market access (i.e. network access in telecommunications or electricity); (iii) licensing regimes (i.e. for accountants, medical staff, or pilots); (iv) investment rules (i.e. restrictions to foreign ownership or repatriation of profits); and competition policies (i.e. against entrenched monopolies). Under GATS, the commitment schedules of countries regarding such policy reforms are divided into horizontal commitments and sector-by-sector commitments.

Services and private investment. Increasing access to service markets generally requires the entry of foreign companies through FDI. Traditionally, developing countries used to be recipients of foreign direct investment in manufacturing and the primary sector. This changed dramatically over the 1990s, a decade that saw a rapid shift to the private provision of infrastructure services, particularly in Latin America and East Asia. Investment in services accounts now for about half the inward foreign direct investment stock in the world (World Bank, 2005).

Services as ‘inputs’ and services as ‘exports’. To a large extent, the process of globalization reflects the internationalization of production, consumption, and trade in services. An implication of these technological developments is that the competitiveness of firms—both domestic enterprises operating on the local market and exporters on international markets—increasingly depends on the availability of low-cost and high-quality ‘backbone’ services. At the same time, services themselves are also becoming increasingly tradable as a result of the greater mobility of people and developments in information, computer, and telecommunications industries. Examples of service ‘exports’ include tourism, call centers, IT-support services and business services. The main focus of this report is on services that serve as inputs to the economy, also known as ‘backbone’ services, because most of the economic gains are expected to be derived from lowering costs of providing these services.

Objective and scope of the analysis

The main objective of this chapter is to identify key policy and regulatory barriers that affect trade and investment flows in the Maghreb. It addresses the following questions:

- a) *What is the reform progress in key ‘horizontal’ policies* (such as exchange rate, trade policy and investment climate) and affecting regional prospects for expanded trade and investment in the Maghreb?
- b) *What is the current performance of ‘backbone’ service sectors?* How efficient is the provision of these services in the Maghreb, in terms of accessibility, cost and quality?; How do Maghreb countries compare with other countries?
- c) *What is the reform progress made in each of these service sectors* What are the challenges that lie ahead that would reduce barriers to trade and investment? What are the potential areas for regional cooperation in each sector?

The chapter is structured as follows. First, it reviews selected horizontal policies that affect trade and investment prospects (exchange rate, trade policies and investment climate). Then the chapter moves on to assess barriers and progress made in service sectors that have also a direct impact on trade and investment prospects. The services sectors examined in the chapter include financial services (banking and non-banking sectors) and infrastructure services (transport; telecommunications; energy and water)¹⁰.

2.2. HORIZONTAL POLICIES

This section reviews selected horizontal policies, including: exchange rate policies; trade policies; and the overall investment climate.

2.2.1. EXCHANGE RATE MANAGEMENT

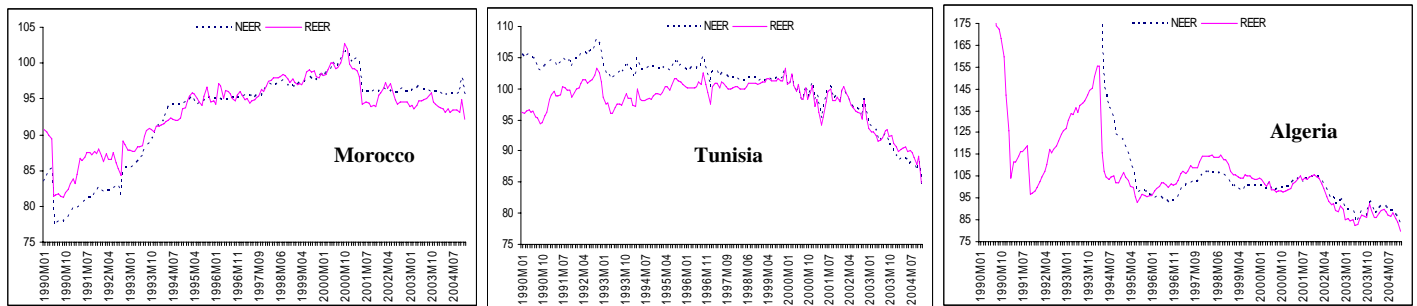
The real exchange rate in the Maghreb countries does not seem to be misaligned. An exchange rate is regarded as misaligned if its realized values continually deviate from its equilibrium trend. Strong and persistent exchange rate misalignment affects export competitiveness. Recent assessments of exchange rate performance carried out by the International Monetary Fund provide evidence that there is no substantial misalignment of the real exchange rate in the Maghreb countries (IMF, 2006a; 2006b; 2005).

In addition, the recent depreciation of the real exchange rate has supported export competitiveness. Since 2001, the real exchange rate in Tunisia and Morocco has been depreciating—both in price and in labor cost terms—which has been favorable for exports and growth. In Algeria, a country where the real exchange rate has a natural tendency to appreciate following oil booms, the authorities have intervened to realign the real exchange rate on a number of occasions. In 1994, the Algerian government corrected the previous real appreciation of the Algerian dinar resulting from high oil prices through a 70 percent devaluation of the currency. Following 16 months of real depreciation since early 2002, (due to the

¹⁰ The report does not evaluate prospects in exports of new services (i.e. professional services, such as consulting, accounting, legal and engineering services; health tourism services; and business processing outsourcing; retail and distribution services). While recognizing that Maghreb countries are well positioned to expand the provision of these services, owing to their proximity to Europe and their relatively highly educated workforce, this analysis falls outside the scope of this report.

appreciation of the Euro against the U.S. dollar) the authorities intervened in the foreign exchange market in 2003 to realign the real effective exchange rate to its end-2002 level.

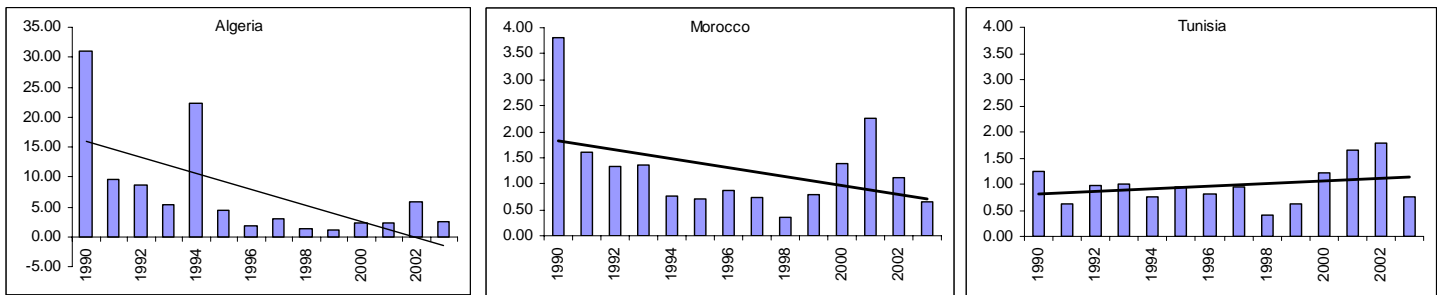
Figure 2.1. Maghreb: Nominal versus Real Effective Exchange Rate, 1980-2004



Source: International Financial Statistics, 2005

Low average volatility of the real exchange rate is also good for trade and investment prospects. While the real exchange rate is not a direct policy instrument, it can be manipulated in part by actions taken with respect with the management of the nominal exchange rate. Exchange rate policies in Maghreb countries (fixed exchange rate regime in Morocco and ‘managed floating’ in Tunisia and Algeria) not only have prevented any severe misalignment of the national currencies but have also contributed to low average volatility of the real exchange rate, particularly since mid-nineties (Figures 2.1 and 2.2).

Figure 2.2 Maghreb: Real Effective Exchange Rate Volatility



Note: Annual volatility is measured as standard deviation measured over a year (using monthly observations). Linear trend is estimated from 1990 to 2004. Source: Authors’ calculations drawing on International Financial Statistics, 2005.

What will be the impact of deeper regional economic integration on the real exchange rate? Deeper regional integration could affect the equilibrium real exchange rate through both substitution and income effects: (a) a reduction in tariffs would increase demand for tradables relative to nontradables. This substitution effect would, in turn, tend to reduce the price of home goods, and hence result in a *real exchange rate depreciation*; and (b) reform-driven productivity gains stemming from service liberalization and investment climate reforms, are expected to raise real income in the economy, which in turn would affect aggregate demand for all goods, including non-tradables and hence tend to *appreciate the equilibrium real exchange rate*. The net impact of deeper regional economic integration on the real exchange rate would depend on the depth and speed of service sector reforms (including financial sector liberalization).

As Maghreb countries move toward deeper integration, they should introduce higher flexibility of exchange rates, together with a monetary policy stance aimed at consolidating the low inflation currently prevailing in these countries. There are a number of reasons for moving toward flexible exchange rate regimes. First, relatively flexible exchange rate regimes may be more appropriate for the Maghreb countries, after financial stabilization has been achieved. Second, early (voluntary) exits from fixed exchange rates are generally recommended, as they may prevent possible exchange rate misalignments

and their adverse effects on export competitiveness. Ghosh et al (2003) and Frankel (2003) argue that fixed exchange rate regimes have been subject to increased vulnerability under increased capital mobility since the beginning of the 1990s. Hence, a relaxation of exchange rate policies should accompany service sector liberalization in the Maghreb countries and their increased integration into regional and international financial markets.

2.2.2. TRADE POLICY

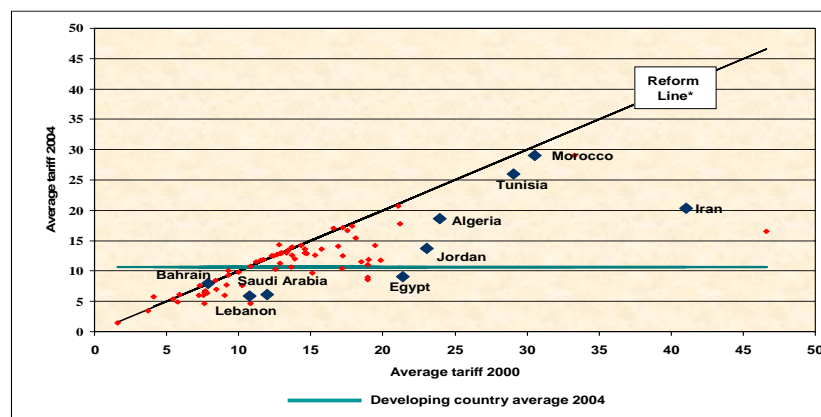
The earlier section showed that real exchange rates do not exhibit overvaluation or significant misalignment in the Maghreb. But the prices of tradable goods and services are also strongly affected by tariff levels and non-tariff barriers. High external tariffs and non-tariff barriers increase trading costs.

A) High Level of Trade Protection

Achieving the economic gains of deeper economic integration will call for further reductions in tariffs and non-tariff barriers. High trade protectionism negatively affects prospects for trade and FDI. First, incentives are skewed towards the production of import competing goods and away from exports. Second, exporters have to pay high duties on imported inputs, which constraints their ability to compete on regional and global markets. Third, FDI and integration into global production chains, which requires freedom of sourcing of inputs, is discouraged. Moreover, there is compelling evidence that successful regional agreements are associated with low external tariffs (World Bank, 2005).

Maghreb countries made progress in tariff reform over the past few years. In 2004 Morocco reduced MFN tariffs to a maximum of 10 percent for goods freely traded with the EU. The reform progress made by the Maghreb countries is evident in the Figure 2.3 below, which compares the average tariffs worldwide in 2004 with those in 2000. By design, the diagonal 45 degree line separates reformers, those that had lower tariffs in 2004 (compared to 2000) and lie below the line, from the non-reformers, those that had the same or higher tariffs in 2004 (compared to 2000) and lie on or above the line. From this figure, it is clear that Maghreb countries have managed to reduce trade tariffs since 2000.

Figure 2.3 Maghreb vs the world: Progress in reducing average MFN tariffs (2000-2004)



Source: TRAINS database. Note: * Countries below and to the right of the line can be considered "reformers" in that they lowered the average unweighted tariff.

Despite further tariff reductions, the Maghreb countries are still highly protected. Despite the trade liberalization efforts and the recent signs of dynamism of Tunisian and Moroccan exports, their penetration into external markets has merely kept pace with the world's increase in exports. This recent export performance masks export vulnerabilities that result from still-high trade protectionism, as

evidenced by the high level of the region's simple average of most-favored nation (MFN) tariffs (see Table 2.1). This protective blanket has converted the Maghreb countries into one of the ten most highly protected regional markets in the world. The high level of protection, a legacy of the import-substitution strategy pursued following independence in Maghreb states, reduces firms' incentive to trade, since their profits often are higher in sheltered markets.

- In Morocco, the high level and dispersion of multilateral tariffs is still a concern. Morocco grants at least MFN treatment to all its trade partners. Since the end of the Uruguay Round of multilateral trade negotiations in 1995, Morocco has bound all its duties at ad valorem rates ranging from zero to 380 percent. Applied rates range from zero to 329 percent. In 2004, the simple average external tariff amounted to 30 percent (50.6 percent for agricultural products and 26 percent for manufactures). For manufactured goods, there are seven non-zero tariff bands, the most frequently encountered rates being 10, 40 and 50 percent. Tariff dispersion as measured by the standard deviation amounts to 24.2 percent. Morocco's tariff structure is in general escalatory, such that import duties on raw materials are lower than those on semi-processed products, which in turn are lower than the tariffs on finished goods (World Bank, 2005). Many of Morocco's tariffs are very restrictive if not prohibitive, so that little trade in the respective tariff lines occurs. Thus, the trade-weighted average of MFN import duties is at 23.5 percent, considerably lower than the simple average.
- In Tunisia, the simple average tariff was 32 percent in 2004 (with the average duty on agricultural products being 69 percent; and 23 percent for non-agricultural products). The trade-weighted rate is still at almost 23 percent for all goods (20 percent for industrial products and 42 percent for agricultural products). The modal rate (that is most frequently applied) is 43 percent, and products corresponding to 15 percent of tariff lines are admitted duty-free. Overall, the tariff structure in Tunisia is characterized by mixed escalation, with raw materials protected by average rates much higher than those for other categories of products.
- In Algeria, the simple average external tariff is lower than in Morocco and Tunisia amounting to 18.7 percent in 2004 (with the average duty on percent for agriculture products being 23 percent and 18.1 percent for non-agricultural products). See Table 2.1.

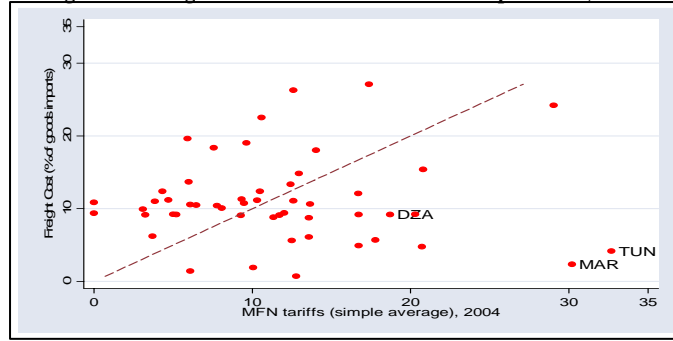
Table 2.1 MFN Tariffs applied by Maghreb countries (simple average, in percent), 2004

	MFN Simple Average (%)			Total Merchandise Imports	
	Total Merchandise Imports	Agriculture Imports	Non-Agriculture Imports	Bound Rate (%)	Binding Coverage (%)
Algeria	18.7	23.0	18.1	n/a	n/a
Morocco	30.2	48.6	27.5	41.3	100.0
Tunisia	32.7	69.3	23.6	57.8	57.4
Maghreb Average	27.2	47.0	23.1	49.5	78.7
CEE Average	8.19	12.19	7.35	11.34	99.06
ASEAN5 Average	7.4	10.1	7.0	22.0	78.2
NAFTA Average	8.5	13.8	9.3	14.5	99.9

Source: World Trade Report, 2005 and WTO database 2005. Note: The latest available data for Algeria (2003) and Morocco (2002) was used. Regional averages draw on the most recent data available

Importers in the Maghreb pay much more for external tariffs than for transport costs. Figure 2.4 shows that in Maghreb, tariff cost incidence (the *ad valorem* duty actually paid by importers) outweighs by far transport costs (proxied by the international shipping costs in the value of trade). By contrast, countries in Central and Eastern Europe and Latin America, importers pay relatively more for transport costs than for tariffs (these countries are represented by the observations above the 45-degree line in the chart). The comparative advantage of geographical proximity to Europe is offset by the Maghreb's high tariff cost incidence. This does not mean that transport costs are not barriers to trade in the Maghreb. As we will see later in this chapter, transport costs in the region are still relatively high.

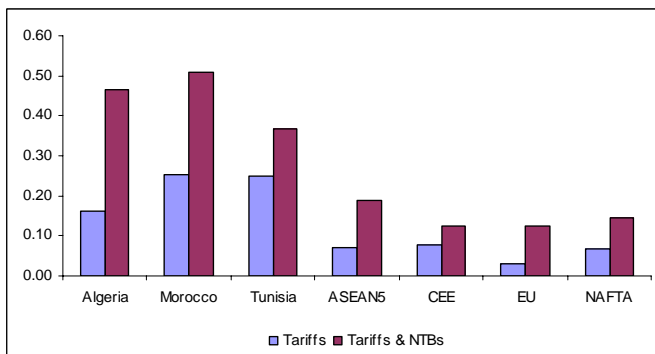
Figure 2.4. Maghreb: External Tariffs and Transport costs, 2004



Source: International Monetary Fund, DoT, 2005; World Trade Organization, 2005

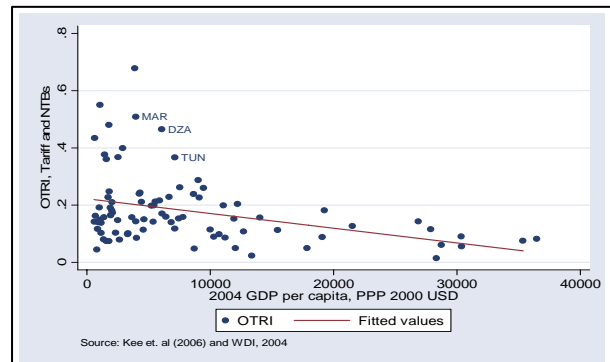
In spite of recent efforts by Maghreb countries to reduce non-tariff barriers, they remain higher than in other regional trading blocs- and the levels of trade protectionism are much higher than predicted by their income levels. In spite of recent achievements, overall trade protectionism in the Maghreb remains higher than other comparator countries and much higher than it would be expected given income levels (Figures 2.5 and 2.6). In the Maghreb, most quantitative restrictions have been eliminated, although prior authorization lists still exist for some items. Tunisia and Morocco have also made significant progress in reducing non-tariff barriers over recent years, including significant customs modernization reforms that reduced customs clearance time considerably. Customs reforms in Morocco are very advanced and comparable to international best practices. A new electronic system of customs processing is currently being implemented to simplify customs clearance. However, certification processes related to quality control standards are still lengthy and widespread in Tunisia. About 30 percent of total tariff lines are covered by technical import regulations. More than half the imports subjected to technical controls in 2003 were raw materials or goods for re-exportation. Thus, the complexity of these controls reduces the competitiveness of Tunisian firms.

Figure 2.5 Maghreb: Tariffs and Non-tariffs, 2004



Source: Kee et al (2006)

Figure 2.6 Maghreb: Overall Trade Restrictiveness & GDP per capita, 2004



Source: Kee et. al (2006) and WDI, 2004

B) Complexity and Limited Coverage of Trade Agreements

A key challenge for expanded investment and trade prospects in the Maghreb region is the complexity of trade regimes. Regional and bilateral trade agreements have proliferated in the Maghreb countries in recent years. The two most substantive types of trade agreements are those between individual Maghreb countries and the European Union (EuroMed Association Agreements) and a number of intraregional pan-Arab agreements. In addition to these regional agreements, Maghreb countries have also signed

bilateral agreements with other countries in the MENA region and outside the region. A brief review of this web of trade agreements is provided below (see Brenton et al, 2006 for further details).

Bilateral Agreements. Since the mid nineties, the European Union embarked on new trade partnerships with its Maghreb neighbors, leading to the conclusion of EuroMed Association Agreements with Tunisia (signed in 1995; in force since 1998), Morocco (signed in 1996; in force since 2000) and Algeria (signed in 2002; in force since 2005). In addition to the EU Association Agreements, Maghreb countries signed other bilateral trade agreements. Tunisia has bilateral agreements with Libya, Mauritania, Egypt, Jordan, Kuwait and Palestine. Morocco has also bilateral agreements with Libya, Mauritania, Saudi Arabia, Egypt, Jordan, U.A.E and Iraq. More recently, in 2004, Tunisia and Morocco signed bilateral agreements with Turkey. Morocco has also signed a bilateral trade agreement with the United States.

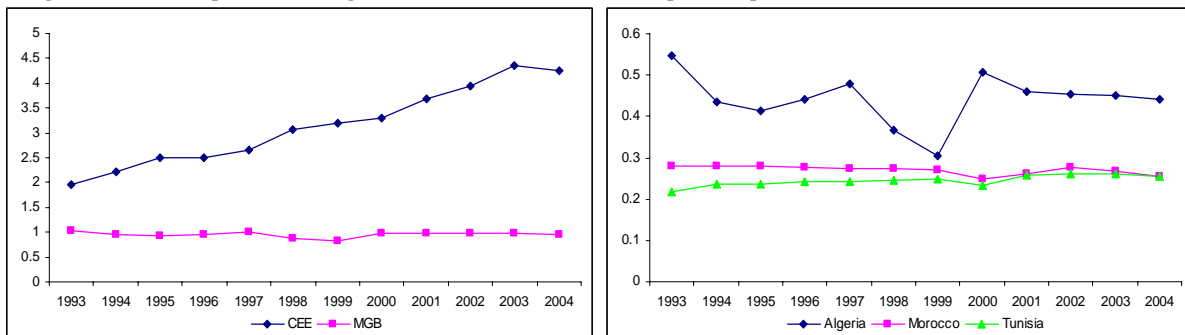
Regional agreements. The Maghreb countries are members of the Arab Maghreb Union, created in 1989, among Algeria, Morocco, Tunisia, Libya and Mauritania. In 1997 they also became members of the Greater Free Trade Area (GAFTA). Later they also signed the Agadir Agreement, which is a compact within the GAFTA framework, signed by Tunisia and Morocco with Egypt and Jordan in 2001 and revamped in 2004.

Multilateral agreements. Turning to multilateral agreements, both Tunisia and Morocco are already members of the World Trade Organization and Algeria is currently in a negotiation stage with WTO.

C) Limited effectiveness of trade agreements

The trade shares of Maghreb countries in the EU markets are much smaller than for Central and Eastern European countries and are stagnant, pointing to the limited effectiveness of the EU Association trade agreements. The EU Association agreements with Tunisia and Morocco, already in force, allow for an initial assessment of effectiveness. Available evidence suggests that these EU agreements have not increased the trade shares of the Maghreb countries in EU markets (Figure 2.7). The trade market shares of the Central and Eastern European countries, which signed Accession Agreements with the EU in the early 1990s, have increased sharply—from around 1.5 percent to around 3 percent.

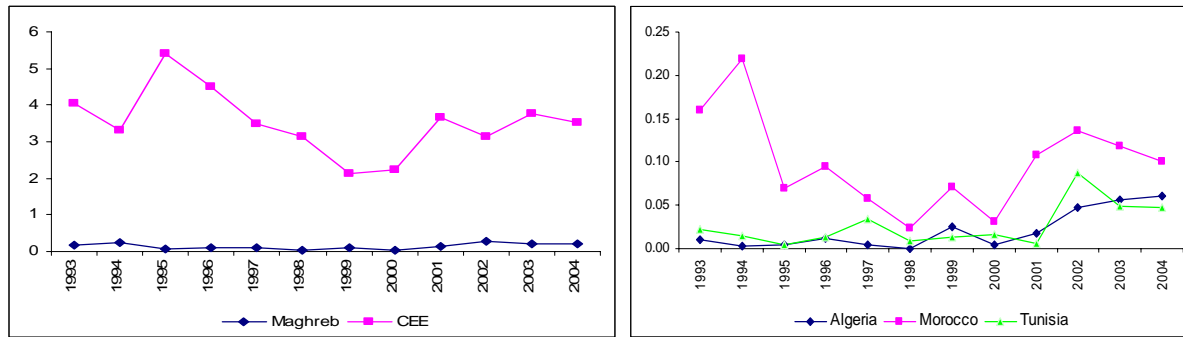
Figure 2.7 EU-15 Imports from Maghreb countries as share of total imports (in percent), 1993-2004



Source: Authors' calculations using UN Comtrade

Similarly, the Maghreb's share of total EU outward FDI has remained much lower than for Central and Eastern European countries, albeit it slightly increased in recent years. This is partly explained by the narrow coverage of trade agreements, as we will see later in this section. Typically trade agreements that include service and right to establishment tend to have greater impact on FDI. The small Maghreb's share of total EU outward FDI compared to the Central and Eastern Europe is also partly explained because of the little progress achieved on reforming services sectors and the investment climate in the Maghreb (Figure 2.8).

Figure 2.8 Share of outward EU FDI into the Maghreb as share of total outward EU FDI (in percent), 1993-2004

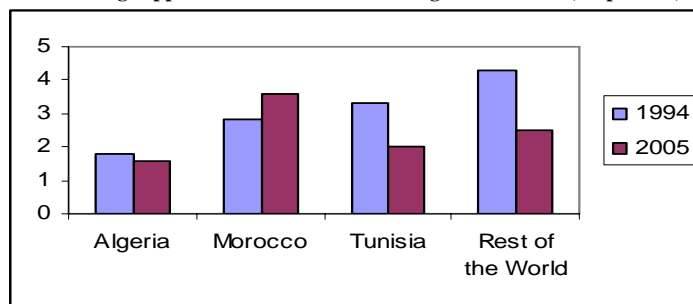


Source: OECD, 2005

Recent econometric evidence also suggests limited effectiveness of the EU-Association trade agreements in promoting intraregional trade and investment opportunities. The panel trade gravity model used in this report is an expansion of traditional gravity models, as it accounts for the timing and establishment of countries' membership in a Preferential Trade Agreement. The results of the model suggest that the EU-Association agreements have led to increased intra-bloc trade (increased trade between the Maghreb partner and the EU). Turning to the impact of these trade agreements on FDI, the EU-Association Agreements with Morocco and Tunisia are associated with increased foreign direct investment from non-members countries. Overall, bilateral agreements with the EU have resulted in a hub-and-spoke trading system in which trade amongst spokes remains highly restricted with the 'hub' enjoying improved access to all the spokes. The panel trade gravity model reveals that GAFTA has led to trade creation among its members (i.e. increased intra-bloc trade). However, it has also led to trade diversion with non-members. GAFTA membership is also associated with higher outward FDI directed towards non-members and lower outward FDI from GAFTA members. (See Annex for details on the model specification and on regression results).

The level and reduction in the EU's average applied tariffs have been similar for Maghreb countries and other countries that have also signed bilateral trade agreements with the EU. The reduction in the EU's average applied tariffs in the Maghreb helps explain the increase in trade between the EU and the Maghreb partners (Figure 2.9). However, the overall reduction in the EU's average applied tariffs in the Maghreb has not been enough to increase the region's trade shares in EU markets, as we saw earlier. The tariff reduction schedules in the EU Association Agreements are back loaded (that is, the larger reductions are to take place in the final years of the agreements), which explains Maghreb's slow progress in reducing them. In Morocco the EU's average applied tariffs have actually increased since the implementation of the EU Association agreement. This temporary increase in protection is due to the timing of the phase-out of tariffs for intermediate inputs, which was frontloaded, and that of final products, which was back loaded.

Figure 2.9: EU average applied tariff rates vis-à-vis Maghreb countries, in percent, 1994-2005



Source: World Integrated Trade Solution, 2005

A number of factors explain the limited impact of trade agreements (see also Brenton et al, 2006):

(i) Administrative factors linked to the complex web of overlapping trade agreements. The trade regimes in the Maghreb are complex to administer due to the proliferation of overlapping trade agreements. This large web of overlapping agreements not only raises administrative costs of governments. It also undermines efforts toward trade facilitation. The complexity of the current regional and bilateral agreements is compounded by rules of origin that vary across trade agreements. It is possible that a product will qualify for preferential access under one agreement but not under another due to differences in the rules of origin. This limits the ability of firms to exploit scale economies. In addition, different trade agreements are dominated by small positive lists of included products or large negative lists of excluded products. Too many product exemptions increase the burden of administering these trade agreements and decrease their effectiveness in expanding trade.

(ii) Technical issues: weaknesses in the design and implementation of trade agreements. A comparison of the key features of the EuroMed Association Agreements and the Accession Agreements makes it possible to identify some of the reasons why the initial economic impact of the former has been modest so far (see Table 2.2).

- ***Narrow coverage of trade agreements.*** The EuroMed agreements are limited in their coverage: they do not cover labor and agriculture and services are excluded (they were left out for future negotiations). Like the Euro Association Agreements, GAFTA is a free trade agreement for goods. Its coverage remains limited by restrictions on trade in services and agriculture. As we saw in Chapter 1, merchandise trade liberalization among small economies with similar trade structures does not yield significant economic benefits. Deeper integration, accompanied by service liberalization and investment climate reforms, promises higher economic returns.
- ***Restrictive rules of origin.*** The EuroMed agreements contain restrictive rules of origin for selected manufactured goods. Restrictive rules of origin are particularly relevant for clothing and textiles. For clothing, the EU Association agreements apply the most restrictive rule.¹¹ GAFTA's rules of origin are simpler than those of the EuroMed Association Agreements. The rule adopted is that goods must have at least 40 percent of their value added within the free trade area. The problem was the lack of clear implementation regulations aimed at enforcing compliance with this rule. In this respect, the GAFTA agreement leaves open the possibility to use them to increase protectionism.
- ***Lack of harmonization of standards.*** There has been little progress in harmonizing standards across Maghreb partners. Standards for imports are often justified by health, safety and environmental concerns. But if standards discriminate against foreign goods, or increase costs unnecessarily, they become 'non-tariff' barriers and reduce trade prospects. Whereas the EU Accession Agreements with Central and Eastern European countries have included technical and financial assistance to gradually adopt EU technical regulations, the EU Association Agreements with the Maghreb have been less ambitious, not specifying how standards are to be harmonized. Maghreb countries require that the relevant testing be done at their national laboratories, taking longer time and pushing up production costs. When domestic standards and testing procedures

¹¹ Rules of origin define the conditions that a product must satisfy to be deemed as originating in the country from which preferential access is being sought. They are generally ranked from least to most restrictive as follows: those requiring a change in tariff classification, those stipulating minimum value addition, and those requiring specific production processes. Sometimes the costs of proving origin are so high that exporters prefer to pay duties to get their goods in, despite having duty-free access provisions in their country's agreement (World Bank, 2003).

differ from those in the EU, Maghreb exporters are at a disadvantage. This also prevents Maghreb countries from joining global production chains with final products destined for EU markets.

Table 2.2. Comparing Euro Med Association Agreements and EU Accession Agreements

Reforms in the agreements	EU Association Agreements	EU accession Agreements
Free Movement of:		
Industrial goods	Yes	Yes
Agricultural goods	To be negotiated	Yes
Services	To be negotiated	Yes
Capital	No	Yes
Labor	No	Yes, with transition period
Complementary structural reforms		
Competition policy	Included as areas for cooperation and harmonization but with no mechanisms for implementation	Included as preconditions for accession
Privatization		
Company law		
Financial sector reform		
Intellectual property rights		

Source: World Bank (2003)

(iii) **Political factors.** Political factors also help in explaining the limited impact of Maghreb trade agreements. In spite of sharing a common culture, language and borders, there has been a lack of political will toward regional integration. The absence of a sustained political process towards regional cooperation has often led to vague plans for economic integration. In some cases, the scope for regional integration is completely constricted (border crossings between Morocco and Algeria remain closed)¹².

The main trade policy challenges faced by the Maghreb policy-makers are: (i) how to rationalize the current web of trade agreements (bilateral, regional and multilateral); (ii) how to extend regional cooperation beyond preferences in merchandise trade and include liberalization of services; (iii) identify the areas where regulatory approximation to the EU makes most economic sense under the new European Neighborhood Policy initiative; and (iv) how ensure WTO consistency. Although ideally multilateral economic integration is the option that can yield the largest economic gains, this is not a realistic strategy for the Maghreb countries, at least in the short-term. Algeria is not yet a member of WTO. Tunisia and Morocco are both members of WTO but have not signed all GATS market access commitments. Tunisia has only signed market access commitments in only three services sectors: finance, tourism and communication services.

2.2.3. INVESTMENT CLIMATE REFORMS

Expanding trade is not only a function of reducing tariffs. The process of trade expansion also involves a phase of investment supply response that is influenced by the elimination of ‘behind-the-border’ investment climate constraints that can affect trade and investment prospects in ways analogous to tariffs and non-tariff barriers ‘at the border’.

A) Current performance

How does Maghreb’s quality of the investment climate fare compared to other regions? This section draws on the Doing Business Database, a World Bank database that collects information on the investment climate regulatory barriers over 150 countries (Figures 2.10 to 2.15). ‘Investment climate’ performance is assessed by the relative burden of regulations affecting business entry, operations and exit. The regulatory burden on investors is measured by: the costs and time required to register and close a

¹² Relations between Algeria and Morocco have been strained since 1975, when Algeria supported the Polisario movement, which resisted the Moroccan claim over the Western Sahara. Ongoing disputes between Algeria and Morocco on the issue of Western Sahara and the closure of the border between these two countries since 1994 have significantly impaired the integration process. See World Bank (2006a).

business; cost and time needed to enforce contracts; labor market rigidities that affect hiring and firing of workers; time and cost to close a business and undertake bankruptcy processes; relative protection of creditors' rights.

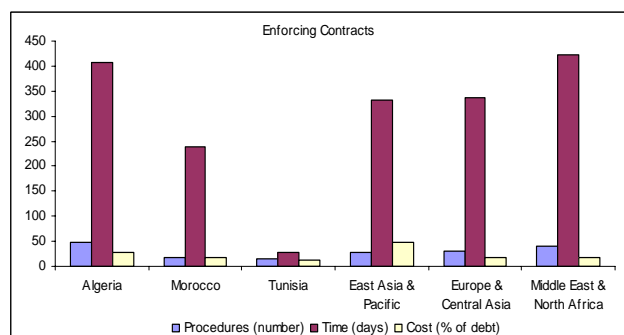
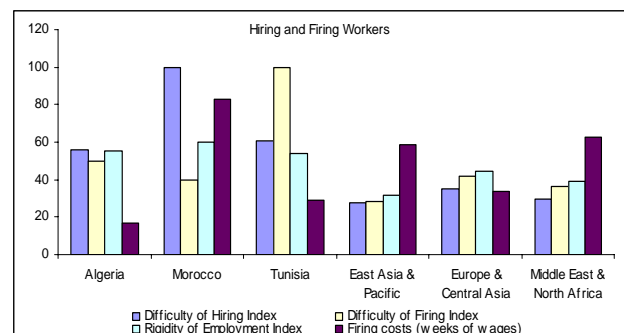
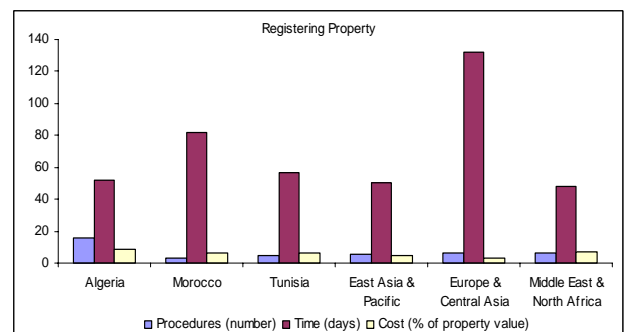
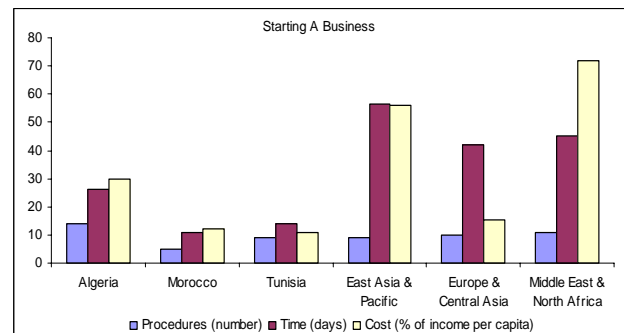
Starting a Business. The number of procedures to start a business in the Maghreb is on average similar to other regions. Maghreb countries fare well in terms of time and costs associated with business registration. Tunisia is the best performer in the Maghreb, ranking among the top quintile of world countries in terms of the number of procedures, delays, and cost of entry into business.

Registering Property. While it takes 16 steps to register property in Algeria, it only takes 5 in Tunisia and 3 in Morocco. While the number of procedures for registration in the Maghreb is the lowest in Morocco, the time needed is higher (82 days) than Algeria (52 days) and Tunisia (57 days). Overall, registering property in the Maghreb is faster (almost half the time) than in Eastern and Central Europe, although East Asian countries fare better. At the same time, the cost of registration is slightly higher in the Maghreb than in Central and Eastern Europe, and East Asia.

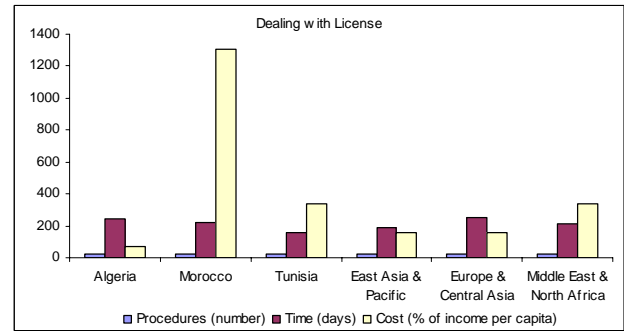
Hiring and Firing Workers. It is more difficult to hire and fire workers in the Maghreb than in other regions. Firing costs, measured in weeks of wages, is higher than in Central and Eastern European countries, although is lower than the MENA average. Firing costs in Morocco are the highest in the Maghreb (nearly four times than in Algeria, where firing costs amount to 16 weeks of wages). In Tunisia firing workers is much harder than in the other Maghreb countries, and in other regions.

Enforcing Contracts. In the Maghreb, enforcing contracts, particularly of small debts, is easier than in other regions. It takes less number of procedures and a shorter time to enforce contracts. The regional average is mainly driven by Tunisia, the best performer in the region. By contrast, contrast enforceability is more difficult in Algeria. Tunisia is also well ranked compared to other countries, whether in terms of time to bankruptcy (delays of little more than 18 months, comparable to Germany and Poland), the cost of the procedure or the recovery rate (52 cents to the dollar, compared to the 29 cents MENA average).

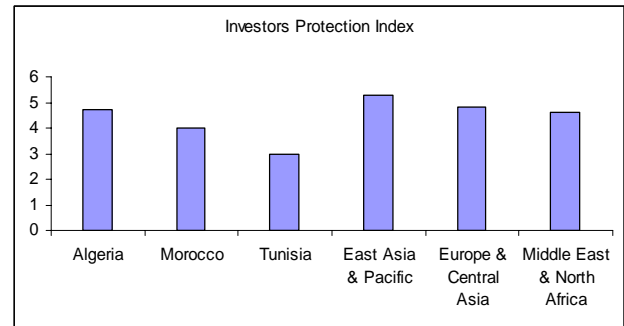
Figures 2.10 to 2.15 Maghreb, Doing Business Indicators, 2004



Dealing with Licenses and Paying Taxes. The costs associated with obtaining a building permit remain relatively high in the Maghreb compared to countries of similar income level. While it takes a similar number of steps to deal with licenses and permits in the Maghreb than in other regions, it is much more costly. In Morocco, the cost of licensing is nearly 13 times the nations' per-capita income. In Tunisia, dealing with licenses takes less time than in Morocco and Algeria (154 days ,compared to 217 days for Morocco and 244 days for Algeria). Turning to tax payment procedures, in Tunisia, tax compliance involves more than 30 payments, compared with one in Hong Kong, eight in Ireland, and 13 in the Czech Republic.



Protecting Investors. The investors' protection index captures the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain. Overall, investors are less well protected in the Maghreb than in other regions, with Tunisia offering less degree of protection to minority shareholders than other Maghreb countries. Morocco is among the ten countries in the world that make it most difficult to bring shareholders to suits. A recent study of private equity transactions finds that equity investment (as a share of GDP) in countries with higher risk of expropriation is half than in countries with higher degree of investors' protection. Poor investor protection means less equity investment.



Business perceptions provide complementary information on the regulatory constraints to trade and investment in the Maghreb. While the objective set of indicators collected in the Doing Business Database provide a mixed picture in the Maghreb, the survey conducted by the World Economic Forum (Arab Competitiveness Report, 2005) reveals that points to Algeria is perceived by businesses to be the Maghreb country with highest administrative trade and investment barriers (Table 2.3).

Table 2.3 Business perceptions on barriers to trade and investment in the Maghreb, 2004

	Hidden trade barriers	Cost of importing foreign equipment	Business Impact of domestic trade barriers	Business impact of foreign trade barriers	Business impact of customs procedures	Efficiency of customs procedures	Openness of customs regime	Business impact of rules on FDI
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Tunisia	4.4	2.3	4.1	3.7	4.1	3.9	4.1	4.9
Morocco	4.3	2.6	4.5	4.3	4.1	4.1	4	4.7
Algeria	3.8	2.8	3.7	3.5	3.5	2.6	3.2	4.3

Notes: (a) 1=important problem, 7=not important problem; (b) in terms of import tariffs, quotas, license fees and bank fees 1=<10%, 2=11-20%, 3=21-30%, 9=>80%; (c)-(e) 1=damaging, 7=beneficial; (f) 1=slow and inefficient, 7=among world's most efficient; (g) 1=highly unfavorable to trade activities, 7=among world's most liberal trade regime; (h) 1=damaging, 7=beneficial. Source: The Arab World Competitiveness Report 2005.

In sum, while Maghreb countries score well on firm entry and hiring of workers, they lag behind peers when it comes to investor and creditor's protection and dismissal procedures.

B) Reform Progress

The previous section benchmarked Maghreb countries against selected investment climate indicators; this section assesses progress made in reforming investment climate policies.

(i) Reforming regulations to open and close a business. In Tunisia, reduced the minimum capital requirement for business creation to a tenth of what it was in 2003. In Algeria, regulations governing business entry have been significantly improved following the elimination of business procedures (e.g. providing proof that previous owner of commercial land/office paid taxes; requirement to have a permanent company headquarters address upon registration). However, a negative development that affects trade more than business entry is a new regulation that imposes a minimum capital requirement of 20 million Algerian dinars for importers of products to be re-exported. In Morocco, administrative barriers to firm entry have been reduced with the introduction of the *Centres Régionaux d'Investissement*, which are essentially operating as one-stop-shop for prospective investors.

(ii) Reforming regulations of business operations. Tunisia has made significant progress in speeding up contract enforcement. Following the introduction of commercial courts, it takes only one month on average to enforce a commercial contract. The authorities have also adopted several measures aimed at improving the relationships between companies and the tax authorities—which has the potential to reduce business uncertainties—but the current framework continues to present weaknesses and imbalances, As we discussed earlier, tax compliance takes longer in Tunisia than other countries at similar income levels). In Morocco, the authorities have adopted judicial reforms to improve enforceability of contracts. The Moroccan authorities have also approved a new law on the protection of industrial and intellectual property. In Algeria, the main recent reform on regulations related to business operations relates to the reform of customs inspections. There have been also some improvements in the tax system. A large taxpayer's center to attend to the tax payment needs by the largest firms is now functional, and regional and municipal tax centers have been set up to assist smaller enterprises in their tax payments.

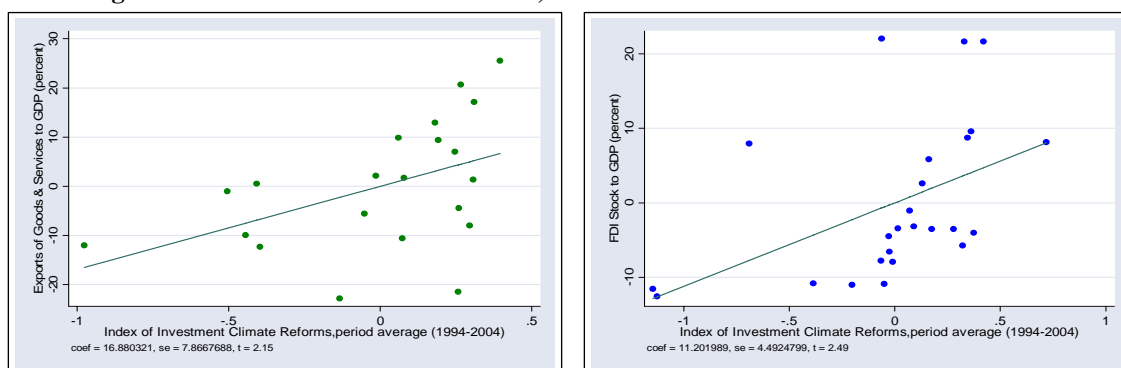
(iii) Reforming regulations of factor markets:

- **Labor.** In Tunisia, flexibility in employers' hiring decisions has improved with the introduction of fixed-term contracts and part-time work. However, termination regulations are still rigid; this makes it hard to restructure private enterprises in a timely manner, although regulatory changes have aimed at reducing administrative discretion concerning entitlements to severance payments. Turning to Algeria, the latest reform of the labor code introduced significant flexibility in hiring, firing and contract terms (including very flexible terms on fixed-term contracts). In Morocco, since the enactment of the new Labor code in 2003, implementation decrees were adopted in 2004. These reforms improved regulatory transparency while introducing some flexibility in hiring. At the same time, the new Labor Code has more than doubled already expensive firing costs. By doubling across the board the amount of severance payments, the 'fear from firing' among firms has aggravated (World Bank, 2006).
- **Land.** Progress in reforming regulations of land markets is more limited. Access to industrial land remains difficult in Tunisia, and the land market remains heavily regulated. In Algeria, some progress has been achieved. Concession contracts for public land has now been adopted as a rule, with a number of provisions that represent significant improvements (i.e. concession can be turned into a sale – at the firms' choice - at a pre-determined price, when the investment has been made; the concession contract is negotiable by banks and can therefore be used as collateral). However, access to land remains very difficult because the allocation of

individual plots remains administratively managed. Progress in land regulation is also limited in Morocco. Access to industrial and commercial land is still an issue of concern, especially in the Casa-Rabat corridor.

(iv) **Progress reform in privatization and enterprise restructuring, price liberalization and competition policy.** Investment climate reforms aimed at improving market contestability (privatization, enterprise restructuring, price liberalization, and competition policy) in the economy are associated with greater trade and FDI flows, after controlling for income (Figure 2.16)

Figure 2.16 Investment climate reforms, trade and FDI



Source: Authors' calculations, based on WDI, 2005

- **FDI legal framework.** Maghreb countries have strengthened the legal framework for FDI but restrictions to competition and foreign investment remain in Algeria and Tunisia. Tunisia and Morocco have now joined all major international agreements covering specific aspects of the FDI environment.
 - In Morocco, resident or non-resident foreign nationals are entitled to invest freely in Morocco. No investment operation in Morocco requires any prior authorization. Prior to 1996, Morocco offered foreign investors a package of investment incentives contained in various investment codes in different areas of business such as exports, tourism, industrial, mining, maritime, handicraft and real estate investments. Those codes have been replaced by a new Investment Charter, promulgated by Decree No.1-95-213 of 8 November 1995. Effective as of January 1996, the new Charter sets up a framework of which the main objectives are the promotion and development of investments in Morocco within the next ten years.
 - In Tunisia, foreign investment is regulated by the Investment Code Law No. 93-120 dating from December 1993. The Tunisian government actively encourages selected foreign direct investment, particularly for export-oriented industries. Investment legislation provides a broad range of incentives for foreign investors, including: tax relief on reinvested revenues and profits; VAT limitation to 10 percent on many imported capital goods; and optional depreciation schedules for production equipment. However, the discrimination between off-shore and on-shore companies leads to an unlevelled playing field for investors¹³. For on-shore firms outside the tourism sector, government

¹³ The Tunisian investment code divides potential investments into two categories: offshore, in which foreign capital accounts for at least 66 percent of equity and at least 80 percent of production is destined for the export market; and on-shore, in which foreign equity is limited to 49 percent in most non-industrial projects. On-shore industrial investment can have up to 100 percent foreign equity. Off-shore companies (those producing at least 80 percent for the export market) receive special treatment: full tax exemption on profits for the first ten years; 50 percent reduction in taxes on profits thereafter; full tax exemption on reinvested

authorization is required where foreign capital share exceeds 49 percent. Investment in manufacturing industries, agriculture, agribusiness, public works, and certain services requires only a simple declaration of intent to invest. Other sectors require a series of government authorizations. Investment in certain state monopoly activities (electricity, gas, water, postal services, retail distribution) can only be made following the establishment of a concession agreement. There are also certain restrictions on trade activities. With few exceptions, domestic trading can only be carried out by a company established under Tunisian law with majority capital ownership and management held by Tunisians.

- In Algeria, the new Investment Code, Ordonnance n° 01-03 du 20 août 2001, was instituted with a view to stimulating investment in industries other than those related to petroleum. In the new Investment Code, restrictions on foreign ownership of capital no longer apply. It guarantees investors the right to repatriate profits and created the *Agence de Promotion, de Soutien et de Suivi des Investissements*. This agency functions as a "one-stop shop" for all foreign companies investing in the country, provides support and assistance to foreign investors and determines which incentives foreign investors should receive. These incentives include exemption from customs duties for imported goods associated directly with the investment. Additional benefits may be established in free zones, once these come into being. To simplify the investment legislation, various investment codes for different industries had been unified into a single code. Among the areas open to foreign investors in Algeria are the huge reserves of natural gas and other hydrocarbons.
- ***Privatization and enterprise restructuring.*** Maghreb countries have made considerable progress in privatization, particularly Tunisia and Morocco, although large-scale state interference in the economy and the granting of privileges to certain sectors are still daunting challenges. See the next section for further details on privatization efforts by Maghreb countries in the financial and infrastructure service sectors.
 - In Morocco, the privatization process was initiated in 2003. It led to the liberalization of key sectors of the economy, including telecommunications, agribusiness, cement, steel and tourism. In 2005, 70 entities out of 114 initially listed for sale have been privatized, including 44 companies and 26 hotels. The sale of *Maroc Telecom* and *Régie des Tabacs* in 2000 and 2003 were by far the largest privatization operations realized in Morocco. The most recent privatization operation took place in 2005, with the sale of four state sugar companies to the Moroccan holding, ONA.
 - In Tunisia, bids have been recently invited for a 35 percent stake in the capital of the *Société Nationale de Distribution de Pétrole*, Tunisia's sixth-biggest company by turnover. In 2005, Tunisie Telecom put up for sale 35 percent of its capital, and a Spanish-Moroccan consortium acquired a 33.5 percent stake in the *Banque du Sud*.
 - In Algeria, delays in privatization compromised the restructuring of public economic enterprises (PEE) and the reorganization of the financial sector. From 2003 to 2005, 270 public enterprises were privatized, with 102 of these privatizations taking place in 2005 alone.

profits and revenue; duty-free import of capital goods with no local equivalents; and full tax and duty exemption on raw materials and semi-finished goods and services necessary for the business.

- **Price liberalization.** The process of liberalization of exchange-rate regulations is continuing gradually in the Maghreb. The currencies of Tunisia, Morocco and Algeria are convertible for all current account transactions. This convertibility was arranged in 1992 for the Tunisian dinar, in 1993 for the Moroccan dirham, and in 1997 for the Algerian dinar. They are also convertible for some capital account transactions, such as capital repatriation by foreign investors in Tunisia and Morocco. In Morocco and Tunisia agents engaged in foreign trade can open convertible accounts. In Algeria strong restrictions still apply on capital transactions. The liberalization of the foreign exchange markets allowed the Maghreb countries to establish an inter-bank foreign exchange market in the late nineties. Despite of the existence of an inter-bank market, the system is still highly centralized in Algeria. In Morocco and Tunisia the system is less centralized and the banks are not required to surrender the remaining balance to the Central Bank which sells foreign exchange through the commercial banks. A review of recent reforms is provided below:
 - In Tunisia, new relaxations were introduced for capital accounts in 2005, including: the right for non-residents to purchase up to 5 percent of Treasury bonds denominated in foreign currency; an increase in the level of transfers allowed to exporting companies; an extension of the right of non-exporting companies to realize investments abroad to finance their foreign activities; the right for non-resident account holders to borrow for more than 12 months without limitation on the amount, provided that the contracting company has first been assessed by an international rating agency.
 - In Morocco, the new Central Bank law (January 2005) conferred more autonomy to the Central Bank in conducting monetary policy.
 - In Algeria, private and public importers may buy foreign exchange from six commercial banks for commercial transactions provided they can pay for hard currency in dinars. Although commercial banks may buy foreign exchange from the Central Bank (*Banque d'Algérie*) they are no longer required to surrender the foreign exchange they acquire to the Bank of Algeria and trade these resources among themselves.
- **Competition policy.** While there is a solid legal framework for competition policy in the Maghreb countries, the lack of enforcement of competition rules remains an issue of concern. Tunisia and Morocco set up competition authorities in the early 2000s, but they are still perceived to be weak and lacking independence. Algeria has not yet set up a competition council. Whereas the Algerian authorities have announced the establishment of sectoral regulatory institutions relating to such areas as electricity, gas, transport, water, post and telecommunications, until now, however only the regulatory authority for post and telecommunications has been set up.

In sum, the Maghreb countries have made significant progress in a number of investment climate policies, including price liberalization and have also introduced reforms to improve competition, privatize state-owned enterprises and facilitate FDI entry in some sectors of their economies. However, they still lag behind many Central and Eastern European countries (Figure 2.17 and 2.18).

Figure 2.17 Maghreb and comparators: Investment Climate Reforms Progress, 2004

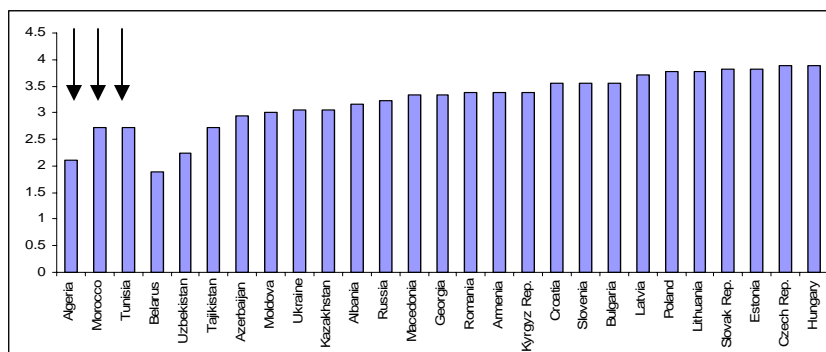
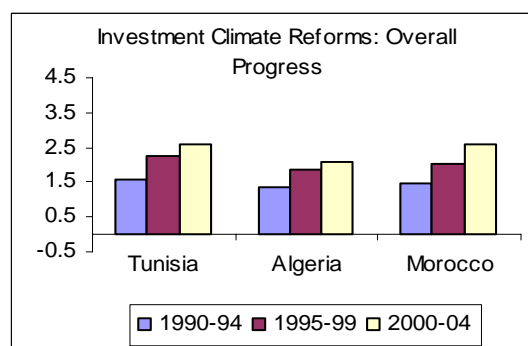


Figure 2.18 Maghreb: Progress in Reforming the investment Climate, 1990-2004



Note: the Investment Climate Reform index captures progress made on: privatization, enterprise restructuring, price liberalization and competition policy. Source: Authors' calculation for Maghreb countries, EBRD, 2004

2.3. SERVICE SECTOR REFORMS

A range of 'backbone' services are needed to facilitate global trade and investment flows. Backbone services are a key input into trade in goods as they 'connect' the economy to the global market and facilitate cross-border transactions and flows of goods, labor, capital and information. Broadly defined, backbone services include financial services and infrastructure services, also referred to as 'network industries' (transport, telecommunications, energy and water).

A number of examples help illustrate the importance of these services sector for trade and investment:

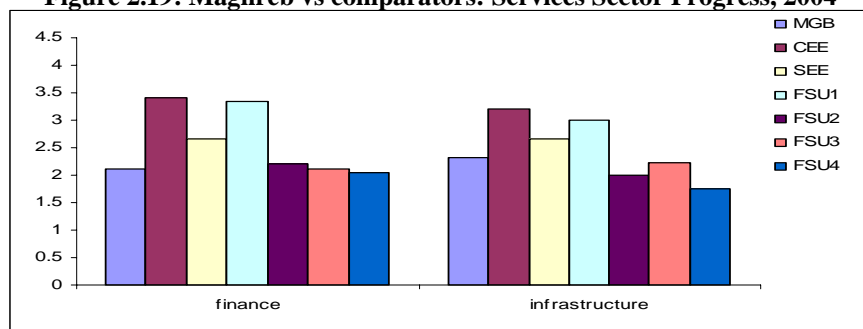
- **Telecommunications services** are crucial for the international diffusion of information and knowledge. For some services, telecommunications technology serves as the means of export delivery. Ensuring access to modern networking technology is a vehicle that allows the economy to diversify by utilizing information technologies to export labor-intensive services. Good examples are the call centers that are proliferating in Tunisia and Morocco. Efficient producer services and the development of e-commerce (Internet) are of great importance in expanding export earnings.
- **Efficient transport services** ensure that goods and people arrive in foreign countries in a timely manner. In places where it is expensive to ship goods abroad and service delays are frequent, transportation can become a prohibitive barrier to trade or can bias the geographic composition of exports and preclude countries from participating in the global production sharing that increasingly characterizes international trade. For *tourism*—a key service export in Maghreb—good transportation and telecommunications infrastructure are also key for the sector growth.
- **Access to financial services**—working capital, export credit, insurance—is critical if firms are to obtain and fulfill orders from abroad; the existence of markets for foreign exchange, forward contracts, options, and other derivatives can reduce exporters' risk exposure.

The service sector reforms discussed in this section cover a mix of deregulation (dismantling barriers to entry and the promotion of competition) and improved regulation (putting in place an appropriate legal environment, strengthening regulatory agencies, increasing their independence, etc.). The policy

challenge is to achieve a balance between effective regulation and increasing the contestability of markets (Hoekman, 2005). Reforming backbone services sectors can play an important role in fostering deeper economic integration. First, service sector reforms can support Maghreb’s integration with global production networks. The cost and quality of key backbone services are important determinants of multinational firms’ decisions to locate production facilities in a country. Second, these reforms will also increase domestic firms’ productivity and competitiveness because they reduce the costs of producing and trading goods and services. Third, these reforms, by improving the efficiency of key backbone services, facilitate the development of new exports with time-sensitive delivery schedules, such as exports of electronic components and exports of ICT- enabled services¹⁴.

As we will see, the overall progress of service sector reforms in the Maghreb has been modest compared to the Central and Eastern European countries. Figure 2.19 plots indicators of the extent of policy reform in the financial and infrastructure services (transport, telecommunications, power and water) and on the investment climate in 2004. These indices, range from 1 to 4.3 (with 4.3 indicating best practice) and span the period 1990-2004. See Annex for methodological details.

Figure 2.19: Maghreb vs comparators: Services Sector Progress, 2004



Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia); FSU1= Estonia, Latvia and Lithuania ; FSU2=Russia, Ukraine, Belarus and Moldova; FSU3=Armenia, Azerbaijan, Georgia ; FSU4=Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

This section is structured as follows. First, it shows how reforming the services sector will support trade and investment in the Maghreb. Second, it will discuss the rationale for deeper integration at the regional level. Third, it assesses reform progress and identifies remaining policy and regulatory barriers that would need to be addressed to reap full benefits from deeper regional economic integration.

The analysis of the services sectors covers the following aspects: (i) overall sector performance against the following criteria: accessibility, quality and cost of services, and relative performance given the country’s income levels; and (ii) reform progress in each sector (i.e. degree of openness, market entry and competition; existence and independence of regulatory agencies). Throughout the section the chapter will compare the performance of Maghreb countries with the regional average in MENA, EU-15, East Asia, and in Central and Eastern Europe. The latter is a region that due to its proximity to the EU is perceived as a strong Maghreb’s competitor for EU trade and investment in services.

¹⁴ ICT-enabled services encompass a broad range of activities made possible by advances in telecommunications and the spread of the internet. These services are increasingly provided in offshore locations in emerging markets and include: (i) data conversion and digitization (i.e. medical transcriptions); (ii) voice center operations (offshore reservation centers, call centers, and telemarketing; and (iii) outsourcing back-office and professional and administrative services.

2.3.1. FINANCIAL SECTOR REFORMS

A) Role of the sector in promoting trade and investment

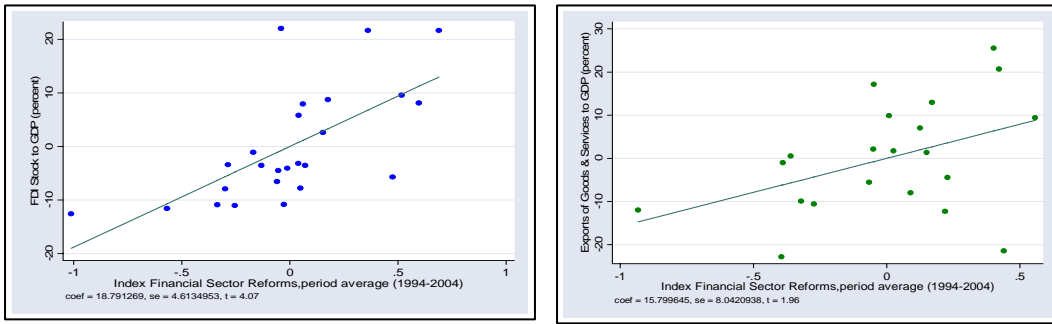
A well-functioning financial sector is critical for the economy. Properly functioning financial markets encourage higher savings and investments; supply entrepreneurs and private companies with capital; allocate scarce financial resources to the most promising ventures; help reduce inflation and real interest rates; and ensure the smooth flow of capital across borders. If financial markets do not function properly, high lending premiums may impose excess costs on savers and investors. Bad loans can lead to bank insolvencies and costly government bail outs. Systemic banking crises or the crowding out by government debt may starve the private sector of funding. Fragile institutions and inadequate regulation may aggravate macroeconomic shocks-thus triggering inflation, exchange rate volatility, or capital flight. In summary, efficient financial markets are vital for the entire economy.

Financial sector reforms can be comprehensive, ranging from pension reforms (to foster the emergence of institutional investors and to increase savings rates); privatization programs (to enhance stock market capitalization and liquidity); as well as fiscal adjustment (streamlined tax regimes, lower deficits). Once an adequate regulatory framework is in place, competition and private management can become the main drivers of efficiency improvements in the financial sector. If banks and other financial institutions have to compete for clients and can no longer rely on a captive market or business generated by government loans, they will be more inclined to provide credit to private firms.

Regulatory regimes pertaining to financial services that affect trade and investment costs are largely associated with impediments to the establishment of contestable markets. They can be separated into domestic financial regulation and barriers to the free flow of international financial services. Illustrative examples of domestic regulation include the existence of dominant state-ownership of the banking system, restrictions on the licensing of domestic banks or branches on the basis of geographical location, or allowing only some banks to provide services to specific sectors of the economy. All such measures limit competition in the financial sector and raise both the cost of financial services and the risk of margin that is usually added to the basic cost of funds. Another important aspect of financial sector reforms is the strengthening of the regulatory and supervisory framework in order to be broadly in line with international practice.

Financial sector reforms go hand in hand with trade and FDI flows. Financial sector reforms aimed at increasing competition and market contestability in the sector are associated with higher flows of trade and FDI, even after controlling for income levels (Figure 2.20). Empirical research has found that integration of financial markets and trade in goods and services tend to go together (Levine, 2001). Financial services are themselves subject to international trade and investment, and it has been found that trade and FDI also improve the quality and reduces the cost of financial services. The presence of foreign banks, for example, can exert competitive pressure on local banks leading to a significant decline in their overhead costs following the entry of foreign banks. In addition, foreign banks often bring new products and may stimulate improvements in domestic supervision and regulation. However, ultimately the link between trade, FDI and financial sector performance is affected by the quality of the regulatory framework (Honohan and Klingebiel 2000).

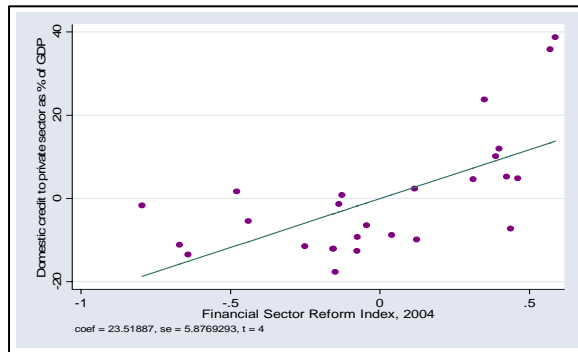
Figure 2.20 Financial sector reforms are associated with more trade and FDI



Source: Authors' calculations using WDI, 2005. See Annex for details on the financial reform index.

Financial sector reforms are also associated with better outcomes: the higher the reform progress, the greater the access to credit. Financial sector reforms aimed at increasing competition and market contestability in the sector are associated with higher shares of domestic credit by the banking sector, after controlling for income levels (Figure 2.21).

Figure 2.21 Financial sector reforms and access to credit



Source: Authors' calculations using WDI, 2005.

B) Rationale for regional cooperation in the sector

While financial sector reforms at the national level are typically the main priority, cross-border integration can bring additional benefits, especially for small financial markets as those of the Maghreb. Regional integration increases liquidity and competition. It allows investors to hold more diversified portfolios and gives firms better access to capital. It helps unlock economies of scale and scope for financial institutions (larger banks and stock markets, greater range of financial products). Among the benefits of integration are a better match between supply and demand, diversification of risk, lower prices, and enhanced customer choice (Muller-Jentsch, 2005).

One of the most beneficial types of cross-border integration is the entry of foreign banks. This can be encouraged through a removal of nationality restrictions, a liberalization of market access, and the sale of state-owned banks. Foreign banks can bring technical know-how, such as modern risk-management. They often raise governance standards, introduce new financial products (e.g. mortgages, leasing), and tend to have better access to international capital than their local peers. Foreign banks may help countries to 'import' modern prudential regulation, since they are being scrutinized by the home regulator of the parent institution. In Latin America and Eastern Europe, foreign investors have also driven the process of regional consolidation. Other policies that facilitate integration between financial markets are the removal of restrictions to cross-border capital flows or foreign exchange transactions. As the Asian crisis and other

examples show, however, the liberalization of a country's capital account can introduce dangerous volatility, unless it is backed up by comprehensive regulatory reforms and healthy financial institutions.

C) Sector Performance

Assessing the performance of the financial sector requires an understanding of the functioning of three main sub-sectors of activity. In most countries, especially in developing economies, the main market segment is banks. Their primary functions as intermediaries between savers and investors are to provide a range of financial instruments (e.g. savings accounts, mortgages, loans) and to manage risk arising in the process. In more mature economies, savers and investors interact directly through capital markets via tradable securities (e.g. bonds, stocks, derivatives). Institutions such as stock markets, clearing houses, and investment banks are needed to facilitate those interactions. Key determinants of capital market efficiency are their depth (market capitalization), liquidity (turnover), and diversity (range of financial instruments). A third important sub-sector is the insurance industry (e.g. life and non-life insurance companies, insurance brokers, reinsurance firms). Insurance markets help allocate risk and provide long-term savings instruments. Finally, institutional investors-such as pension funds, mutual funds, or asset managers-play an important role in the development of more sophisticated financial markets.

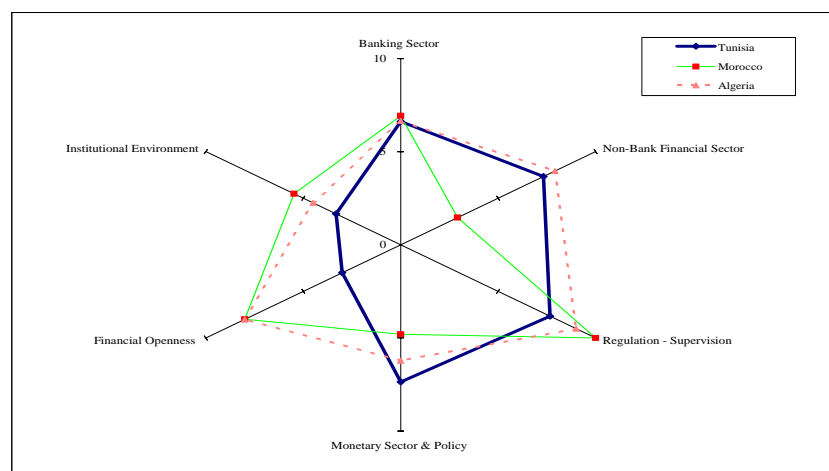
(i) *Quality of the regulatory framework*

An adequate regulatory framework is a prerequisite for the efficiency of financial services. This involves modern prudential regulation and corporate governance; adequate bankruptcy and accounting laws; independent regulators; a separation between financial and non-financial institutions (to avoid directed credit or politically motivated loans); and a judicial system that permits the enforcement of property rights. Failure to implement such policies can be costly. In Turkey, for instance, poor supervision and political meddling led to a banking crisis in 2001, which cost \$47 billion, or 32 percent of GDP.

The financial regulatory frameworks of Tunisia and Morocco are more advanced than in Algeria. Following Creane et al (2004), this section compares the financial sector regulations of the Maghreb countries according to six broad dimensions: monetary policy; banking sector size, structure and efficiency (including the role of the government in the sector); non-banking sector development; quality of banking regulations and supervision; degree of financial openness; and quality of the institutional environment¹⁵ (See Figure 2.22).

¹⁵ 'Monetary policy' examines the extent to which the government uses indirect monetary policy instruments as opposed to direct controls on interest rates and credit allocation; 'Banking Sector' examines the efficiency of the commercial banking sector (profitability of banks, bank concentration, and ease of private access to bank credit); 'Non-Banking Financial Sector' explores the development of alternative sources of capital as well as markets for financial products or services (stock markets, mortgage or housing finance institutions, corporate bond markets, insurance companies, mutual funds, and pension funds); 'Regulation and Supervision' assesses bank's performance with respect to minimum (Basel) capital adequacy requirements and provisions against nonperforming loans; 'Financial Openness' assesses the appropriateness of the exchange rate regime, including whether it operates smoothly and is relatively free of interventions. It also examines restrictions on capital account transactions; 'Institutional Environment' examines the ease of loan recovery through the judicial system. See Creane et al (2004).

Figure 2.22 Quality of the Financial Regulatory Framework in the Maghreb, 2004



Source: Creane et al (2004).

- **Monetary policy.** Forcing banks to subsidize credit to certain sectors, or restricting the quantity of credit distorts the credit market and lowers overall banking efficiency. Tunisia's monetary policy is the best developed in the Maghreb and it does not rely on direct controls on credit allocation.
- **Financial openness.** Maghreb countries have gradually opened up their current accounts. Although Tunisia is moving gradually to full capital account liberalization, it still maintains restrictions on foreign ownership of assets and repatriation of earnings.
- **Regulation and supervision.** Morocco ranks the best in the Maghreb in terms of banking supervision and regulation, and Tunisia follows closely. Both countries have taken steps to conform to international Basel standards by increasing capital adequacy ratios and reducing nonperforming loans.
- **Banking sector development.** In the Maghreb, foreign ownership of banks remains low. Foreign ownership is marginal in Algeria at 4 percent of total banking assets, 15.7 percent in Tunisia and 20.2 percent in Morocco. Government ownership is the norm in Algeria (nearly 96 percent of total assets) as opposed to Tunisia (43 percent) and Morocco (35 percent) where the private-sector holds a relatively larger stake. There are also low levels of competition, as reflected in high levels of concentration - In Algeria, the 3 largest banks hold 97.8 percent of total commercial bank assets in contrast to 73.8 percent in Morocco and 47 percent in Tunisia. These figures partly reflect the small size of most domestic markets and partly existing regulatory barriers to entry of new private banks.
- **Nonbank financial sector.** In the Maghreb, the non-banking financial sector remains underdeveloped, partly because of legal limitations on ownership. The regional stock market turnover ratio, an indicator for trading dynamics and liquidity, is between 4 to 9 percent, compared to 30 to 40 percent in most Eastern European countries. In Algeria, financial markets remain thin (the stock exchange has almost no activity) and the insurance sector is very small (total premium accounts for 0.58 percent of GDP in 2004).

Table 2.4 Maghreb vs. Comparators: Capital Market Indicators

regions	market capitalization (% of GDP)		market capitalization value (US bil)		stock turnover ratio (%)		no. of listed domestic companies	
	1996	2004	1996	2004	1996	2004	1996	2004
Maghreb	22.8	29.7	6.5	13.9	3.7	8.8	38.5	48.0
MENA	20.3	38.4	51.4	141.0	17.8	22.7	1138.0	1627.0
CEE	12.1	25.6	6.9	29.0	75.9	38.6	510.6	144.8
SEE	4.4	19.9	0.8	8.5	7.5	13.0	25.8	1502.3

Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia). Source: WDI, 2005.

(ii) Key sector performance indicators:

- **Availability:**

- Morocco has 23 commercial banks registered at the central bank. These include 17 onshore banks, and six offshore. Within this overall total are a wide variety of institutions ranging from those in which the state maintains a significant stake, to private-sector banks and banks with majority foreign ownership – notably French-owned. There are five banks in which the state has a large ownership. Alongside the banks are some 44 quasi banking institutions, such as consumer credit companies, which specialize in financing purchases on credit of durable consumer goods, leasing companies and factoring companies. Lending to the private sector is strong, reaching \$27.98bn in 2004, or 59.4 percent of all assets. The majority of lending, some 58 percent, goes to corporate clients, a figure which increases to 68 percent if small entrepreneurs are included. While this is the largest sector, the fastest growing is retail, with lending to individuals accounting for about 28.5 percent in 2004.
- In Algeria, domestic credit to the private sector is negligible (11 percent of GDP), although lending to the private sector as a proportion of total lending has increased. In 2004, private sector lending accounted for 43.7% of total lending to the economy, compared to 31.3% in 2001. Despite the end of the state monopoly in the banking sector in 1990, state-owned banks remain the predominant players in the market, accounting for almost 95 percent of total bank assets in 2004. There are currently 40 players operating in the Algerian banking sector, including seven state-owned banks, 24 privately owned banks, and nine finance companies. The top 10 banks include the seven state-owned. The privately owned banks provide a wide range of banking services, catering for both corporate and private clients, and generally have diversified portfolios, both in terms of deposits and lending. The banking network spreads over 1050 branches, 1004 of which belong to public banks. The agencies belonging to the private banks are mostly located in large towns. The bank ratio is around 30,000 habitants per agency. This is much higher than in Europe, where the bank ratio is 5,000, demonstrating the insufficient distribution of banking facilities.
- In Tunisia, domestic credit to the private sector is about 65 percent of GDP. Tunisia has a large number of banking institutions for a relatively small market. There are fourteen commercial banks, six development banks, two merchant banks and eight offshore banks. There are, in addition, ten leasing companies, a stock exchange and a growing number of investment funds and companies. The Tunisian state still controls some of the country's largest banks (*Société Tunisienne de Banque, Banque Nationale Agricole and Banque de l'Habitat*). The Tunisian state is the controlling shareholder in ten banks, which together account for more than two thirds of all credit and over half of total deposits. The

estimated total assets of the country's five largest state-owned banks are about USD 10 billion, but foreign participation in their capital has risen significantly and is now well over 20 percent. Most major Tunisian banks lend to Tunisian corporations with the exception of a private bank, *Banque Internationale Arabe de Tunisie* (BIAT), which has a greater focus on the retail sector. BIAT lending to individuals represented over 33 percent of the bank's loan book in 2004. The Tunisian banking sector does not suffer from excessive sectoral concentration.

- **Cost.** Comparative data on financial services' costs is scarce. A useful proxy for the cost of financial services is the ratio of bank overhead costs to total assets. This ratio is the highest in Algeria, amounting to 3.3 percent, compared to 2.5 percent in Tunisia. Morocco is the Maghreb country with the lowest bank overhead costs, amounting to 2.2 percent. Net interest margins vary widely in the Maghreb, from 2.4 percent in Tunisia to 4 percent in Algeria. The difference in internet margins is an indication of the differences in finance-related transaction costs that firms face in each of these countries. It is, however, an imperfect indicator because differences in net interest margins may not always reflect differences in real interest rates that firms pay on their borrowing, including on export credit (i.e. differences in inflation rates and subsidies, for example, may also be important determinants of differences in the real interest costs paid by companies). High overhead costs, net interest margins, and credit volumes are correlated: high overhead costs are reflected in high interest margins and high costs and interest margins are reflected in low credit volumes (Table 2.5).
- **Quality.** A proxy for the relative quality of the banking services is the ratio of non-performing loans (NPLs) to total lending to the economy. The share of NPLs to total loans is relatively high in the Maghreb region compared to other regions (Table 2.5).
 - In Morocco's banking sector, non-performing loans remain a central problem particularly among the former specialized banks, which built up large portfolios because of the state's requirement that they engage in directed lending. NPLs have not only remained high, but also growing. At the end of 2003, for example, at 18.1 percent of gross loans. This is a rise from 17.2 percent in 2002. However, though the figure appears high, NPLs at the commercial banks were some 11 percent, dragged up by as high as 40 percent at the specialized banks, leading to the overall higher average. More encouraging is the rise in provisioning, though modest. Provisions against NPLs were 55 percent at the end of 2003, a rise from 54.7 percent in 2002, and 52.9 percent at the end of 2001. This suggests the specialized banks are reporting a higher level of bad debts, and they are putting more funds aside to offset the risks, a positive trend. Despite concerns over NPLs in some banks, across the sector the aggregate capital adequacy levels are well within the Basel I requirements, with regulatory capital to risk-weighted assets at 10.1 in 2003, and 13.2 for the commercial banks in particular.
 - Tunisia's banking system is also burdened by a large amount on nonperforming loans and provisioning remains inadequate as a result of overvaluation of real estate collateral. In 2004, the level of non-performing loans (NPL) remains high, over 23 percent of commercial bank total claims. NPLs at the five major Tunisian Banks range from 15 percent to almost 40 percent of total bank loans. NPLs are concentrated in the service sector. A number of reasons explain the low provisioning of NPLs. First, Tunisian Central Bank rules for loan classification and loan loss provisions and banks' risk management systems remain below international standards. Second, some banks rely heavily on real estate guarantees that tend to be illiquid and over-priced. Third, poor disclosure of credit information, lack of transparency in financial statements, and

inadequate internal credit mechanisms hinder an accurate valuation of the bank portfolios.

- One of the legacies of Algeria's socialist political history is a relatively high level of non-performing loans issued by the state banks. At the end of 2000, the level of NPLs across the Algerian banking sector was approximately 50 percent of total loans (or 11 percent of GDP). As part of its efforts to reform the state banks along more commercial lines, the government has bought back much of this bad debt, reducing the level of NPLs to about 27 percent in 2003 and close to 17 percent in 2005.

Table 2.5 Maghreb vs comparators: Banking Indicators, 2004

	Sector Structure			Access	Cost			Quality	
	Banking assets held by foreign-owned banks (% of total banking assets)	Banking assets held by government-owned banks (% of total banking assets)	Bank Concentration (%)	Domestic credit to private sector (% of GDP)	Interest rate spread (lending rate minus deposit rate)	Lending interest rate (%)	Bank Overhead Costs / Total Assets (%)	Bank nonperforming loans to total (%)	Net Interest Margin (%)
Algeria	3.9	95.7	97.8	11.0	5.5	8.0	3.3	27.0	4.0
Morocco	20.8	35.0	73.8	56.7	7.9	11.5	2.2	19.4	3.7
Tunisia	15.7	42.7	46.8	65.2	2.0	5.0	2.5	23.7	2.4
East Asia & Pacific	67.6	6.4	60.1	48.5	6.3	13.3	2.7	13.2	4.1
Europe & Central Asia	50.0	12.0	63.1	26.6	5.8	13.6	4.9	5.7	5.1
Middle East & North Africa	15.7	35.0	78.3	39.8	5.5	10.70	2.3	18.0	3.2

Note: Overhead cost is the value of a bank's overhead costs as a share of its total assets. Net interest margin is the value of bank's net interest revenue as a share of its interest-bearing (total earning) assets. Bank concentration is the asset values of 3 largest banks as a share of assets of all commercial banks. Source: Beck et. al(2000), WDI 2005. The most recent data is used beginning with 2004.

(iii) *Business perceptions.* Algeria is perceived as being lower in their financial market sophistication, venture capital mobility and regulation of securities exchange relative to Tunisia and Morocco (See Table 2.6). Tunisia comes out ahead in terms of the quality of securities regulation and venture capital mobility while Morocco's financial market sophistication is perceived to be the highest in the region.

Table 2.6 Business perceptions on the Financial Sector in the Maghreb, 2004

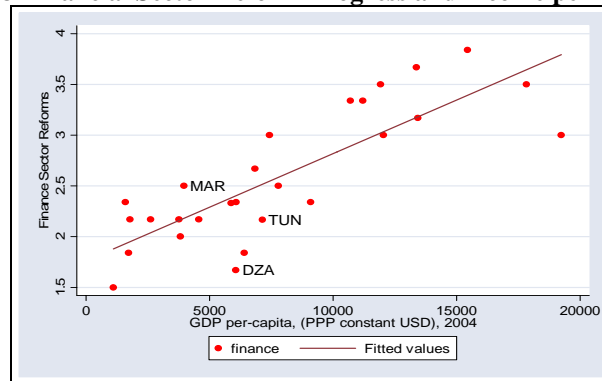
	Financial Market Sophistication (a)	Venture capital mobility (b)	Regulation of securities exchanges (c)	Effectiveness of bankruptcy law (d)
Tunisia	3.6	3.8	4.8	5.2
Morocco	3.9	3.4	4.6	4.5
Algeria	2	2	3.4	3.8

Notes: (a) 1=lower than international norms, 7=higher than international norms; (b) 1=difficult, 7=easy; (c) 1=non transparent, ineffective, 7=transparent, effective and independent. Source: The Arab World Competitiveness Report 2005.

D) Reform Progress

With the exception of Morocco, Maghreb countries have made less reform progress than predicted by their income levels. The progress made by Algeria, and to a lesser Tunisia, in reforming their financial sectors is below what it would be expected given the country's level of income. By contrast, Morocco's reform progress is greater than predicted by its income level (Figure 2.23)

Figure 2.23 Financial Sector Reform Progress and income per capita



Source: Authors' calculations based on WDI, 2005

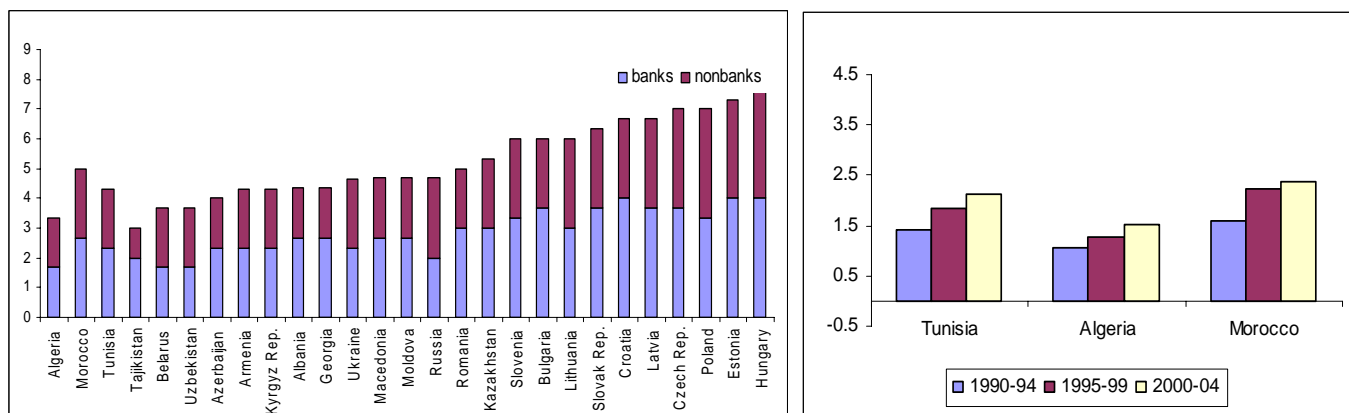
Among the Maghreb countries, Morocco is ahead in financial sector reforms. Financial sector reforms are well advanced in Morocco (with a strong tradition in private-sector banking), they are progressing, albeit slowly in Tunisia, but have barely begun in Algeria:

- In Morocco, the financial sector has witnessed a wide range of reforms since 2003, following the first wave of reforms implemented in the 1990s. In recent years, there have been strong efforts to reform the banking sector, including recapitalizing and bringing new management. Beyond the state-controlled banks, private-sector institutions are divided between those majority-owned by local shareholders and those controlled overseas. There are three banks with majority foreign ownership, each dominated by a French banking group. Sector developments included the merger of two of Morocco's top-five banks; and a small further step in privatization, with the move to sell 20 percent of Morocco's largest bank, GBP (*Groupe des Banques Populaires*) to the public, through an initial public offering (IPO). The new shares are now listed on the Casablanca bourse. New financing mechanisms are also being put in place to help businesses improve their balance sheets. As far as prudential regulation is concerned, the new Basle II solvency ratio will be adopted in 2006 to prevent bank runs and improve financial sector stability. The new law defining the status of the Moroccan Central Bank was adopted by the parliament in 2005, and a new banking law is also currently under discussion.
- In Tunisia, the banking sector has undergone important changes since 2001. The financial system remains centered on commercial banks, which account for about 70 percent of total financial assets at end of 2004. But the role of state-controlled banks has diminished. The structure of the Tunisian banking system, after the two recent privatizations, remains one third under state control, one-third under control by foreign banks, and one third by private nationals. New laws have been introduced (most recently in 2002) that tightened operating standards, encouraged banks to engage in a wider range of financial operations, and strengthened the guarantee system to give deposit holders greater protection. The non-banking sector has not undergone significant reforms over the last decade. Insurance penetration in Tunisia remains tilted toward the non-life segment (casualty and property insurance), with total written premiums worth of 2 percent of GDP. The authorities have also adopted steps to strengthen bank supervision and financial transparency. A banking law strengthening supervision was adopted in 2002, and revisions were introduced in the commercial code to facilitate execution of judicial rulings and seizing of sale of real estate collateral. In 2003, the revisions introduced to the 1995-34 law strengthened protection of creditor rights. The 2005-96 law strengthening financial security further improved financial transparency.

- **In Algeria**, by contrast, progress in financial sector reforms has been more limited. The Algerian banking sector was officially liberalized on April 14, 1990, with the promulgation of the Currency and Credit Law. Due to the security crisis of the 1990s, it was not until late in the decade that the first private banks, both domestic and foreign, entered the market. Since then there has been some increase in the level of competition within the sector, and a basis for the development of a banking system on par with international standards has been created. However, there is still a long way to go for the Algerian banking system to reach international standards. The Algerian banking sector is regulated by the central bank, *Banque d'Algérie*, through a subdivision known as the *Commission Bancaire*. This body was in the past headed up by the minister of finance, but in a move aimed at freeing the state banks from their traditional role as agents of governmental economic policy, the roles were officially separated in 2004. Since 2004, privatization efforts in Algeria have stepped up, albeit slowly. The first bank to be targeted to privatization is the *Crédit Populaire d'Algérie* (CPA), owing to the recent progress the bank has made in modernizing its operations and complying with international standards. Two other banks, the *Banque Nationale d'Algérie* (BNA) and the *Banque de Développement Local* (BDL), have also been earmarked as targets for privatization. But lack of financial transparency is a source of concern to potential investors (Oxford Business Group, 2006).

In sum, while Morocco has made relatively more progress than Tunisia and Algeria in liberalizing the financial sector, the Maghreb region still lags behind Central and Eastern European countries in ensuring market competition and contestability in the sector (See Figure 2.24). It should be noted that foreign direct investment by European banks has been the main driver of deeper regional integration both in the accession countries of Central and Eastern Europe and more recently in the Western Balkans. If the Maghreb countries want to emulate these successful precedents, the privatization of remaining state-owned banks and financial services companies (e.g. insurances, stock market) would be the main policy lever.

Figure 2.24 Finance Sector Reforms (Banking and Non-banking sectors), by country and by sector, 2004



Source: Authors' calculation for Maghreb countries, EBRD, 2004. Note: the financial sector progress reform index covers banking and non-banking sectors (stock exchange, insurance, mutual funds)

There could be a number of reforms that could be undertaken at the regional level. By international standards, Maghreb stock markets remain small and cross-border mergers or alliances between them would also be beneficial. But prudential regulation at the national level will be needed to prepare the sector for cross border integration. Harmonization of banking and insurance regulations and the provision for the right of establishment could also be another area for regional cooperation. There is relatively little integration among the financial institutions in the Maghreb countries, although it is more significant in banking activities. The right of establishment for national banks on a preferential basis in each others'

markets may bring some additional efficiency gains to a future Maghreb regional economic project, especially by eliminating the highly concentrated market structure.

It could be argued that the greatest economic gains are derived from multilateral efforts to financial sector liberalization. However, there are wide asymmetries in Maghreb financial services markets. This is reflected in the large gap between the unilateral liberalization programs and the commitments made by Maghreb countries under the GATS in financial services. Hence, it makes sense to implement a regional coordinated approach to financial sector liberalization while the Maghreb countries continue their gradual implementation of multilateral commitments.

2.3.2. INFRASTRUCTURE SERVICE REFORMS

This section first discusses how key infrastructural service sectors (roads, railways, airports, seaports, power and water) support trade and investment. It then assesses prospects for regional cooperation in the sector whenever appropriate. Each subsection benchmarks the relative performance of the infrastructure sectors (in terms of accessibility, cost and quality of services) in the Maghreb with comparator countries, and provides a brief overview of policy stances and reform progress made in the sectors.

In particular, the chapter focuses on reform progress in the following policy areas: better regulation of the provision of these services, removal of cross-subsidization, more efficient pricing, improved revenue collection, and separation/unbundling of activities. Three types of reforms¹⁶ are particularly important in increasing the efficiency of provision of regulated infrastructure services: (i) allowing entry of new domestic and foreign providers; (ii), where feasible, opening the domestic market to imports of such services; and (iii) the establishment of an independent regulator. The latter is likely to be a key determinant of regulatory effectiveness.

This section focuses on the following infrastructural service sectors: transport (roads, railways, maritime and air transport); telecommunications; power and water.

2.3.2.1. REFORMS IN TRANSPORT SERVICES

A) Role of the sector in promoting trade and investment

Poor transport infrastructure are reflected in higher direct transport costs and longer time of delivery leading to higher domestic production and trading costs. An improvement in a country's infrastructure can make a big difference to the costs of trading. It has estimated that a 10 percent increase in transport costs may reduce trade volume by more than 20 percent (Limao and Venables, 1999), and that the decline in transport costs accounts for 8 percent of average world growth since 1945 (Baier and Bergstrand, 2001). Better infrastructure for sea, land and air transport are associated with higher volumes of trade. A recent study shows that doubling the number of paved airports per square kilometers of territory in a country boosts imports by 14 percent. Trading with an exporting country with twice as many airports increases bilateral trade by a further 15 percent. Doubling the kilometers of paved roads per 100-square kilometers is estimated to increase trade by 13 percent (Nordas and Piermartini, 2004).

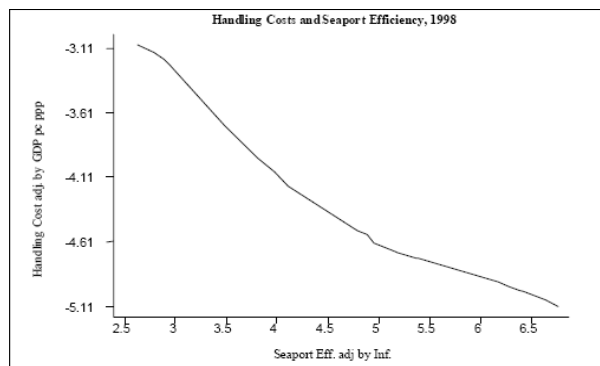
¹⁶ Reforms may and often do include privatization, but this variable is captured in the overall investment climate reform index discussed in the earlier section of the chapter. Even if incumbent providers remain state-owned, if regulators permit entry of new providers in the market, such competition can be expected to yield efficiency gains in the industry overall.

The proliferation of intra-firm trade, international outsourcing, and increasing focus by firms on managing their supply chains efficiently have highlighted new dimensions of transport costs. One of these aspects is time to market. In this respect, transport costs are different from tariffs. Lengthy shipping times impose costs that impede trade. It has been estimated that each day spent in shipping time adds 0.5 percent to the cost of a good, approximately 30 times greater than the cost associated with pure inventory holding (Hummels, 2000). Hummels estimates that doubling shipping time decreases the volume of trade by approximately one quarter to a third. Similarly, lengthy times in completing customs procedures for border crossing have a significant negative impact on trade. An increase in the median number of days required for customs clearance from five to seven reduces trade by more than 40 percent (Nordas and Piermartini, 2004).

A second aspect that affect trade costs is the efficiency of transport services. As long as cross-border transport remains more costly, time-consuming or unreliable than domestic transport, it will constitute a non-tariff barrier and will affect trade and investment prospects. Ultimately, traders and private investors care about the cost, flexibility and quality of transport services provided. For example, improving port efficiency from the 25th to the 75th percentile reduces shipping costs by 12 percent and can increase bilateral trade by 25 percent (Clark, Dollar and Micco, 2004).

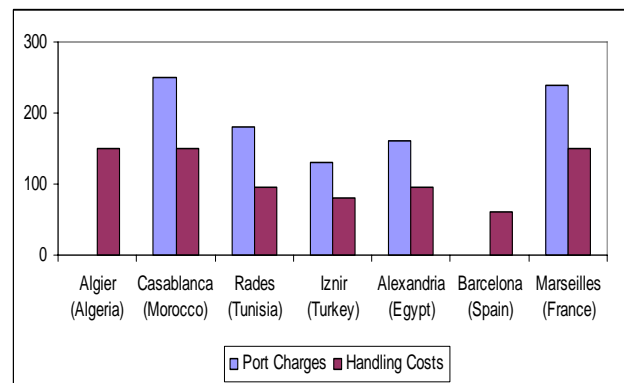
Port efficiency is inversely correlated with handling costs. Countries with inefficient seaports have higher handling costs, after controlling for income levels and general quality of the country's infrastructure (Figures 2.25 and 2.26). Bad ports are equivalent to being 60 percent farther away from markets for the average country. Inefficient ports also increase handling costs, which are one of the components of shipping costs. The activities required at the port level are crucial for international trade transactions. These include not only activities that depend on port infrastructure, like pilotage, towing and tug assistance, or cargo handling, but also activities related to customs requirements.

Figure 2. 25 Port Charges and Handling Costs (per Twenty-Foot Equivalent Container), in Euro, 2002



Source: Clark, Dollar and Micco, 2004

Figure 2. 26 Port Handling Costs and Seaport Efficiency

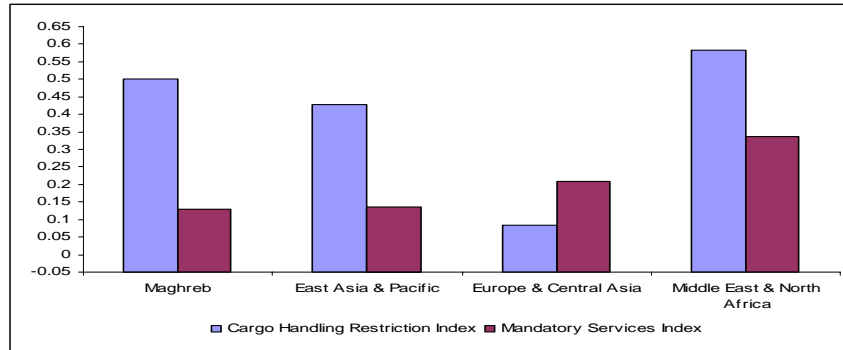


Source: Chaponniere, 2002

Regulatory restrictions in port activities can also negatively affect port efficiency. For example, in many countries workers are required to have a special license to be able to provide stevedoring services, artificially increasing seaport costs. Other deficiencies, associated with port management itself, are also harmful to country competitiveness. For example, in many ports it is almost impossible to obtain a written and accurate account of the main port procedures, and sometimes port regulations are not clear about the acceptance of responsibilities (for cargo in shed or on the quay, for instance). All of these generate unreasonably long delays, increases the risks of damage of products (in turn, raising the insurance premiums), and consequently increase costs associated with port activities. The index of cargo handling restrictions captures regulatory restrictions and special requirements imposed on foreign suppliers of

cargo handling services¹⁷. The index on mandatory port services¹⁸ captures the extent to which port services are mandatory for incoming ships. Both indices represent restrictions at port level that could limit competition. Morocco and Tunisia have higher cargo restrictions and mandatory port services than other Central and Eastern countries and the EU-15 average (Figure 2.31).

Figure 2.27 Maghreb vs comparators: Regulatory Restrictions on Port Activities, 2004



Source: Clark, Dollar and Micco, 2004. Note: Tunisia and Morocco have similar scores in both indices (0.5 for cargo handling restrictions; and 0.13 for mandatory services. Data for Algeria was not available)

Anticompetitive behavior and restrictive regulations can also increase transport costs for traders and investors. Improvements in regulatory quality, competition and liberalization in the air transport sector can reduce air transport costs significantly. Fink et al (2002) estimate that liberalizing port services may reduce prices by an average of 9 percent. Micco and Serebrisky (2004) quantify the effects of infrastructure, regulatory quality and liberalization of air cargo markets on transport costs. They find that improvement in airport infrastructure from the 25th to 75th percentiles reduces air transport costs 15 percent. A similar improvement in the quality of regulation reduces air transport costs 14 percent. In addition, open skies agreements reduce air transport costs by 8 percent.

B) Rationale for regional cooperation in the sector

There is a close relationship between trade costs and a country's ability to increase its exports and integrate into the world economy. The relevance of transport costs as a component of trade costs has been increasing as liberalization continues to reduce artificial barriers to trade. In many cases, the effective rate of protection provided by transport costs is higher than the one provided by tariffs (Clark, et al, 2004; Hummels, 1999). In addition to distance, however, many other elements influence transport costs. As explained by Limão and Venables (1999), transport costs and trade volumes depend on many complex details of geography, infrastructure, administrative barriers and the state of competition in the transport industry. Provided that distance and infrastructure-related costs are major determinants of the success of a country's export sector, immediate questions arise: what can governments do to "get closer" to markets with high import demand? Can improvements in infrastructure and regulation reduce transport costs? Is it worthwhile to implement policies designed to increase competition in transport markets? Do these policies have a quantifiable impact on transport costs?

Efficient ports are crucial for freight transport and thus for expanded trade and investment flows in the Maghreb. Maritime transport remains by far the principal means of intraregional transport of goods in the Maghreb, although the rate of growth of cargo transport both by air and by road has been faster during

¹⁷ The index takes a value of 0 if no restriction exists, 0.25 for minor restrictions, 0.5 if a joint venture condition is imposed, 0.75 if a very high national participation in the company is required, and 1 if foreign companies are simply forbidden to provide cargo handling services.

¹⁸ This index is constructed adding .125 for each of the following services if they are mandatory: pilotage, towing, tug assistance, navigation aids, berthing, waste disposal, anchorage, and other mandatory services.

the recent years. In addition, fostering competition for passenger and freight transportation would increase the contestability of markets and improve service quality. Regional cooperation in transport could also promote service exports. For example, an efficient, reliable and cheap transport system can promote tourism and other travel related services.

C) Sector Performance

In the Maghreb most trade outside the region is by sea or air. Transport by road and rail is used primarily for domestic and regional trade. But because it is needed for door-to-door delivery, the efficiency of the land leg determines the overall efficiency and costs of multimodal transport logistics.

(i) Road Transport

- **Availability.** Road density per 1000 square kilometer in the Maghreb is higher than the average in Central and Eastern Europe and in the Middle East and North Africa regions. Within the Maghreb, the road density network is comparably better in Morocco and Tunisia than in Algeria. Tunisia has an official road network of 19117 km (of which over 65 percent paved) and 192.5 km of motorway. Road transport remains the predominant transport mode, carrying about 305400 travelers and 192000 tonnes of merchandise daily. Road transport services are limited. The country's 57 hauliers account for only a 3 percent of international road transport trade. In Morocco, only a few number of companies offer transport logistic services related to road transport. Moroccan companies are generally little integrated in "supply chain management" processes, i.e. optimized logistic management, regarded as an important factor of competitiveness.
- **Cost.** Diesel fuel prices in the region are lower than the average in Central and Eastern Europe though higher than the MENA average. Fuel prices are much lower in Algeria (USD 0.15 per liter) than in Tunisia (USD 0.39 per liter) and Morocco (USD 0.79 per liter). But in addition to diesel costs, regulatory barriers in the road transport sector can also raise trading costs. In Tunisia, a survey carried out in 2003 revealed a number of regulatory barriers to cross-border movement of trucks: foreign trucks are not allowed to drive on weekends and public holidays; paperwork requirements may be changed without prior notification; and foreign trucks unloading in a country must return to the their country of origin without cargo; there are fiscal charges and other surcharges on road transport, and enforcement of technical regulations for weights and dimensions applied to foreign trucks (Zarrouk, 2004).
- **Quality.** The quality of roads in the Maghreb is higher than the average in East Asia, although lower than in Central and Eastern countries. In Algeria, the road network infrastructure lacks adequate maintenance. East-west traffic uses the northerly route, on which there is frequent congestion. The east-west motorway project that has been included in the recent Algeria's public expenditure program will contribute to improve the quality of transport by road. Tunisia, by contrast, enjoys a well developed road infrastructure and in good condition. The quality of road transport services is weak in Morocco. This sector is dominated by micro-enterprises that are not financially viable, lack investment capabilities and do not respect the regulation in force. The average age of the truck fleet is 13 years and these trucks are not generally covered by transport insurance. Fast and reliable road transport is served by a very small number of companies. Foreign companies find it difficult to find companies sufficiently reliable to sub-contract transport services and often invest themselves in this part of the production and distribution chain (World Bank, 2005).

Table 2.7 Maghreb vs comparators: Road Transport Indicators, 2004

	Access		Cost	Quality
	Road Density (km/1000 people)	Road Density (km/1000 sq km)	Pump price for diesel fuel (US\$ per liter)	Paved Roads (% of total roads)
Algeria	3.5	43.7	0.15	68.9
Morocco	2.0	129.3	0.70	56.4
Tunisia	2.0	122.3	0.39	65.4
East Asia & Pacific	1.1	126.5	0.40	32.3
Europe & Central Asia	2.9	59.2	0.90	74.0
Middle East & North Africa	0.3	11.1	0.15	66.3

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. Source: WDI, 2005 and Estache and Goicoechea, 2005.

(ii) Railway Transport

- **Availability.** Access to railway is lower in the Maghreb relative to Central and Eastern Europe. Algeria has a rail network 4000km long (rail links are mostly situated along the coast and serve the main port towns). Relatively more goods are transported using rail in Morocco compared to Algeria or Tunisia, despite the higher rail-line density in the latter (Table 2.8).
- **Cost.** Tariffs for passenger and freight rates are slightly higher than the average in the Middle East and North Africa region, although they are more affordable than the average rates in Central and Eastern Europe.
- **Quality.** The overall quality of railway services in Maghreb countries is perceived to be lower than in Central and Eastern European countries. In Algeria, the railway network is small, only about 300 km have been built since the country became independent in 1962. Upgrading programs (replacement, modernization, and electrification) will be started on a total of 5500 km of railway line. With the inclusion of the east-west line, these railway projects will make the upland regions accessible by linking dozens of small and medium sized towns to the rail network. Upgrading good lines will also help in promoting trade. While Algeria can afford to finance these large scale infrastructure projects, delays in implementation have typically hindered the execution of railway projects.

Table 2.8 Maghreb vs comparators: Railway Transport Indicators, 2004

	Access			Cost		Quality	
	Railways, passengers carried (million passenger-km)	Rail Lines Density (km/1000 people)	Rail Lines Density (km/1000 sq km)	Railways, goods transported (million ton-km)	Avg. Passenger Rail Tariff (PPP cent/passenger-km)	Avg. Freight Rail Tariff (PPP cent/ton-km)	Commercial Perception of Railroad Services Index
Algeria	950	0.11	1.50	1945	-	-	-
Morocco	2614	0.06	4.27	5535	7	8	3.2
Tunisia	1242	0.19	12.29	2173	8	6	3.7
East Asia & Pacific	2017	-	-	2662	5	13	3.7
Europe & Central Asia	2227	9.3	13.66	9675	911	1114	3.7
Middle East & North Africa	1265	0.1	9.6	2364	5	6	3.5

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. Source: WDI, 2005 and Estache and Goicoechea, 2005

(iii) Maritime Transport

- **Availability.** Container port traffic is relatively lower in the Maghreb compared to other regions. This is also reflected in the relatively smaller size of the region’s merchant fleet. Tunisia has the lowest merchant fleet in the Maghreb. Morocco’s geographical position on the north-western tip of Africa and its 3000 km of Mediterranean and Atlantic coastline make maritime transport a national priority. Some 90 percent of Morocco’s trade goes through its ports, and the Moroccan merchant navy fleet holds a high rank among Arab and African maritime transporters. With

regard to port infrastructure, Algeria has 10 commercial ports, two of which specialize in oil and gas and 35 fishing ports. Morocco has 26 ports – 6 tourism harbors, 9 fishing ports and 11 ports for international commercial activities. The port of Casablanca is the country's largest port, accounting for 40 percent of overall national traffic. Tunisia's main port, Rades, suffers from congestion, caused by the slowness of port operations, which are carried out exclusively by the public sector company STAM.

- **Cost.** Transport costs include freight charges and insurance on shipments (customarily added to freight charges data), holding costs in transit, port handling costs, vehicle renewal costs and other general charges. Since the availability of direct measures of transport costs is limited in coverage or by its private nature, economists generally measure transportation costs using various proxies:
 - **Direct transport costs.** Freight costs, including insurance costs (proxied by cif/cob ratios) are higher in the Maghreb than in other regions. Morocco's freight costs are the highest in the Maghreb, at 17.4 percent in 2004. Although widely used, the cif/fob ratio is quite imprecise¹⁹. More accurate data on maritime transport costs in the Maghreb is provided by Chaponnière (2002) and Drewry (2005). The total costs of shipping a container of twenty feet equivalent is about 400 euros from Casablanca-Marseille, whereas it is about 250 euros from Tunis to Marseille. These high maritime transport costs are partly explained by the high port handling costs. Morocco's port handling and charges are amongst the highest in the Maghreb. Port charges (in USD per 20 fcl) are estimated at 248 in Casablanca (Morocco) compared to 174 in Rades (Tunisia). Port handling costs (also in USD per 20fcl) are about 147 in Casablanca and 98 in Rades.
 - **Shipping times.** Morocco and Tunisia have stepped up efforts to improve customs inspection and clearance activities, it takes 8 days on average between the arrival of the goods and its exit, whereas this time is half in Tunis owing to the computerization of customs clearance processes (World Bank, 2005). Yet, Maghreb countries are still much less efficient than many countries in Central and Eastern Europe. In Estonia and Lithuania, for example, customs clearance procedures only require 1 day (World Bank, 2006). Containerized shipments and 'rolling on, rolling off' (Ro/Ro) transshipment help reduce the load and unload time and hence reduces shipping times. While almost all lines between Europe, the US, and Asia are containerized, only 35 percent are in Morocco and 30 percent in Tunisia (Chaponnière, 2005).
- **Quality.** As we saw earlier, Tunisia and Morocco have higher cargo restrictions and mandatory port services than other Central and Eastern countries and the EU-15 average. Cargo restrictions are associated with higher port handling charges and lower port efficiency. This is particularly evident in Morocco. A recent study shows that maritime transport services are highly protected in Morocco in comparison to most emerging countries. Existing restrictions generate an extra cost

¹⁹ A proxy that is often used in the economic literature is the 'cif/fob' ratio. The f.o.b (free on board) price measures the cost of an imported item at the point of shipment by the exporter as it is loaded onto a carrier for transport. The c.i.f (cost insurance freight) price measures the cost of the imported item at the point of entry into the importing country, inclusive of the costs of transport, insurance, handling, and shipment costs, but not including customs charges. The higher the value of the ratio, the higher the share of transport cost in the value of traded goods. However, this ratio should be read with caution. First, there are a series of technical problems with the estimation of cif/fob values of trade that are simply solved through data imputation. For example, loading or unloading costs are included in the cif values depending on the country. This renders the quality of the data very poor. Second, the cif/fob ratio is subject to variations due to compositional changes in the types of goods traded, the set of partners with which a country trades over time, and in the choice of the mode of transport. Third, the ratio underestimates the recent fall in transport freight rates due to technological innovations and the reduction in air transport costs.

for foreign trade operators of about 72 percent compared to what would prevail under full liberalization (Achy, 2005).

Table 2.9 Maghreb vs comparators: Seaport Transport Indicators, 2004

	Access		Cost	Quality
	Container port traffic (TEU: 20 foot equivalent units)	Total Merchant Fleet (in 000 grt)	CIF/FOB Freight cost (% of imports)	Commercial Perception of Port Facilities Index
Algeria	354724	862	9.3	-
Morocco	560682	523	17.4	3.7
Tunisia	230671	175	5.2	4.4
East Asia & Pacific	102039032	1766	9.9	4.2
Europe & Central Asia	-	1011	4.5	3.6
Middle East & North Africa	1039369	832	-	4.1

Note: The most recent data is used beginning with 2004. For commercial perception indices, 1=worst and 7=best. Source: WDI, 2005, Review of Maritime Transport 2005 and Estache and Goicoechea, 2005.

(iv) Air Transport

(i) Sector Performance:

- **Availability.** Access to air transportation is far lower in the Maghreb compared to other regions. Undoubtedly demand-side factors have had an impact on air transport in the region (including: growth of international and regional tourism; the continuing global trend toward lower air fares; the growth of the share of high-value/low-bulk products in the manufacturing and trade of countries; the rise in share of services in total output). Supply inelasticities have however resulted in only modest growth in the region's airlines. Maghreb's main airlines have remained small, in spite of recent reforms in the sector. None of the Maghreb airlines are included in the top thirty scheduled air carriers in the world, in terms of freight and mail ton-kilometers performed annually. The shape and size of air transport systems are not only affected by infrastructure and geographical limitations but also by government regulations. Morocco's air transport liberalization reforms have dramatically increased availability of flights²⁰.
- **Cost.** Available comparative data show that the cost of air transport is the highest in Tunisia, followed by Morocco. Algeria's costs are the lowest. However, as it is the case in other infrastructure services, looking at costs without netting out the amount of government subsidies to the sector is misleading. Morocco's recent liberalization efforts in 2004 and 2005 are having an impact on air transport tariff declines that are not reflected in Table 2.10 below. Liberalisation had a quick effect, with the number of airline companies flying to Morocco up substantially, including many charter and low-cost airliners. Facing increased competition, the national carrier RAM has undertaken a restructuring process, launching a low-cost affiliate in 2004 called Atlas Blue.
- **Quality.** In 2004, the quality of air transport services was perceived by businesses to be slightly higher in Tunisia than in Morocco. It is expected that Morocco's recent reforms will also have a positive impact on the quality of air transport services.

²⁰ French Corsair and Air Horizon, Spanish Air Europa, German LPU and Air Berlin and British First Choice all opted to include Morocco among their destinations. Middle Eastern companies have also started to see Morocco as a gateway for the whole sub-Saharan African region. Morocco's freight traffic has also been affected by the reforms in the sector. RAM, which annually transports some 30,000 tonnes, has been multiplying efforts to develop this segment. A call center dedicated to cargo was inaugurated by the company to better respond to customer expectations. Two bi-weekly flights were also added to bolster the busy Casablanca- Paris route, along with the introduction of a back-up solution in the event of cargo aircraft unavailability. Connections to North America have also been strengthened, as the introduction of the B767 has increased available capacity to 64 tonnes from 24 tonnes, spread out over eight weekly flights (five to New York and three to Montreal).

Table 2.10 Maghreb vs comparators: Air transport Indicators, 2004

	Access			Cost		Quality		
	Air transport, passengers carried (millions)	Air transport, freight (million tons per km)	Air transport, registered carrier departures worldwide	Daytime landing and takeoff charges (USD)	Charges related to passenger carried (USD)	Number of first class airports per one million population	Number of first-class airports per 100,000 km square	Commercial Perception of Air Transport Services Index
Algeria	3.2	21.44	48531.00	734	125	0.53	0.71	-
Morocco	3.0	61.90	41526.00	2020	2137	0.34	2.24	4.8
Tunisia	1.9	20.29	20554.00	2120	2517	0.60	3.86	5.4
East Asia & Pacific	203.3	13730.1	2078864	1168	1942	0.33	1.69	0.0
Europe & Central Asia	65.1	2138.5	984537	2765	2818	0.29	2.28	3.9
Middle East & North Africa	34.0	1103.5	357602	884	2236	0.69	2.08	4.9

Note: The most recent data is used beginning with 2004. For commercial perception indices, 1=worst and 7=best. Cost relates to B767-300 aircraft engaged in international operations. Source: WDI, 2005; Estache and Goicoechea, 2005; ICAO 2005

D) Reform Progress

The world has witnessed important reforms in air transport over the past few years. Among the more significant of these have been the increase of open skies agreements, burgeoning of transnational alliances and cross-ownership between companies, a single European aviation market and similar attempts in Latin America, liberalization of airport services in the EU, concentration of the industry, growing intervention of competition authorities, the bankruptcy of certain national carriers, development of activities of air cargo integrators, and privatization of airlines and airport services.

The trend towards privatization of national airlines is accelerating in the Maghreb, allowing it to catch up with much of the rest of the globe. Worldwide, trends toward privatization of airline companies have strengthened and become more general. Over seventy-percent of airline companies now have a majority of private capital, with state-owned flag carriers becoming rarer. Since the mid-nineties, Algeria and Morocco targeted their national companies for privatization (Air Algerie, Royal Air Maroc). The Tunisian air line (TunisAir), is 80 percent state-controlled after a 20 percent divestiture. It is also significant to note that Maghreb governments no longer invariably come to the rescue of distressed national airlines and some closures have been allowed to take place.

Morocco is the country that has made the strongest progress in liberalizing the transport sector in the Maghreb:

- (i) **Road sector reforms.** In March 2003 the government introduced road transports reforms aimed at upgrading the whole sector and open it to foreign competition. In 2004, a consortium led by the French RATP took over Casablanca's public transportation company (RATC), which was nearly bankrupt after years of mismanagement.
- (ii) **Railway reforms.** The government of Morocco initiated a restructuring program for the public railways company (ONCF) during the late 1990s. In return for an injection of funds, the company committed itself to restoring financial equilibrium within five years. This was achieved primarily through staff downsizing. The restructuring of ONCF was a prelude to the sector's liberalization. Additional steps towards the liberalization of the railway sector include the change to the regulatory framework governing the ONCF so it is no longer a public agency but rather a public company controlled by the state under the name of *Société Marocaine des Chemins de Fer* (SMCF). The aim behind this change is to provide the management with greater financial autonomy, as well as bring some of the commercial and marketing dimensions that are often lacking among state-owned utilities. The state plans to sign a 35-year contract with the SMCF to run the national railway network. Other aspects of the liberalization process include granting private operators the right to operate certain networks that are unused by the SMCF, which could

be used for tourism, and other lines that could be used for rail freight. At a later stage, the opening up of the SMCF's capital to private operators is also envisaged.

- (iii) **Maritime transport reforms.** The Moroccan authorities have undertaken changes in the regulatory framework governing the maritime transport sector, but it remains highly restricted to competition. The first step (as stipulated by Law No. 15 of 2002) was to transform the state port authority, *Office d'Exploitation des Ports* (ODEP) into two entities: a public commercial company under the name of *Société des Exploitations des Ports* (SEP) and an independent supervisory body called *Agence Nationale des Ports*. ODEP's internal upgrading program reached an advanced stage in 2004, with financial stability achieved as showed by the published results. In 2004 the government initiated the restructuring of the state-owned maritime company Comanav, which controls one-third of the national maritime transportation sector. In 2004, the company posted positive results for the first time since the early 1990s.
- (iv) **Air transport reforms.** The introduction of partial air transport liberalization was a major turning point for Morocco's airline industry in 2004. It had two main objectives. The first of these was to make Casablanca Mohammed V Airport a hub for the entire North and West African regions. To that end, the airport authority, *Office National Des Aéroports* (ONDA), invested considerably to extend and upgrade existing airport infrastructure. The second objective was to attract 10m tourists by the year 2010. An important regulatory development in this sector includes the recently signed civil aviation agreement (open skies agreement) between the EU and Morocco. Before February 2004, flagship carriers could only operate scheduled flights to Morocco (which were a matter of bilateral agreement between governments) and charter flights could only operate starting outside Morocco. Internal air transport, now shared by *Royal Air Maroc* (RAM) and *Regional Airlines*, is also scheduled for liberalization by 2005. The unfinished domestic reform agenda in the air transport sector includes the liberalization of licensing regimes; furthering the privatization/restructuring of airports and the flag carriers; introduction of competition in ground handling and airport management.

Since the early 2000s, Tunisia has made some progress in reforming the maritime transport sector and modernizing customs but open entry is still not allowed in the transport sector. Over the last few years, Tunisia has developed modern shipping and port technologies, modernized customs procedures, and set up data exchange systems to facilitate trade logistics. However, it has not made progress in the liberalization of the sector. Tunisia and Algeria could follow Morocco's example in advancing the liberalization of the transport sector.

In sum, remaining reform challenges at the national level include: (i) privatizing port services and promoting private investments in ports; (ii) facilitating access of foreign investors to trade-related transport and further reduce red tape at the border; (iii) modernizing and restructuring the railway state-owned enterprises; (iv) liberalizing airport and air transport services.

There are a number of transport reforms that could be adopted at a regional level. A regional agreement on common shipping policy principles could help in fostering competition and improve the quality of transport services to producers. Shipping companies in Morocco identify crucial elements to be incorporated in a regional economic integration project: commitments to reduce measures either favoring the use of national carriers; or restricting/regulating access to port and port services; reduction of abusive tariffs for transshipment and unjustifiable liability claims by customs; and simplification of cumbersome administrative and port procedures. There is also a need for regional cooperation that involves some harmonization of transit charges as well as elimination of excessive tariffs that increase the administrative cost of trade in Maghreb countries. Turning to air transportation, the Maghreb countries could consider promoting connections between Maghreb networks and the EU networks. Maghreb transport networks

cannot stand in a competitive market against giant international transport consortia. An integrated network of multimodal port and airport platforms, and their connection to present or planned land transport networks is a key factor in promoting trade and investment opportunities in the Maghreb. A common regulatory framework could be envisaged so as to provide a harmonized business environment and a level playing field between carriers operating in the Maghreb. Maghreb countries could also consider an open sky agreement between the region and the EU. Other regional trading blocs (EU, Mercosur, Andean Pact) have undergone open skies agreements. There is also scope for regional integration in harmonization of fiscal charges (such as excise duties on fuel, road use charges, and tolls); technical regulations (weights, dimensions of specific trucks); allow for cabotage (foreign trucks return loaded to original destination).

2.3.2.2. REFORMS IN TELECOMMUNICATIONS

A) Role of the sector in promoting trade and investment

The significance of telecommunications for the development of a modern economy-in which services, information, and speed play a critical role-is widely acknowledged. On the one hand, the telecom sector is important in its own right-thanks to its contribution to GDP, employment, foreign direct investment, and stock market capitalization. On the other hand, it serves as an input into most other economic activities and as an important connector to the global economy. A recent study finds a strong and positive correlation between the density of fixed and mobile phone lines and trade relative to GDP (Jansen and Nordas, 2004).

Good telecommunications promotes trade in services, investment and just-in time delivery of goods. Improvements in the telecommunication sector can have spillover effects in exports of other services. Transport logistic services, for example, are intensive in information. Fast and reliable information processing is a prerequisite for the efficient flow of goods, since transport is ‘perishable’ – the spare capacity of a plane or a ship cannot be sold once the trip has been made. Information flows in transportation are facilitated by a variety of ICT applications- such as inventory and warehouse management systems, route optimization, tracing software, and satellite-based fleet management systems. Another type of telecom services with good export potential in the Maghreb is the call center industry²¹.

Telecommunication sector reforms are associated with better access and quality of services. Having seen that the quality and cost of telecommunication play an important role in both the volume of trade and the pattern of international specialization, the question is how telecommunication services can be improved through improved regulation. Fink et al (2003) found that privatization, competition and the introduction of independent regulators had a positive impact on telephone penetration and productivity in the telecommunications sector. The study also found that countries that introduced the full package of reforms did systematically better than those that confined themselves to partial reforms. We also find that telecommunication sector reforms aimed at improving competition and market contestability are associated with lower telephone faults (per 100 main lines), after controlling for income (Figure 2.28). These reforms are also associated with higher number of mobile subscribers (per 1,000 habitants), also after controlling for income levels (Figure 2.29).

²¹ Morocco and Tunisia have their own well-developed call centre industries. In the Algerian telecoms sector, the call centre industry still in its infancy. The legal framework, which was established in mid-2005, imposes significant taxes on operators. The only takers for Algeria’s call centers so far have been *Algérie Télécom*, running a small commercial operation and private GSM operators serving their own customers.

Figure 2.28 Telecommunication reforms and mobile phone subscribers (per 1,000 people)

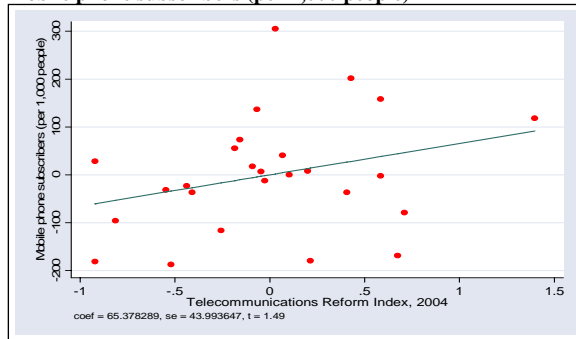
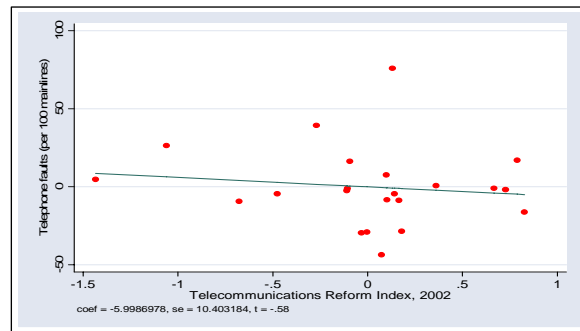


Figure 2.29 Telecommunication reforms and telephone faults (per 100 main lines)



Source: Authors calculations, based on WDI (2005)

B) Rationale for regional cooperation in the sector

Regional approaches to reforms in the telecommunication sector is less evident than in other services, but there is still scope for regional cooperation to exchange best practice between regulators and foster trade in IT-enabled services. In telecommunications, there seems to be little value added in regional integration (Muller-Munsch, 2005). A priori the case for a multilateral approach to integration in this area is stronger than for regionalism as GATS is well developed in this area and the geographic proximity does not play an important role as they do for transport, power and water sectors. However, other regional trading blocs, such as the ASEAN countries, have signed regional cooperation agreements to exchange of best practice between policymakers and regulators foster trade in IT-enabled services and the cross-border provision of content (i.e internet portals).

C) Sector Performance

(i) Telephone services

- **Availability.** The fixed telephone density is lower in the Maghreb than in other regions. It is particularly low in Algeria and Morocco, at around 70 and 44 fixed lines per 1,000 people, respectively (Table 2.11). Like other regions, the Maghreb has a relatively higher number of mobile phone users compared to fixed line subscribers. Mobile telephony is the sub-sector where competition and private participation are most advanced in the Maghreb. In Morocco, increased competition has driven the number of mobile subscribers past the 12 million mark during 2005, compared with less than 400,000 in 1999. In sharp contrast with the mobile market, the Moroccan fixed network has declined since 1999. Although it has been seeing a recovery since 2003, driven by soaring demand for Internet access and ADSL broadband services. Tunisia has the highest number of fixed line and mobile telephone users in the Maghreb.
- **Cost.** The cost of making calls is still comparatively higher in the Maghreb than its comparators in MENA and other regions. Despite higher cost, the Maghreb region fare better in the quality of its communication infrastructure, judging from the lower number of telephone faults (per 100 habitants) than other regions. The costs of local calls are higher in Morocco than in Algeria and Tunisia. Cost comparisons can be misleading when market competition is restricted. In Algeria, until recently, telephone tariffs were not cost-based, but administratively decided. In other words, the few that were connected to the telephone network benefited from most of the cross-subsidies. Intensified competition in recent years has resulted in lower international phone calls, a decrease that could be intensified in the long-term by the four internet providers offering international phone calls using voice over internet protocol. Today it is cheaper to make international calls

from Morocco than in the other two Maghreb countries. Lower cost of domestic calls may partly explain why Tunisia is leading the region in telephone subscription.

- **Quality.** At the beginning of the 1990s Algeria had a very poor quality of telephone services (with frequent faults and up to seven years of waiting time for telephone connections). Its reform program initiated in 2000 yielded some positive results, as evidenced by the relative low average ratio of telephone faults in 2004, lower than Morocco and Tunisia. Yet, the unmet demand is still much higher in Algeria than in Morocco and Tunisia. In addition, the quality of mobile services has long been hampered by interconnectivity problems between the networks.

Table 2.11 Maghreb vs comparators: Telephone Services, 2004

	Access		Cost				Quality		
	Telephone mainlines (per 1,000 people)	Mobile phone subscribers (per 1,000 people)	Price basket for residential fixed line (US\$ per month)	Price basket for mobile (US\$ per month)	Cost of Local Phone Call (US\$/3 minutes)	Cost of Cellular Local Call (US \$/3 off peak minutes)	Telephone average cost of call to US (US\$ per three minutes)	Telephone faults (per 100 mainlines)	Unmet Demand (% of main telephone lines in operation)
Algeria	70.7	144.7	10.2	5.1	0.04	0.78	2.08	6	39
Morocco	43.9	313.1	16.0	18.4	0.17	0.33	1.41	25	0
Tunisia	121.2	358.7	6.8	4.7	0.02	0.41	2.28	30	11
East Asia & Pacific	187.9	243.5	5.1	4.5	0.05	0.42	1.2	32	13
Europe & Central Asia	241.7	457.5	10.3	3.5	0.07	0.40	1.61	41	8
Middle East & North Africa	90.6	128.6	8.1	4.9	0.06	0.52	1.66	-	26

Source: WDI 2005, ITU 2005 and Estache and Goicoechea, 2005. Note: Unmet demand is the ratio of telephone mainline listing list to the total main lines in operations. Note: The most recent data is used beginning with 2004.

(ii) Internet and Multimedia Services

- **Availability.** Internet usage in the Maghreb is comparable to that of East Asian regional average but still falls short by almost half of that in Central and Eastern Europe. Personal computer as a ratio of the population is also lower than in other regions. Within the Maghreb region, Morocco ranks at the top in terms of internet users and internet traffic growth followed by Tunisia, which also happens to do better in personal computer use. Internet use in Algeria is still limited and lags significantly behind that of neighboring countries. There are currently around 100,000 registered internet subscribers, whereas the actual number of internet users is estimated to be around 1.5m, a penetration rate of less than 5 percent.
- **Cost.** The cost of accessing the internet for the Maghreb is comparable to other regions. Despite having a relatively higher number of internet users in the region, the average price basket for internet services in Morocco at USD 25.3/month is higher than Algeria and Tunisia (Table 2.12).
- **Quality.** Maghreb fares poorly compared to other regions in terms of quality of internet services, as proxied by the ratio of broadband subscribers and international internet bandwidth. Within the Maghreb, the quality of internet infrastructure is better in Tunisia, followed by Morocco. Algeria has the lowest quality of internet infrastructure in the region.

Table 2.12 Maghreb vs. comparators: Internet and Multimedia Services, 2004

	Access				Affordability	Quality	
	Internet users (per 1,000 people)	internet host (per 1000 people)	personal computers (per 1000 people)	Households with television (%)	Price basket for Internet (US\$ per month)	Broadband subscribers (per 1,000 people)	International Internet bandwidth (bits per person)
Algeria	26.1	0.03	7.5	97.5	17.8	1.1	4
Morocco	117.4	0.13	16.3	76.0	25.3	2.1	26
Tunisia	84.1	0.04	33.5	90.2	17.3	0.7	44
East Asia & Pacific	73.8	1.15	39.6	79.6	19.9	13.4	48
Europe & Central Asia	138.0	5.38	77.2	91.8	19.8	2.4	210
Middle East & North Africa	41.5	0.13	19.6	88.0	24.5	0.2	15

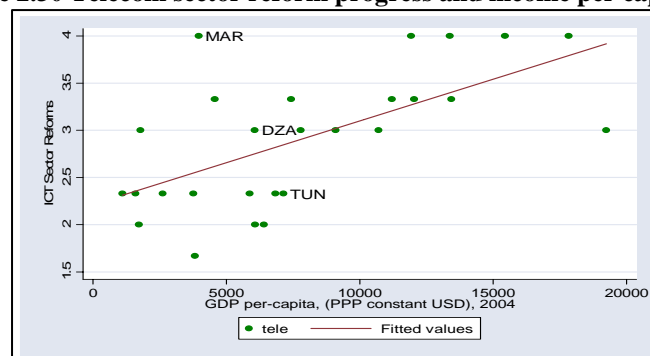
Source: WDI 2005, ITU 2005, World Bank ICT at a glance tables. Note: The most recent data is used beginning with 2004.

D) Reform Progress

Over the past decade, best practices in telecom sector policy reforms have emerged, including: the separation of regulatory from operational functions and the creation of independent regulators; the privatization of the incumbent and the gradual opening of the fixed-wire network to competition; the tendering of competing GSM licenses; and the full liberalization of value-added services (e.g. data, internet). An analysis of links between the policy framework and sector performance in 86 developing countries for the period 1985 to 1999 yielded some important conclusions (Fink et al. 2002). It found that the effects of policy reforms on sector performance outweighed those of technological progress; that comprehensive reforms increased performance much more than partial reforms; that the positive effects of private participation are reinforced through competition; and that the sequencing of reforms matters, especially introducing competition prior to privatization.

With the exception of Tunisia, Maghreb countries have made stronger reform progress than it would be expected by their income levels. The progress made by Tunisia in liberalizing its telecommunication sectors is below what it would be expected given the country's level of income. Algeria's relative progress is slightly higher than it would be expected given its income level. By contrast, Morocco's reform progress is much greater than predicted by its income level (Figure 2.30). In spite of significant progress in the mobile sector, Algeria and Tunisia still lag global reform trends in telecommunications, particularly regarding the liberalization of the fixed network and the privatization of state-owned telecom companies.

Figure 2.30 Telecom sector reform progress and income per capita



Source: Authors' calculations, based on WDI, 2005

- Morocco, where telecom reforms started are most advanced, shows that a combination of domestic policy measures and foreign investment can lead to impressive results. The telecom sector law, adopted in 1997, laid the foundations for private participation and competition. It defined licensing principles, established the independent regulator (ANRT) and provided for the privatization of the incumbent operator. The chief contributor of the progress in the sector has been the mobile sector. In 1999 a second mobile phone license was awarded to a consortium led by Telefonica of Spain and Portugal Telecom. In 2000 Morocco became the first in the region to sell minority shares in telecommunications. In 2001, the government sold 35 percent of *Maroc Telecom* to Vivendi Universal of France. Incumbent operator, *Maroc Telecom* was partially privatized in 2001. Two Third Generation (3G) mobile licences are expected in 2006 and the sale of a further 25 of *Maroc Telecom* in 2007. The Moroccan success story not highlights the importance of a well-sequenced reform program a predictable regulatory framework and a transparent tender process. The privatization of the Moroccan telecommunications sector has raised fiercer competition among the present mobile and fixed line licenses operators, and has introduced full competition in the internet marketplace. Today, every government office has a website. Moroccan newspapers edit on-line, airplane tickets are reserved through internet, several

private companies sell on-line, and banks and stock exchange continue to improve their on-line services.

- In Tunisia, the telecommunications market has long been characterized by the monopoly of *Tunisie Telecom* (TT) on fixed telephony, mobile telephony and internet services, and the extensive role of the state as a policy-maker, regulator and operator in the sector. Since the mid 1990s, however, the government has initiated a cautious program of telecommunications liberalization. In 1997, it signed the WTO Agreement of Basic Telecommunications Services, thus committing itself to gradually liberalizing its telecommunications sector. For all services, however, foreign ownership was capped at 49 percent, and foreign ownership of TT was only permitted to 10 percent until 2002. In January 2001, Tunisia enacted a new Communications Code, which enabled the opening-up of the market to private companies by introducing a licensing regime for the supply of telecommunications services and networks. In addition, the Code created two regulatory agencies, one in charge of the regulation of the telecommunications sector and the other in charge of spectrum management. However, the code fell short of setting up an independent regulatory agency, since significant lawful capacities were left to the ministry, with regard to license awarding, dispute settlements and application of sanctions. Competition in the Tunisian mobile sector started towards the end of 2002, when the second mobile operator, *Orascom Telecom Tunisia* launched its services. In 2005, the ministry initiated the liberalization of the fixed line market, introduced further competition in the mobile market and initiated a bidding process for a 35-stake in *Tunisie Telecom*.
- In Algeria, the regulatory reforms in the telecommunications sector did not start until 2000. By the end of the 1990s, while many developing countries had already liberalized their telecommunications markets, Algeria still managed its telecommunications sectors as public property²². The Ministry of Post and Telecommunications set the policy, enforced regulation and was in charge of service provision. In 2000, the Algerian authorities launched a reform program, aimed at separating operational activities from policy formulation and regulation and investing in telecommunications infrastructure. The enactment of the law 2000-03 led to the creation of a new regulatory body (ARPT) and two public entities that were established to take over the operational activities from the ministry: *Algérie Telecom* (AT) and *Algérie Poste*. Both entities were kept vertically integrated. In 2002, Algeria liberalized the mobile market, which is currently served by 3 operators: *Algeria Telecom*, *Orascom Telecom Algeria* and *Wataniya Telecom Algeria*. In spite of the progress achieved on the mobile telephone market, competition in the Algerian telecommunications sector remains low and market structures are still at an immature stage. State-owned enterprises and government agencies still represent the bulk of demand for IT products and services.

2.3.2.3. REFORMS IN THE POWER AND WATER SECTORS

A) Role of the sector in promoting trade and investment

The formal definition of what constitutes ‘trade’ in the electricity and water sectors is not straightforward. Multilateral trade discussions have thus far a limited role in the liberalization of these sectors. Horizontal GATS commitments on commercial presence (rights of establishment, entry to foreign investment) are increasingly relevant for trade via mode 3. However, important impediments to cross-border trade in electricity and water (mode 1) and market integration arise from regulatory issues, such as

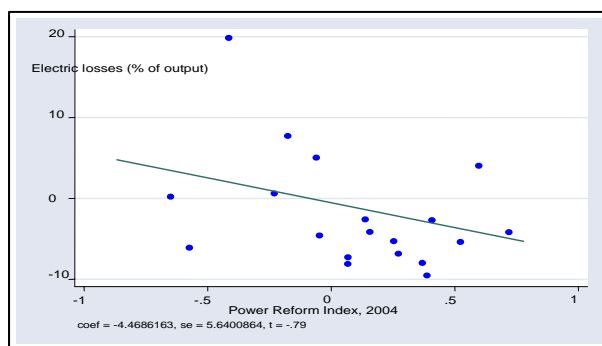
²² The public monopoly was breached by the enactment of a decree 1998 liberalizing the provision of internet services. However, despite that breach only few private operators entered the internet market.

vertical integration, conditions of network access, and state-owned monopolies (see Muller-Munsch, 2005).

Reforms in power and water sectors can attract FDI and trade. Energy and water are two sectors where improved governance and regulatory quality has been shown to dramatically improve the ability of emerging economies to attract foreign direct investment and stimulate trade. A recent USAID study shows that sector reforms aimed at introducing market competition and contestability are essential to attract substantial investment in the power sectors. However, these reforms do not affect all investments in the power sector in the same manner. Regulated assets like distribution companies and generation plants operating under long-term power purchase agreements (PPA) may see a fair amount of investment with relatively low improvements in the sector regulatory framework. However, investment in new generation, and in particular competitive new generation, is extremely sensitive to the regulatory framework and reacts markedly to every improvement in regulations.

Power sector reforms are associated with better quality of electricity services. Progress in power sector reforms aimed at improving competition and market contestability in the sector are positively correlated with lower electric transmission and distribution losses (as a share of total electrical output), after controlling for income levels (Figure 2.31)

Figure 2.31 Power Sector Reforms and Electric Losses (in percent of output)



Source: Authors' calculations, based on WDI, 2005

B) Rationale for pursuing deeper integration at the regional level

Economic benefits of deeper regional integration in the power markets could be substantial. First, cross-border power transfer for emergency support and peak demand allows countries to lower expensive reserve margins (around 25 percent of generation capacity). This reduces investments needs and increases capacity utilization. Second, economies of scale, different load profiles, and complementary energy endowments can give rise to further gains from trade (e.g. Algeria could export electricity to Morocco). Third, private investors tend to be more willing to invest in large markets. The benefits of the Maghreb regional integration process could potentially include increased reliability in electricity and water supply; lower operating costs; reduced needs for additional-capacity investments, especially in generation; improved opportunities for intra- and inter-regional trade, including peak load by hydroproducers in the region; and lower prices for the end customers.

Regional cooperation in electricity and water distribution could also help achieve regulatory economies of scale and scope. It could also facilitate market competition in the Maghreb. Geography matters in the supply of water and electricity distribution services. Deeper forms of integration can only be achieved between neighbors, namely trade through cross-border interconnections and the establishment of cross-border markets. The modest size of some Maghreb countries can create a challenge to exploit the economies of scale and scope- and hence reduced costs- that often are generic to the provision of utility

services. Cross-border supply of such services can provide opportunities to realize such economies. Regional power and water markets could also facilitate domestic reforms in the Maghreb, especially the introduction of market competition. Most national electricity and water markets lack the critical mass (small markets) to make effective competition feasible and industry unbundling worthwhile.

The EU and the SEE regional integration of power markets offer two interesting examples of regulatory cooperation in the sector. EU regional integration in the power sector has a dual objective: the promotion of competition and more transparent regulation; and the removal of barriers to cross-border integration. Several regional institutions have been established to help in achieving these objectives: (i) the *Council of European Energy Regulators* facilitates regulatory cooperation and exchange of regulatory practices; (ii) the *European Association of Transmission System Operators* ensures the collaboration between network operators, working together on issues such as cross-border pricing or congestion management; (iii) at the technical level, *the Union for the Coordination of the Transmission of Electricity* has been responsible for maintaining the stability and integrity of the continental European grid. The development of sub-regional power markets, such as the *European Energy Exchange*, has been another element in the creation of EU regional electricity market structures. The process of regional integration of energy markets in Southeastern Europe (SEE) is also worth noting. All SEE countries, together with Turkey, have committed to undertaking steps toward opening their energy markets. These steps include adopting energy strategies; setting up independent regulators; unbundling industry; and developing grid codes, cross-border transmission pricing, congestion management principles, and trading and commercial codes (Muller-Jentsch, 2005).

C) Sector Performance

- **Accessibility.** The population of Maghreb countries enjoys relatively good access to electricity, with the exception of Morocco. Water supply and sanitation services are easily accessible in all the Maghreb countries. In Tunisia coverage is universal in urban areas and service 24 hours. In Morocco's largest four cities the coverage is also universal and available for 24 hours. In Algeria, by contrast, the public utility makes frequent use of the practice known as 'intermittent supply', which means that they deliver water to various parts of a city for a fixed number of days on a scheduled basis. In Oran, for example, water is supplied every other day during drought years. Yet, intermittent supply increases operating and maintenance costs by about 50 percent (World Bank, 2006).
- **Cost.** While power and water tariffs are relatively low to final consumers in the Maghreb, they hide a substantial amount of government subsidies and inefficiencies. Consumers of domestic water supply services, rich and poor pay only a fraction of the cost of water services. Their connection to the network and/or their water consumption are subsidized. Yet, almost every city in the Maghreb collects insufficient revenue to cover operations and maintenance costs and the depreciation of assets. Operating cost coverage ratio (defined as the total annual operational revenue over total annual operating cost of the public utility) is 1.10 in Casablanca and Oran, but is only 0.9 in Algeria and in Tunisia (World Bank, 2006).
- **Quality.** The Maghreb region fares poorly in power losses compared to East Asian and Eastern European countries. Morocco has the highest percent of electric losses in the Maghreb, amounting to 16 percent of electric output. Water losses are also high in the region. They are particularly high in Algeria where 51 percent of the total water resources are unaccounted for²³. In Morocco and Tunisia, partly as a result of hard budget constraints introduced on water supply

²³ Water losses owing to: unauthorized consumption, metering inaccuracies, real loss from leakages on transmission and/or distribution mains, at utilities, or leakage on service connections up to point of customer metering

and sanitation operators, water losses are lower. In Morocco's largest cities, water losses amount to 25 percent whereas in Tunisia they represent about 18 percent of available water resources (World Bank, 2006).

Table 2.13 Maghreb vs comparators: Power and Water Indicators, 2004

	Access				Quality
	Access to Electricity Network (% of population)	Energy Use per PPP GDP (kg of oil equivalent/1000 PPP USD, constant 2000)	Access to Improved Water Sources (% of population)	Access to Improved Sanitation (% of population)	Electric losses (% of output)
Algeria	96.0	177.3	87.0	92.0	14.2
Morocco	47.0	97.6	80.0	61.0	16.1
Tunisia	95.0	123.3	82.0	80.0	11.2
East Asia & Pacific	54.0	217.9	75.0	60.0	7.3
Europe & Central Asia	99.0	375.0	87.0	78.0	13.0
Middle East & North Africa	88.0	235.8	85.0	77.0	15.5

Note: The most recent data is used beginning with 2004. For commercial perception indices, 1=worst and 7=best. Source: WDI 2005, ITU 2005 and Estache and Goicoechea, 2005

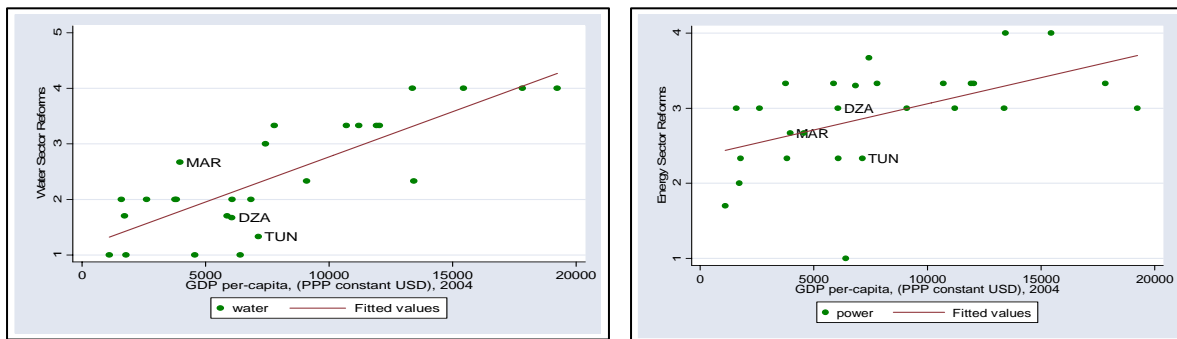
D) Reform Progress

Power and water sectors were traditionally dominated by vertically integrated and state-owned monopolies. Over the last two decades best practices in reforming these sectors have emerged.

Electricity sector reform encompasses a number of elements, but the common objective of these steps is to increase access by users, increase efficiency of energy services, and decrease the cost of energy services and to introduce competition into the sector wherever feasible. Utility sector reforms have entailed: (i) the introduction of competition and private sector participation through privatizations and concessions; (ii) the vertical unbundling of the industry into generation, transmission, distribution and supply activities; (iii) the restructuring of state-owned utilities (e.g. commercial management, balance sheet restructuring, rebalancing of tariffs to bring prices in line with costs; more effective billing and customer support systems); and (iv) the modernization of the regulatory framework to prevent an abuse of monopoly power and ensure market competition and contestability (e.g. separation of regulatory and operational functions, the creation of independent regulators).

Maghreb countries are still at early stages of power and water sector liberalization reforms and they have made less progress than it would be expected given their level of income. Power and water sectors in the Maghreb countries are still organized according to the traditional model. It is still dominated by vertically integrated public monopolies. Morocco is the Maghreb country where its progress in the electricity sector is greater than predicted by its income level (Figure 2.32).

Figure 2.32 Power and water sector reform progress, and income per capita



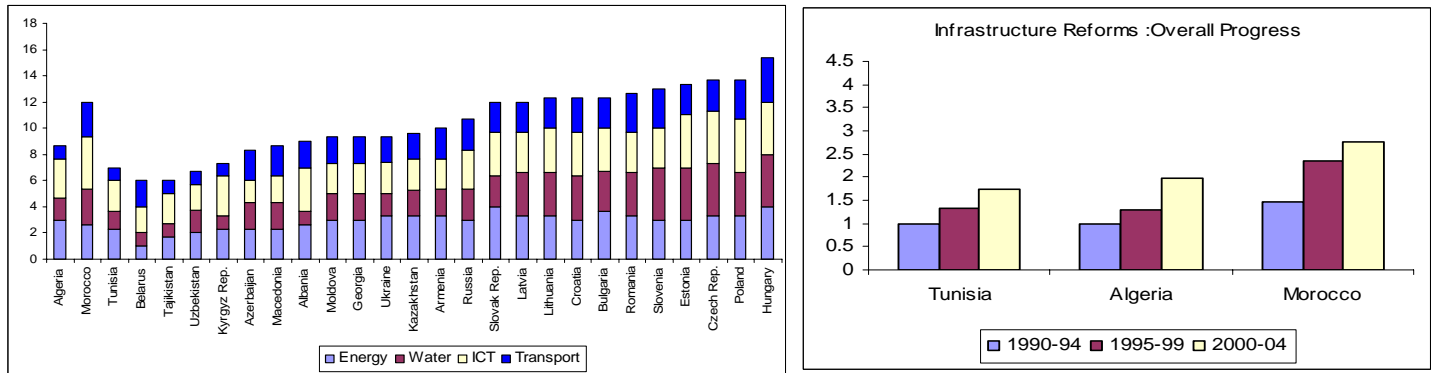
Source: Authors' calculations, based on WDI, 2005

- In Tunisia, the government's move in 1996 to remove the monopoly for generating power of the state-run operator *Société Tunisienne de l'Electricité et du Gaz* (STEG) saw the introduction of private power producers, the first of which began operating in 2002. Since the early 2000s the Tunisian government's energy policy has aimed at attracting foreign firms in the energy sector. Tunisia reformed its hydrocarbons law in 2000, reducing the tax rate from 75 percent to 50 percent for foreign firms and royalties were fixed at 10 percent for oil and 8 percent for gas. Turning to the reform progress in water supply and sanitation services, Tunisia has a publicly owned operator, the *Société Nationale d'Exploration et de Distribution des Eaux* (SONEDE), which is responsible for domestic and industrial water supply and sanitation in all of the country's urban areas. SONEDE, regulated by the Ministry of Agriculture, Environment and Water Resources, performs reasonably well. (World Bank, 2006).
- In Morocco, a decade-long process of opening up the power sector is coming to fruition in 2006, with the publication of a new law governing further electricity liberalization. The new law envisions a dual market whereby some electricity consumers, specifically industries, will purchase their power straight from producers, while others, mostly retail customers, will continue to do it through traditional providers. The *Office Nationale d'Electricité* (ONE) was until 1995 solely responsible for electricity generation, transport and distribution. In 1994, the government passed legislation to allow private actors to become power producers and in 1995 the ONE was reorganized. While ONE is still the sole distributor of electricity, the government plans to gradually transform it into the industry regulator as well as a minor producer. The Ministry of Interior supervises domestic electricity consumption, except in four cities where it has been subcontracted to private- and foreign-managed firms. In Casablanca, Rabat, Tangier and Tetuan electricity and water are handled by private-sector contractors. The concession of water supply and sanitation services to the private sector in these four large cities has provided incentives for improved performance. Water service is now 24 hours a day in these four cities and water supply connections have increased by almost one-third since the concession began (World Bank, 2006).
- Algeria's power sector monopoly was for a long time *Sonegaz*, set up in 1969. It has been responsible for power generation, all aspects of the national grid (including investment, maintenance, and operation), and low-voltage distribution of electricity. Recent years have seen the beginning of sectoral power reform. A special law on electricity and gas distribution passed in 2002. This provided for abolition of *Sonegaz's* legal monopoly over power production, unbundling of *Sonegaz* activities, establishment of an independent regulator, and eventual transition to regulated third-party access (TPA) in the power sector. But progress has been slower than originally envisaged. The law talked of a 30 percent market opening "within three years" but more recent timetables schedule the first stage of market opening for 2007. There are no concrete plans for the privatization of *Sonegaz*. The regulatory body envisaged in the 2002 law, the *Commission for Electricity and Gas Regulation* (CREG) was not created until 2005, and is still in an organization and recruitment phase. Significant steps have been taken in unbundling, however. While *Sonegaz* remains a holding structure, fully owned subsidiaries have been set up to deal with generation, the electricity grid, and gas distribution. Power distribution is divided between four regional units, which are expected to move from autonomy to full subsidiary status at the end of 2006. (Oxford Business Group, 2006).

In sum, with the exception of Morocco, Maghreb countries have made less progress in liberalizing infrastructure services than many other emerging economies (Figure 2.33). In Morocco, the lead reformer in the infrastructure sectors, implementing and sustaining reform has tended to be more difficult in some sectors than others. In telecommunications, where prices before liberalization were often high – and in port and airport transport, which are generally export-oriented services- there has been less difficulties to

start reforms. In the electricity and water sectors, on the other hand, where prices were way below costs, the progress has been much slower as policy-makers were aware that efficiency improvements could not offset the need for price increases. Tunisia and Algeria have approached service reform in the infrastructure sector in a piecemeal fashion. As a result, privatization has been slower than in other parts of the world and barriers to entry often remaining forbidding for investors.

Figure 2.33 Infrastructure Sector Reforms, by country and sector, 2004



Source: Authors' estimations for Maghreb countries, EBRD, 2004

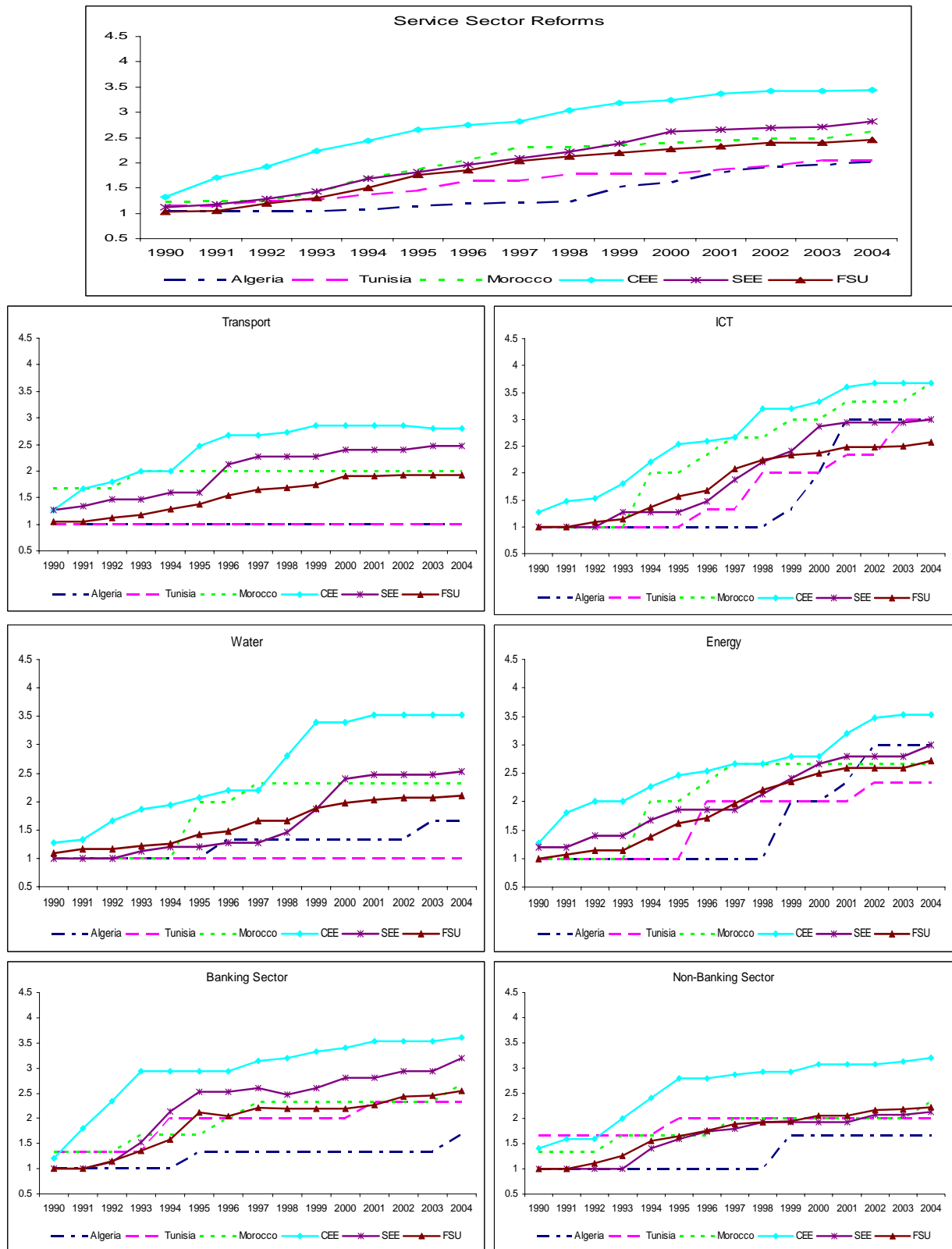
While the liberalization of the energy sector is a domestic policy issue, progress on this front offers potential for regional power markets in the Maghreb. As mentioned earlier, transmission losses are a function of geographic distance. A prerequisite for trade in electricity are physical links between national grids. With several interconnection projects completed in recent years, Maghreb countries are now hooked up to the transmission network of their neighbors. Morocco has power connections to Algeria and Spain as part of the Mediterranean network. But the capacity of these interconnections is low, permitting only emergency and peak exchanges. Several capacity expansions are planned. When completed in 2015, the North Africa-Middle East-Europe Mediterranean Power Pool will connect the power grids of Algeria, Morocco, Tunisia, Libya, Egypt, Spain and the Middle East (Jordan, Syria, Turkey, and Iraq).

The Maghreb countries could also reap significant economic gains from wider integration with the EU. In application of a Protocol signed by the European Commission and Energy Ministers of Morocco, Algeria & Tunisia, these three countries are to adopt a regulatory framework compatible with that of the EU by 2006. The definition of this framework will be discussed and decided in a process similar to that in place in South-East Europe, with a regional forum and a series of working groups. Maghreb countries could also gain from greater regional integration with the Iberian power market (Spain and Portugal have arrangements that go beyond the EU acquis).

2.3.3. Time Path of Service Sector Reforms

This section aims at summarizing the overall progress made in service sector and investment climate reforms in the Maghreb, across time and compared to what is observed for ECA countries (see Figure 2.34).

Figure 2.34. Time Path of Service Sector Reforms, by Country



Source: Authors, drawing on EBRD, 2004

CEE countries have made the most progress in all three services policy areas. SEE have advanced the most on reforms in banking and infrastructure, while CIS countries (particularly the Central Asian republics) have made the least progress in all three areas, with one country—Turkmenistan—not advancing at all in any area.

In terms of policy, the CEE countries have consistently performed best over the whole transition period, followed by SEE and the CIS countries. The Maghreb countries, notwithstanding their progress in reforming the service sectors (particularly Morocco), consistently under perform compared to the CEE countries.

To some extent the differences (and divergences over time) in performance can be traced to different approaches to economic integration. Integration into the EU appears to have been a major factor for the policy progress made in ECA countries. Maghreb countries could emulate the performance of the ECA countries through deeper integration into the EU (which is, in part, on offer to Maghreb countries through the European Neighborhood Policy). Concerted regional approaches to integration have also led to progress in policy reforms in a number of ECA countries (an example is the SEE regional electricity agreement). Maghreb countries could also emulate this experience through concerted regional cooperation in some areas of the regulatory framework.

2.4. CONCLUSIONS

This chapter has reviewed the relative performance and progress made by Maghreb countries in reforming key policies that affect trade and investment flows in the region. From an international comparative perspective, the Maghreb countries score well on a number of policy areas, including exchange rate management and some areas of the investment climate (such as business entry and easiness to hire workers).

In spite of recent progress made on reducing tariffs and non-tariff barriers and in reforming service sectors, the Maghreb region as whole lags behind comparator countries when it comes to trade liberalization and market contestability in key service sectors. In Tunisia and Algeria, service sectors remain largely closed to foreign participation and foreign investment and services are provided at high cost relative to other emerging economies. Service liberalization could help promote current levels of private investment and trade. Because services are also key input into all sectors of the economy, their liberalization could also cut costs and drive larger productivity gains. The next chapter estimates the economic gains that could be derived from a strategy based on deeper integration (through service sector and investment climate reforms) and wider integration (with the EU). As this report will argue, improving the investment climate and reforming the services sectors so as to strengthen market competition might be a more propitious strategy for expanded trade and investment opportunities in the Maghreb.

This chapter also illustrates that integration into the EU has been a major factor for the policy progress made in ECA countries. Maghreb countries could emulate the performance of the ECA countries through deeper integration into the EU (which is, in part, on offer to Maghreb countries through the European Neighborhood Policy).

Concerted regional approaches to integration have also led to progress in policy reforms in a number of ECA countries (an example is the SEE regional electricity agreement). Whereas the chapter points to some areas where a regional coordinated approach would be beneficial, this does not prevent Maghreb

policy-makers from proceeding in parallel towards selective regulatory approximation with EU standards and continuing their gradual regulatory convergence to international best practices under WTO. Quite the opposite, stronger regional cooperation could help prepare the ground for multilateral integration. First, concerted efforts in reducing policy barriers to trade and investment in the region could stimulate further EU foreign direct investment into the Maghreb. If intraregional trade in goods and services begins to flow more freely, the 'hub-and-spoke' effects will be reduced. It is more likely that investors will set up firms in the region to gain access to a bigger market. Second, deeper economic integration (as reflected in liberalization of key backbone service sectors) should make it easier to contemplate deeper links with the EU and other countries (such as the United States).

CHAPTER 3. ESTIMATING THE ECONOMIC GAINS FROM DEEPER AND WIDER INTEGRATION

3.1. INTRODUCTION

The report has illustrated that there is a low level of regional integration in the Maghreb, and that the potential for integration of product markets is limited given a variety of economic disincentives relating to the structure of production, endowments and size of the Maghreb economies. The conclusion emerging from the analysis is that the prospects for a regional strategy based on merchandise product market integration to deliver growth are weak. The second chapter identified policy barriers that affect prospects for enhanced trade and investment opportunities in the Maghreb, and showed that these countries systematically underperform, particularly in the area of service policy reforms, compared to CEE countries. This final chapter of the report argues that deeper economic integration (focused on service liberalization and investment climate reforms) and wider integration (with the EU) has the potential to generate more substantial economic gains than would be obtained from regional integration of goods markets.

Some conceptual issues

(i) What is 'deep' integration?

Economic integration can be regarded as a continuum from 'shallow' integration (based on the removal of import tariffs and quantitative restrictions) to 'deep' integration. The term 'deep integration' refers to explicit government actions to reduce the market-segmenting effect of domestic regulatory policies and regulations, other than the tariffs and formal non-tariff barriers. These include other policies and regulations 'at the border', such as customs clearance and certification that imports satisfy domestic standards of quality control. They also include 'behind the border' policies and regulations that impose a burden upon business activity and affect market contestability. These 'deeper' domestic policy reforms include: (i) horizontal policies, such as trade policy, exchange rate policy, competition policy and the overall investment climate; and (ii) sector-specific policies affecting trade in services and the efficient provision of key backbone services sectors (such as finance, transport, telecommunications, energy and water).

(ii) What are the benefits of deeper integration?

The case for deeper economic integration has been made well in the trade literature (Hoekman and Konan, 1999; Konan and Maskus, 2003). 'Deep' integration is estimated to be far greater than the impact that can be expected from 'shallow' integration focused on merchandise trade liberalization. Deeper economic integration can expand trade and FDI opportunities, induce large productivity gains and enhance the overall competitiveness of Maghreb economies.

Inefficiencies in the provision of key backbone services coupled with high transaction costs owing to remaining regulatory constraints in the investment climate rise production and trading costs. This is partly due to past government policies and regulations that result in limited competition. Further liberalizing and opening up markets in telecommunications, transport, finance, and other network industries to competition, and improving the overall regulatory framework for businesses, will help not only the firms that engage in trade *per se*, but will also help to improve the efficiency of domestic industries that provide services to firms that produce and trade. Service sector and investment climate

reforms can lower trade-related transport, logistics, and reduce the cost of key production inputs such as finance, telecommunications, distribution and other services. These services inputs represent 10 to 20 percent of production costs in the Maghreb (World Bank, 2005). Deeper economic integration will also improve the region's attractiveness to multinational enterprises. The location of multinationals is crucially affected by the scope for effective sourcing of inputs and the ability to move inputs quickly and cheaply across national boundaries.

(iii) Is there a rationale for a 'regional' approach to deeper integration?

Much of what is needed could be pursued through unilateral action. Service sector and investment climate reforms are needed in their own right in the Maghreb countries. Galal and Hoekman (2003) provide two persuasive arguments in favor of a regional approach to deeper integration in the Maghreb:

- ***Political economy argument.*** Service liberalization reforms are likely to result in contraction or adjustment of domestic firms that benefit from protection, while firms in which the country has a comparative advantage are likely to expand. Many of the latter tend to be small and dispersed, whereas the former tend to be larger and concentrated. But, as it will be argued in this report, these political constraints may be overcome if the Maghreb countries agree on a sequence of selected sector reforms. Regional cooperation in selected services sectors could also help define the right policy sequencing and complementary actions needed to increase competition in the selected sectors (e.g. downstream privatizations prior to upstream policy reforms). Liberalizing air transport without liberalizing airport slots does not lead very far. These are examples of regulatory issues that tend to be ignored by national sectoral regulators and could be addressed more efficiently in a region-wide approach.
- ***Economic incentive argument.*** Deeper regional integration can lead to regulatory economies of scale or scope. Regional cooperation can assist in the removal of national entry barriers and improve market contestability by providing a focal point for reform and mechanisms to monitor progress. Another potential area for regional cooperation is to establish regional regulatory agencies to oversee network services (telecommunications, electricity, transport). Regional regulatory agencies could facilitate cooperation between Maghreb countries that are investing in and managing the physical networks by issuing region-wide licenses for a market that would be large enough to attract global players. The creation of regional networks between regulators could facilitate the exchange of best regulatory practices (e.g. through technical working groups) and could also ensure the consistent application of technical safety and environmental regulations.

Owing to the difficulties in estimating the marginal gains of regional cooperation in the service sectors (see next section), the report focuses on the economic gains of service policy reforms that are likely to positively affect trade and investment prospects with all partners (and not just with the other Maghreb countries). Chapter 2 provided some examples of areas where regional concerted efforts could be successful (such as in the electricity sector).

Objective and Scope

This chapter aims at estimating the gains from deeper and wider economic integration. Wider integration will be measured by the impact of RTA between the Maghreb and the EU, drawing on Dee (2005). Deeper integration will be proxied by a move toward service liberalization and its impact on growth, exports and FDI, drawing on Eschenbach and Hoekman (2005).

The chapter will work through what one should expect to happen to the Maghreb's economies as a result of the following economic integration alternatives:

- '*Shallow integration*', that is the formation of a regional trade agreement (**RTA**), in which most tariffs and other barriers to trade are eliminated for intraregional merchandise trade;
- '*Wider integration*', in which Maghreb countries form a regional merchandise trading bloc with the EU (this scenario will be compared to the gains of each country's unilateral integration with the EU);
- '*Deeper integration*', in which case Maghreb countries form move toward service sector liberalization and investment climate reforms;
- '*Deeper and wider integration*', in which Maghreb countries form a regional trading bloc with the EU and also move toward service sector liberalization and investment climate reforms.

It should be noted, however, that the chapter will not assess the marginal gains of regional cooperation in the service sectors. This analysis is hampered by the absence of detailed data on services trade and investment by sector, the absence of regionally comparable CGE (computable general equilibrium) models, and the lack of updated and disaggregated input-output tables for the three Maghreb countries. There is much work still to be done on identifying where regional cooperation can promote national services reforms or generate "scale" effects for the countries concerned. Indeed, service policy reforms in services are likely to positively affect trade with all partners (and not just with the other Maghreb countries).

Some methodological issues

The chapter reviews four forward-looking scenarios from 2005 to 2015 according to the relative degree of regional integration efforts. These range from zero additional effort (that is, maintaining the status quo) to deeper regional integration efforts that include service liberalization and domestic reforms aimed at improving the investment climate.²⁴

The methodology used to construct these scenarios is derived from the simple idea of applying some kind of average behavior drawn from the data on panel regression analysis. The scenarios are not based on specific simulations of how the various integration schemes would work or affect the economic performance for individual Maghreb countries. Such an approach would require far more effort and resources than could be prepared this paper.

Instead, we use statistical relationships emerging from worldwide experience that show the typical impact of such integration schemes, assuming that they would apply on average to the Maghreb situation. These scenarios should be seen as illustrations of the kinds of gains that could be expected from regional integration, not actual predictions on the likely impact. Figures for the four scenarios showing comparative economic performance for 2015, which follow, should be understood as illustrative in this sense.

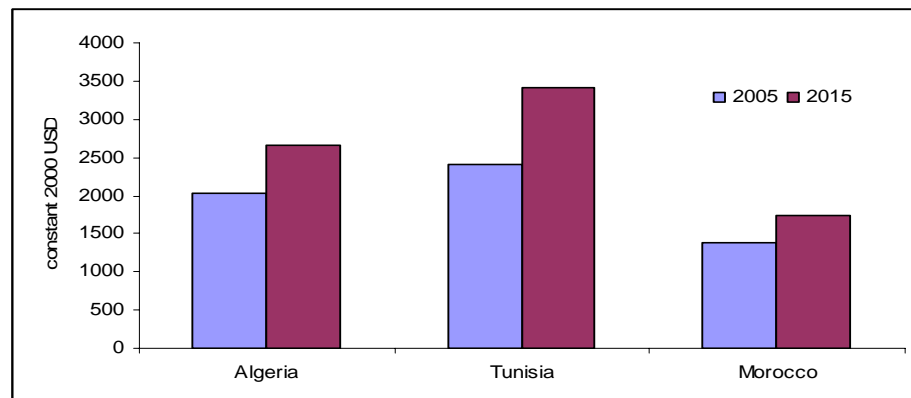
²⁴ Investment climate reforms referred to are those reforms that aim at enhancing market contestability and openness (such as privatization, liberalization, competition) Because of data limitations, we do not include the impact of labor mobility in this analysis.

3.2 SCENARIOS

SCENARIO 1: THE STATUS QUO

In the absence of further efforts to integrate the Maghreb economies, GDP per capita growth between 2005 and 2015 based on average annual per capita growth rates (in constant 2000 US dollars) would increase by 30 percent for Algeria, 41 percent for Tunisia, and 27 percent for Morocco between 2000 and 2004 (Figure 3.1).

Figure 3.1 Real Per Capita Income Under Status Quo



Source: Authors' calculations

SCENARIO 2: MERCHANDISE TRADE LIBERALIZATION: SHALLOW VERSUS WIDER INTEGRATION

In this scenario, we try to assess the economic gains from a Maghreb regional integration scheme focused on merchandise trade liberalization. We assumed that members of regional trading arrangement (RTA) reduce to zero most tariffs and other barriers to trade among themselves, while keeping unchanged their barriers to trade with counties outside the group. They must likely adopt 'rules of origin' to determine which goods are eligible to cross the RTA's internal borders free of tariff. The RTA does not entail any further integration of the markets of the participating countries, such as free movement of capital, labor and technology or the harmonization of domestic policies and regulation. Since typical RTAs focus on merchandise trade, the quantitative models and proxies that we use to assess the impact of RTA capture primarily the effects of merchandise trade integration.

One of the most fundamental questions about an RTA is whether it will foster economic growth. Even if an RTA causes efficiency losses due to trade diversion, or short-run losses for other reasons, these losses could be more than made up for if the RTA raises the long-run growth rate by even a percentage point or two. A steady higher rate of output growth will eventually create gains that surpass most losses. An RTA may be beneficial to growth through a number of channels. First, by raising the level of real income, the RTA permits greater savings and investment, promoting long-run growth. Second, by giving access to cheaper capital goods import, the RTA can make savings and investment more effective in expanding the capital stock, and thereby enhancing long-term growth. Third, the RTA allows through trade, spillover of technology from one advanced to less advanced countries, as entrepreneurs in the latter are able to learn from and imitate the former by observing the products they produce. Finally to the extent that an RTA attracts greater FDI, it contributes directly to the expansion of capital stock. FDI may also cause greater

spillovers of technology than would be possible with just arms-length trade. Our analysis building on work by Jaumotte (2004) and detailed in the technical annex suggests that a larger regional market can raise the level of FDI stock in the Maghreb countries.

We consider two sub-scenarios: a first one where Maghreb countries joint a RTA focused on merchandise trade liberalization (shallow integration), and a second one where Maghreb as a trading bloc joins the EU. That way, the gains from regional Maghreb integration alone can be compared with the gains from Maghreb integration with the EU.

There are a number of reasons to think of the EU as a well-suited partner for regional integration outside the Maghreb. First, it is a large economic block that accounts for a quarter of the world GDP; it is already the main source of exports and import destination for the Maghreb countries. It accounted for over 65 percent of total Maghreb trade by 2004; it is an economy that is very open to the world; and European FDI flows into the Maghreb could further increase as a result of the regional integration project. All these features reduce the risk of trade diversion (Muller-Jentsch, 2005).

Scenario 2(a) Shallow integration: Maghreb RTA

We first estimate the annual average impact of RTA (focused on merchandise trade liberalization) on per-capita income growth. This empirical exercise draws on estimates from a panel regression analysis following Berhelon (2004) and relating per-capita income growth to existing RTA's as reflected in their market size between 1980 and 2004²⁵. The regional agreements incorporated in the RTA variable cover bilateral agreements (such as US-Israel), country-association agreements (e.g. EU-Tunisia) and association agreements (eg. NAFTA, ASEAN, GCC). The RTA variable is the sum of the share of the partner countries GDP to world GDP. The control variables include: initial GDP per capita, the ratio of government consumption to GDP, the investment rate, foreign direct investment as a percentage of GDP, human capital, the share of manufactured exports in total exports, the ratio of total trade to GDP and an index of financial risk and a measure of investment climate sourced from the ICRG. The model and results are described further in the Annex.

Impact on per capita income

Given the limited prospects of intraregional merchandise trade, it is not surprising that the impact on per capita income from integrating merchandise goods markets is very small: *0.01 percentage points of per capita annual growth on average in each Maghreb country. Real GDP per capita in 2015 would be very similar to that shown for the status quo in Scenario 1.*

Scenario 2(b) Wider Integration : Maghreb RTA with the EU

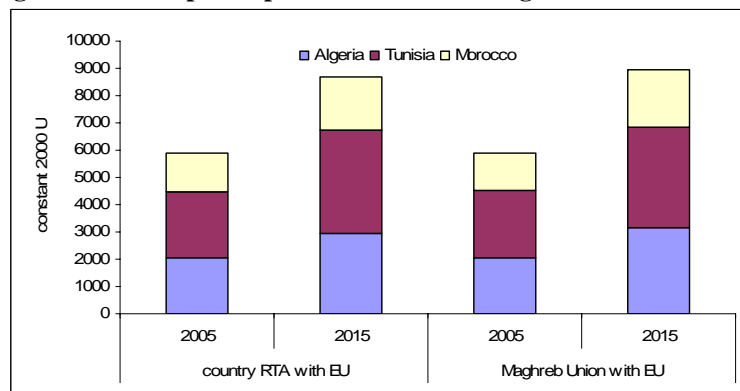
In this scenario, we compare the gains if Maghreb countries were to individually join the EU; compared to a scenario where the Maghreb countries form a regional trading bloc and then join the EU as a group.

²⁵ Typically computable general equilibrium (CGE) models are used to evaluate the trade effects of an RTA. These models combine standard microeconomic assumptions with data from a single time period to simulate an entire economy of group of economies response to policy changes. Unlike macro-econometric models that are used for macroeconomic forecasting, CGE models have a weaker empirical foundation because their equations are not estimated empirically from time series data. However CGE models are able to account for more complex general equilibrium interactions among a larger number of sectors and markets than can be accomplished in econometric models. However, the results from the CGE models should also be read with caution, given the range of estimates, varying their assumptions about elasticities of response and/or mobility factors that affect the model calibration.

Maghreb countries unilaterally forming a bilateral trade agreement with the EU (reflecting merchandise trade liberalization) would yield economic gains through access to the larger EU market. If each Maghreb country could form an RTA with the EU, it would generate one percentage point of additional growth for each country when compared with the growth rate in Scenario 1, raising real per capita GDP in 2015 over 2005 by an additional 15 percent in Algeria, 16 percent in Morocco and 14 percent in Tunisia. The total sum of the Maghreb countries' per capita real GDP would rise by an additional 15 percent over the same period compared to the status quo (Figure 3.2)

Maghreb countries forming a joint regional trading bloc with the EU (reflecting merchandise trade liberalization) would raise real per-capita GDP of the three Maghreb countries in total by an additional 22 percent between 2005 and 2015 relative to the status quo, which is 7 percentage points greater than the sum of per-capita income of the three Maghreb countries joining the EU unilaterally (Figure 3.2). Dividing the gains to the Maghreb using income weights from 2004, an RTA with EU is expected to increase per-capita income by an additional 27 percent in Algeria, 16 percent in Tunisia and 22 percent in Morocco between 2005 and 2015.

Figure 3.2: Real per Capita Income under Maghreb RTA with EU



Source: Author's calculations

Impact on non-oil exports

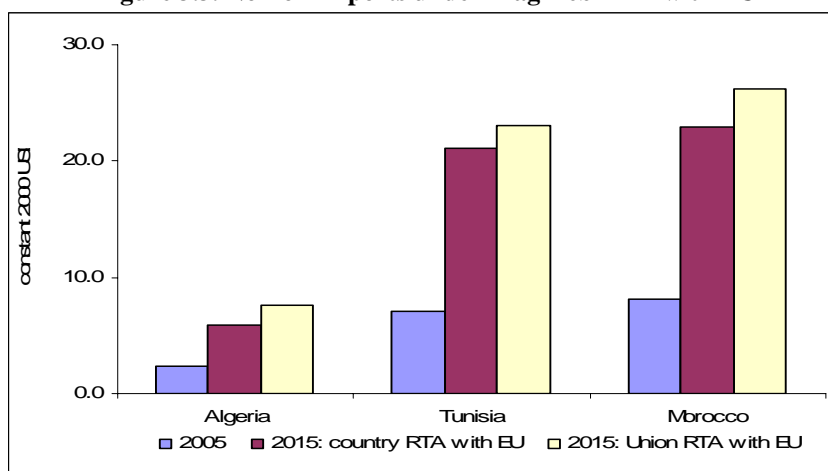
This entails using a similar model used to estimate the per-capita income impact of an RTA, except that the focus is now on real non-oil export performance. The empirical estimates can be found in Annex B.1.13.

Integrating the goods market of Maghreb countries will have a marginal impact on real non-oil export value. Between 2005 and 2015, **real non-oil exports values are expected to increase by 3.5 percent on average in each Maghreb country.**

However, each Maghreb country separately forming an RTA with the EU would expand the available market size considerably. Between 2005 and 2015, real non-oil exports is expected to nearly double in each Maghreb country on average relative to the status quo (Figure 3.3). It is also the case that the total sum of non-oil exports across the three Maghreb countries doubles in contrast to the status quo.

When the Maghreb countries join the EU trading bloc as a group, the total export value in real terms is expected to rise by an additional 2.5 times for each country on average between 2005 and 2015 relative to the status quo. (Figure 3.3)

Figure 3.3. Non-oil Exports under Maghreb RTA with EU



Source: Author's calculations

SCENARIO 3. DEEPER INTEGRATION: SERVICE LIBERALIZATION AND INVESTMENT CLIMATE REFORMS

Given the limited magnitude and potential for intra-Maghreb merchandise trade, complementary regional integration approaches are needed. A third option is to focus on deeper integration with particular focus on the service sectors. These are seemingly domestic policies such as regulations of banking, telecommunications and insurance, where inconsistencies across countries can complicate and interfere with international transactions. It was the removal of such discrepancies that constituted much of the EU's move toward the 'single market' that was completed in 1992.

The case for deepening integration has been made by Hoekman and Konan (1999) in the context of a Euro-Mediterranean free trade. By coordinating standards, regulation and procedures along a EU model, the Maghreb countries will make it significantly easier for both local and foreign firms to operate in both markets. This will help not only firms that engage in trade per se, but will also help to modernize and make more efficient domestic industries in the Maghreb that provide services to firms that produce and trade. As we will see, regional integration efforts that focus on services can potentially generate gains many times greater than from preferential merchandise trade liberalization.

Data show that the Maghreb countries are not significant exporters or importers of commercial services in world trade. Barriers to trade in services are clearly important in these countries. Several studies have shown that domestic distortions inhibit export expansion. These distortions reside in the inefficient regulation and lack of competition, generating costly and low-quality services. This translates into higher insurance premiums and high port service costs as well as poor transport and lack of storage facilities. A regional agreement that allows free entry into services activities should help domestic services companies to expand to regional markets before venturing into the more competitive world markets.

It is difficult to separate domestic liberalization from cross-border liberalization of services. The measurement of services tends to lump them together. This scenario therefore examines whether policy reforms, which consist of liberalizing cross-border services as well as reforming the domestic policies and regulations for services, would expand domestic private investment or FDI in the Maghreb.

As shown in Table 3.1, results from a panel growth regression reveal that *a one-unit point increase in the progress reform index in the infrastructure sector, financial sector, or the investment climate is associated with an increase of about 2 percent in per capita growth rate, holding inflation and the change in investment to GDP ratio constant*. It is interesting to note that the growth impact of service policy reforms in the Maghreb is lower compared with Eastern European countries, which appear to gain the most from the reform progress.

Table 3.1 Impact of Unit Increase in Service Reform Index on Annual Per Capita Real GDP Growth (in percent)

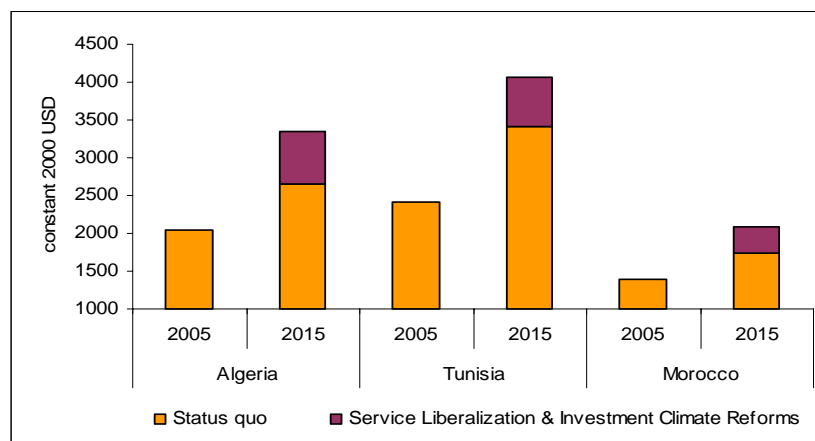
	Infrastructure	financial services	investment climate
Maghreb (MGB)	2.08	2.20	2.06
South-East Europe (SEE)	3.77	5.84	7.35
Central and Eastern Europe (CEE)	2.90	4.00	5.87
Former Soviet Union (FSU)	11.04	11.08	9.66

Source: Authors calculations Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia); FSU1= Estonia, Latvia and Lithuania : FSU2=Russia, Ukraine, Belarus and Moldova: FSU3=Armenia, Azerbaijan, Georgia : FSU4=Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Impact on income per capita

What is the impact on per capita income in this scenario? Assume that each Maghreb country gradually reforms its service sectors and its regulatory framework by 2015 to achieve complete service liberalization and an investment climate that is in line with international best practice—in other words, that the reform index reaches its maximum value of 4.3 by 2015. If so, real per capita GDP would rise an additional 34 percent for Algeria, 27 percent for Morocco, and 24 percent for Tunisia between 2005 and 2015. Figure 3.4 compares this growth scenario with the status quo growth scenario described in Scenario 1.

Figure 3.4. Real Per Capita Income with Service Liberalization and Investment Climate Reforms

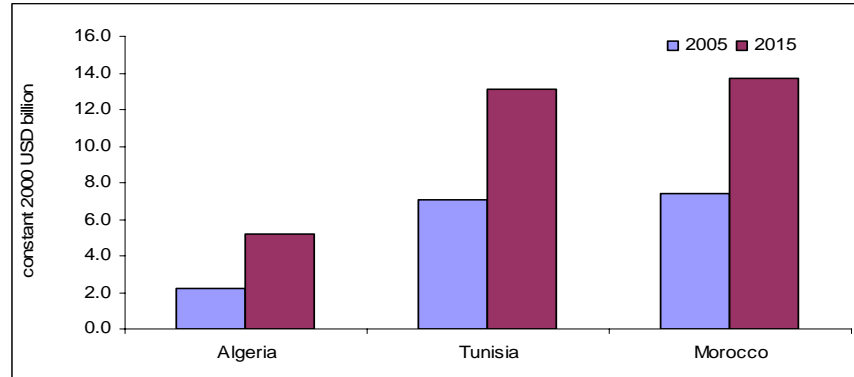


Source: Authors' calculations

Impact on exports

What is the impact on exports? With gradual service liberalization completed by 2015, real non-oil exports value would grow by 138.1 percent for Algeria, 85.8 percent for Tunisia, and 85.7 percent for Morocco (Figure 3.5).

Figure 3.5. Non-oil Exports Value with Service Sector Reforms (in constant 2000 USD)



Source: Authors' calculations

Impact on FDI

Assume a one-unit increase in the progress reform index for infrastructure, the financial services sector, and the investment climate. This raises the stock of FDI stock by 8.8 percent of GDP for Algeria, 9.2 percent for Tunisia, and 8.5 percent for Morocco. As shown in Table 5, each respective index in the Maghreb is lower than for the transitional countries of South-East Europe, the former Soviet Union, and Central-East Europe.

Table 3.7. Impact of Unit Increase in Service Reform Index on FDI stock (percent of GDP)

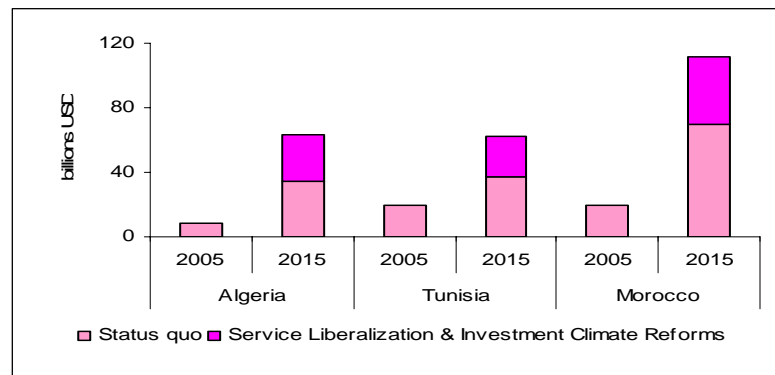
	Infrastructure Reforms	Financial Sector Reforms	Investment Climate Reforms
Maghreb (MGB)	8.83	9.21	8.53
South-East Europe (SEE)	12.55	13.57	12.93
Former Soviet Union (FSU) and Central East Europe (CEE)	19.13	18.35	15.02
Average	17.37	17.38	14.64

Source: Authors' calculations. See Annex. Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia); FSU1= Estonia, Latvia and Lithuania : FSU2=Russia, Ukraine, Belarus and Moldova; FSU3=Armenia, Azerbaijan, Georgia : FSU4=Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

A unit increase in the progress reform index raises, on average, the FDI stock into the Maghreb countries by 6.7 percentage points on the financial services sector index and 6.0 percentage points on the investment climate index.

Using the average growth rate observed between 1994 and 2004, ***the level of FDI stock between 2005 and 2015—that is, in the absence of service sector reforms—is expected to grow by 301 percent for Algeria, 96 percent for Morocco, and 248 for Tunisia.*** Assuming a progressive implementation of service reforms completed by 2015, the level of FDI stock between 2005 and 2015 is anticipated to rise by an additional 342 percent for Algeria, 128 percent for Morocco, and 211 percent for Tunisia respectively, compared to the growth that is predicted *without* further reforms (Figure 3.6).

Figure 3.6. FDI Stock with Service Liberalization and Investment Climate Reforms (in billions USD)



Source: Authors' calculations

SCENARIO 4: DEEPER AND WIDER INTEGRATION

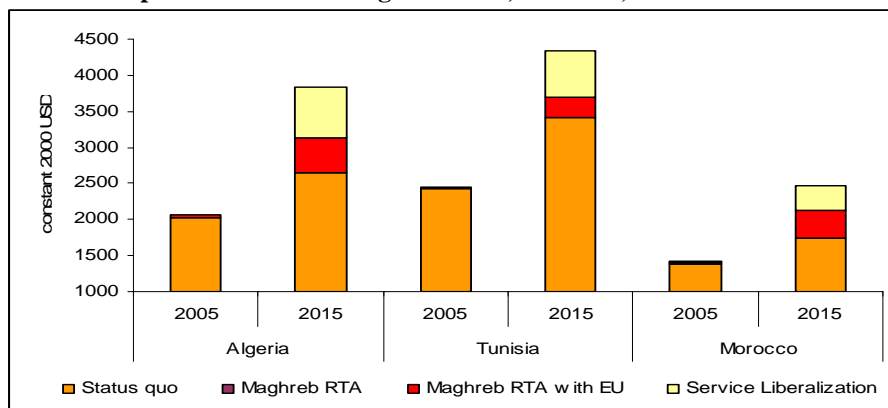
The fourth scenario assumes that the Maghreb countries form a trading bloc with the EU and in addition, they deepen integration efforts, by gradual liberalization of services and by furthering investment climate reforms to achieve international best practice by 2015.

Impact on per capita income

The expected average annual per capita growth between 2005 and 2015 is 6.2 percent for Algeria, 5.8 percent for Tunisia, and 5.7 percent for Morocco (Figure 3.9). Per capita real GDP between 2005 and 2015 would rise an additional 57, 38, and 51 percent respectively, compared with the growth rate reported in the status quo of Scenario 1.

This calculated additional growth may overstate the potential gains because we assume that the benefits from Scenario 2 (integration with EU) and Scenario 3 are additive. In fact, this may not be the case because some of the channels that produce the gains are partly the same in the two scenarios.

Figure 3.7. Per Capita Income with Maghreb RTA, EU RTA, and Service Reforms



Source: Authors' calculations

3.3. CONCLUSIONS

This chapter has provided some evidence that the strategy that offers the greatest economic gains for Maghreb countries is one that focuses on deeper integration (through services sectors and investment climate reforms aimed at improving competition and market contestability) and wider integration (particularly if the Maghreb were to form a trading bloc with the EU).

But achieving these gains is not automatic. Reaping full benefits from deeper integration will require the effective adoption of regulatory reforms to achieve economic efficiency at the national level, as well as a high degree of regulatory cooperation at the cross-border level. At the same time, geographical and cultural proximity to the EU markets are important sources of comparative advantage for the Maghreb countries. Removing non-tariff barriers to these markets—including inefficiencies in the backbone service sectors—is critical to exploit these advantages.

CONCLUSION

Disappointing record of regional integration...

The report shows that Maghreb's regional trade and investment performance over the past two decades has been lackluster. The share of intra-regional trade in Maghreb's total trade is still exceptionally low, and has declined. The region's exports are losing world market shares. We also learned that there seems to be little potential for increased merchandise trade among Maghreb countries. Intraregional investment and FDI also remains limited. Past regional trade agreements have not yielded the expected economic gains in terms of net trade creation.

Similarities in trade structures compounded by political economy constraints and policy barriers have hindered regional integration prospects...

The report provides a handful of reasons that help in explaining the low levels of regional integration: political economy; the small size of the markets; broadly similar production structures; low trade complementarity; and non-dynamic and poorly diversified exports. We also saw in the second chapter those cumbersome investment regulations; extensive role of the public sector (in Algeria and Tunisia, and to a lesser extent in Morocco); high transaction costs; and more restrictive barriers to foreign entry than many other emerging economies. Fragmented markets and limited service sector liberalization are also a reason for European and other foreign investors to locate their operations in the EU to benefit from economies of scale, and to export to, and invest in, each Maghreb separately ('hub' and 'spoke' relationship). Complexity of the trade policy frameworks is yet another reason: multiplicity of trade agreements with no harmonization; and shallow agreements that have excluded services and right to establishment.

Recent signs of optimism but also rising challenges...

But the picture looks somewhat less gloomy after examining recent trends. Particularly in Tunisia and Morocco, there is increased export dynamism, diversification, and FDI flows. These signs point to untapped markets and potential for increased trade and investment. At the same time, domestic and international challenges are increasing pressures for reforms. On the international front, global competition has become more intense and EU demand could shift to competitors from Central and Eastern Europe and East Asia. The quality and cost of services is an essential input of countries' competitiveness. In Maghreb, as the report illustrates, services are still more costly than in many other emerging economies and entry is limited. Maghreb policymakers are also facing domestic challenges. Given the current average income growth and the growth of the labor force, it will be difficult for the Maghreb governments to sustain reductions in unemployment without furthering reforms to open competition and facilitate private investment.

The Way forward- 'Open' Regionalism...

The disappointing track record of Maghreb intraregional merchandise trade is explained by a number of factors, including the small size of the markets, low trade complementarity, non-dynamic and poorly diversified exports.

When contemplating regional integration efforts, the Maghreb's ultimate objective is to reap the gains from trade arising from comparative advantage, scale economies, import competition, knowledge spillovers, and FDI flows. Besides the reduction of tariffs or quotas, a multitude of non-tariff barriers

increase transaction costs. The report recommends taking a fresh look to regionalism and proposes an ‘open regionalism’. The objective should be to achieve deeper integration so as to remove a wider range of policy distortions gradually over time. From a political economy viewpoint, an advantage of the proposed open regionalism is that it provides a compelling long-term vision (full economic integration with the region and global markets) but that it can be implemented selectively and gradually.

In principle, multilateral integration through the WTO would be preferable to regional integration. The reason is that it minimizes trade diversion, increases transparency for traders, and it gives countries recourse to the dispute settlement mechanisms of the WTO. On the other hand, there are also important arguments in favor of a parallel process of both regional integration and global integration. This paper proposes the Maghreb countries to pursue a type of ‘open regionalism’ focusing on “wider” integration with the rest of the world, including the EU, and on “deeper” integration (through service policy reforms).

The pursuit of ‘open regionalism’ would imply that the Maghreb countries’ regulatory frameworks are in line with international best practice. For instance, this deeper market integration process does not necessarily require the full adoption of the *EU acquis communautaire*, but it does require a targeted removal of tariff and non-tariff barriers to facilitate trade in goods and services and the adoption of domestic reforms to improve the investment climate and the cost-effectiveness of backbone service sectors (such as transports, telecoms, financial services). The idea is that multilateral commitments are topped up by regional integration in sectors where the GATS framework is poorly developed or where multilateral negotiations are progressing slowly (e.g. air transport and electricity).

A strategy focused on reforming the services sectors while pursuing wider integration with the EU offers the greatest economic potential. Geographical and cultural proximity to the EU markets are an important source of comparative advantage for the Maghreb countries. Removing non-tariff barriers to these markets –including inefficiencies in the backbone services- is critical to exploit these advantages. Achieving the full gains of deeper regional integration will require the effective adoption regulatory reforms at the national level (to achieve economic efficiency) and a high degree of regulatory cooperation at the cross-border level.