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TRANSPORT SECTOR REFORM AND DEEPER ECONOMIC INTEGRATION IN THE EURO-MEDITERRANEAN REGION

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Abstract

This paper argues that the countries of the southern Mediterranean should move beyond free trade towards deeper forms of integration with the EU through a selective harmonization of their regulatory frameworks with those of the European Single Market. In the transport sector, such deeper integration would amount to the creation of a ‘common transport space’ in which a wide range of bottlenecks, frictions, and inefficiencies in the region’s multimodal system would be removed in order to facilitate the flow of goods, people, and investments. The paper discusses the various national and cross-border reforms that would have to be implemented to achieve that objective. It analyses sector performance and sector policies in the Mediterranean Partners (MPs) and benchmarks them against international best practice. It reviews the policy framework and reform trends in the European Union. It analyses the linkages between transport sector policies and regional integration in North America, Eastern European, and the Baltic Sea region. It reviews the implications of business trends such as supply-chain management and outward processing trade for the participation of the southern Mediterranean countries in European production networks. And it discusses issues such as the relevance of the third-party logistics industry, the policy implications of multimodal transport, or the concept of transport corridors. With the majority of cross-border transport flows in the region carried by sea or air, the reform needs and reform options for these two modes receive particular attention

1. The Euro-Mediterranean Partnership and Deeper Integration

The main economic pillar of the Euro-Mediterranean Partnership (EMP) is the creation of a free-trade area (FTA) between the 15 countries of the European Union (EU) and their 12 Mediterranean Partners (MPs). With Cyprus and Malta preparing for EU membership, Turkey already part of a customs union with the EU, and with Israel a high-income country, the eight Arab MPs form a distinct subgroup among the MPs. These countries of the Maghreb and Mashreq are characterized by low levels of economic development and poor integration into the world economy. Despite significant financial assistance to economic and social adjustment in the region—about € 1 billion of MEDA grants and a similar amount of EIB loans are committed per year—the economic performance of these countries has not improved notably since the launch of the EMP at the Barcelona Conference in 1995.

These countries face the dual challenge of national economic reform and global integration. To meet this challenge, they need to address a legacy of state-ownership and government-interference, inadequate regulatory frameworks, and an under-developed private sector. Despite geographic proximity, the Arab MPs are poorly integrated into European production networks and only about two percent of European FDI flows to this region.[1] At first sight, the Euro-Mediterranean Partnership appears to provide an ambitious vision for the region (free trade, financial assistance, regional policy dialogue etc.) but from an economic perspective, it is basically a limited free-trade area (no trade in services, no trade in agricultural products, no harmonization of regulatory frameworks), with some conventional development projects attached to it. If the development impact of the EMP is to be enhanced, regional integration has to become a more effective catalyst for economic adjustment at the national level and vice versa. This paper suggests that deeper regional integration between the two sides of the Mediterranean could offer a strategy to achieve that objective.

Regional economic integration can yield significant benefits to a country.[2] Gains from trade derive from comparative advantage, economies of scale, knowledge spill-overs, the external anchoring of economic reform, and foreign direct investment. In principle, multilateral trade liberalization is the first-best option to reap these gains, but in practice regional trade blocks have proven to be important building blocks for the global trading system. The track-record of regional integration between developing countries is rather poor, but there is increasing evidence that north-south integration with industrialized economies can become an important driver of economic growth in developing countries.[3] The reasons are more complementary economic endowments, greater potential for knowledge-spillovers, and the external anchoring of national reforms. For such north-south integration, geographic proximity is an advantage.

The most prominent example for such integration is the North American Free Trade Area (NAFTA) between Mexico and the United States. Launched in 1994, NAFTA has almost completely liberalized trade in manufactured and agricultural products; it has significantly reduced the barriers to trade in services; it has opened public procurement and it has started to remove technical barriers to trade such as incompatibilities in product standards.[4] Compared to the Euro-Mediterranean FTA, it has light institutional structures and little political pretence, but it is considerably more substantive in terms of economic integration. To prepare its economy for the challenges and opportunities of regional integration, Mexico has pursued a comprehensive program of economic adjustment since the late 1980s. Despite some setbacks on the way, the economic impact of this dual strategy for domestic reform and regional integration has been remarkable. The country tripled its annual trade to $ 280 billion in the decade to 1999; attracted $85 billion of FDI between 1994 and 2000 alone (60 percent

[1] *Financial Times* (15 November 2000).
[2] Comprehensive reviews of types and benefits of economic integration can be found in McDonald and Dearden (1999) and Jovanovic (1998).
[3] World Bank 2000a: 5.
[4] Abbott 1995: 80–93.

of which from the United States); and the government estimates that about half of the average 5 percent growth in GDP over the four years to 2000 can be attributed to increased exports.[5]

There are important linkages between regulatory reforms at the national level and deeper integration among countries. Whereas trade liberalization is mainly concerned with the removal of tariffs and quotas, a range of non-tariff barriers (NTB) also segment markets along national boundaries. Product standards, safety rules, market access restrictions, and other parts of the regulatory framework can disrupt or distort economic transactions between jurisdictions. The concept of deeper integration relates to the harmonization of laws, regulations, and institutions as a means to reduce such NTBs.[6] Harmonization can be achieved through common minimum standards, mutual recognition, or the wholesale adoption of the trading partner's regulations. Since the EU has a well-developed regulatory framework and a large Single Market, many of its neighbors have chosen the latter option and started to adopt EU-rules in selected areas of economic policy (e.g. Switzerland, Norway, Turkey). The Association Agreements (AAs) between the EU and the Arab MPs, however, do not yet contain concrete provisions in that regard (only rendez-vous clauses).

In terms of its economic implications, the liberalization of trade in services is closely related to the concept of deeper integration. In most developed economies, service sectors account for about two-thirds of GDP and even in most MPs their share in national value-added is around 50 percent.[7] Most services differ from goods in the sense that they are non-tangible and non-storable. An important consequence is that the delivery of services generally requires the physical interaction between seller and buyer, and that trade in services entails the crossing of borders either by the consumer (e.g. tourists) or by the service provider (e.g. workers or FDI). While trade barriers for goods tend to be situated at borders (e.g. customs), most trade barriers for services are located within a country and come in the form of regulations. Therefore, the liberalization of trade in services requires far-reaching reforms of the regulatory framework (e.g. rights of establishment, liberalization of market access restrictions). The new round of multilateral negotiations under the auspices of the World Trade Organization (WTO), launched in late 2001, puts a strong emphasis on the liberalization of trade in services. At the regional level, the Euro-Mediterranean Partners have declared the will to extend their FTA to the service sectors and recently launched a working group to study the related policy issues.[8]

These developments regarding the liberalization of trade in services provide a window of opportunity for deeper economic integration in the Mediterranean region over the coming years. At the national level, much of the economic adjustment agenda that the MPs need to implement to enhance their competitiveness in a free-trade environment requires regulatory reform. Both incidences of market failure (monopolistic structures, externalities, public goods) and incidences of government failure (exclusivity rights, poorly managed state-owned companies, red tape) are wide-spread and undermine economic efficiency. In summary, a similar set of regulatory reforms are needed if the MPs are to achieve three objectives: economic adjustment, deeper regional integration, and a liberalization of trade in services. This is particularly the case in network industries and in financial markets. The challenge for governments will be to develop reform strategies that address these interrelated objectives.

Some important lessons for deeper integration in the Euro-Mediterranean area also come from the process of EU integration and EU enlargement. After five decades of gradual deepening, the EU has become the world's most integrated economic block with 15 countries and 380 million consumers. It has established a Single Market with a harmonized regulatory framework, free factor mobility, a single currency, and common rules on a wide range of other economic policies such as taxes or fiscal deficits. Some of the most recent economic

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[5] (1) Mission of Mexico to the EU. 2000. *The Mexico-EU Free-Trade Agreement*. Brussels. (2) *Financial Times* (28 March 2001).

[6] An overview over the recent thinking about deeper integration can be found in: Bhagwati and Hudec 1996.

[7] World Bank 2001b: 194–2000.

[8] Euro-Mediterranean Ministerial Conference on Trade (Toledo). "Conclusions of the Presidency." 19 March 2002.

reforms in the EU have transformed the network industries (telecoms, electricity, gas) and an ongoing reform package is doing the same in the financial markets.[9] As previously in other sectors, EU regulations not only facilitate cross-border integration between member states, but also trigger economic adjustment at the national level. Continuous monitoring and fine-tuning of national policies through such instruments as competition and state aid policies, or the formal complaint procedures regarding breaches of Community law, help safeguard regulatory harmonization and competitive dynamics across the Single Market. 'Soft' instruments, such as benchmarking exercises or peer pressure between governments, contribute to the mutually reinforcing processes of liberalization and cross-border integration.

With much of the internal economic reform agenda complete, the attention of European policy-makers has shifted to the next round of EU enlargement. Eight countries of Central and Eastern Europe (CEECs) as well as Malta and Cyprus are to join the EU in 2004. Such an expansion of the Single Market to 25 countries with 450 consumers threatens to further divert FDI and trade away from the MPs. At the same time, multilateral trade liberalization is eroding the relevance of the MPs' preferential trade agreements with the EU. Squeezed from two sides, the southern Mediterranean countries should consider moving toward deeper forms of integration with an expanding EU. With Malta and Cyprus part of the first round of enlargement and the EU's agreements with Turkey and Israel already containing provisions for deeper integration (e.g. harmonization of competition policy and product standards) only the eight Arab MPs are left without a clear strategy for deeper integration with the EU.

The experience of previous accession candidates and the CEECs illustrates the benefits of economic integration, if combined with domestic adjustment. The contrast between the fast-growing and rapidly modernizing countries Spain and Portugal (who joined in 1986) and the laggard Greece (which joined in 1981) has often been explained by a lack of structural adjustment in the latter.[10] In the CEECs, the adoption of EU rules and regulations, which is a precondition for accession, has also become a driver of domestic economic reform. According to some estimates the 'growth bonus' of the regulatory and institutional modernization could eventually amount to 22 to 33 percent of GDP.[11] Other features of the pre-accession process, such as targeted technical assistance, annual progress reviews, and peer pressure between the accession candidates further accelerate economic adjustment. By 2000, most CEECs had already redirected two thirds of their trade to the EU, enjoyed large inflows of FDI, and their manufacturing industries had been well integrated into EU supply-chains.[12] Despite such synergies between economic reform and regional integration, there are also parts of the *acquis communautaire* (the body of EU law), whose adoption can have an adverse impact on economic performance, such as the common agricultural policy. Other parts are less suitable for middle-income countries, such as strict environmental or labor standards. In summary, economic integration with the EU can be an important catalyst for economic reforms at the national level, but deeper integration is ideally pursued in a selective manner.

The previous considerations suggest that it might be worthwhile for the eight Arab MPs to consider their options for deeper integration with the EU. A number of features actually seem to make the EU a suitable partner for such deeper integration. First, it has a well-developed legal and regulatory framework that is explicitly designed for transposition into different national legal systems. Second, many of the EU's multilateral institutions and procedures are well-suited for participation by non-members. Third, benchmarking exercises, peer pressure, and the role of the Commission as an 'honest broker' can all help governments to overcome the resistance of national vested interest groups to economic reforms. Fourth, a multitude of Commission programs can in principle be opened to non-members (e.g. education, training,

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[9] European Commission website (*http://europa.eu.int/comm/internal_market/en/finances/general/01–1712.htm*) and (*http://europa.eu.int/comm/internal_market/en/finances/actionplan/progress5en.pdf*).

[10] World Bank 2000a: 51.

[11] Piazolo 2001: 72–73.

[12] Kaminski and Ng 2001: 51–52.

youth, or cultural programs). As a means to exchange knowledge, spread best practice, and build personal networks across borders, these programs can be an important facilitator for the process of deeper integration. Given the specific features of the EU, deeper integration with the MPs not only appears desirable, but also practically feasible.

This, however, leads to the question concerning the optimal depth of integration and how it could best be achieved. It seems necessary to make a policy-by-policy and a sector-by-sector assessment, to identify those areas where the economic gains from deeper integration are greatest. The more in line with international best practice EU rules are and the greater the dual impact on deeper integration and economic adjustment of their adoption, the more suitable a specific policy is for deeper integration. In policy debates about regionalism, deeper integration is generally discussed in terms of cross-sectoral policy issues, such as norms and standards. However, the economic payoffs and the linkages between domestic adjustment and regional integration might be even more pronounced in individual sectors—especially in the network industries (telecoms, electricity, transport) and in financial markets. These industries are particularly prone to incidences of market and government failure and thus prime candidates for regulatory reform. They also provide important inputs for most other economic activities, are well-suited for the liberalization of trade in services, and are sectors where EU rules have played an important role in triggering domestic reforms in the member states.

As far as the instruments for the implementation of deeper integration are concerned, Euro-Mediterranean policy makers have a range of alternatives. Unilateral adoption of EU rules by the MPs appears to be the easiest option. Bilateral agreements between the EU and the MPs would take more time and political determination to implement, but would have the advantage of giving external credibility to domestic reforms. Second generation AAs could be signed, that would bundle several amendments into a give-and-take package for both sides (e.g. trade in agricultural products demanded by MPs, in return for trade in services desired by the EU). One of the most interesting options would be to use the multilateral WTO negotiations, and in particular the national commitment schedules under the General Agreement on Trade in Services (GATS), as an instrument for deeper regional integration. This would permit for 'open regionalism', while making use of the WTO's strict enforcement mechanisms.

Assuming that deeper integration between the EU and the MPs is desirable and possible, and that suitable instruments for its implementation are available, all that seems to be missing are detailed strategies of how to achieve it. As argued above, telecommunications, transport, electricity, and financial markets appear particularly well-suited for deeper Euro-Mediterranean integration. In two World Bank studies, the author has explored the respective reform needs and options for the electricity and the transport sector.[13] The following sections will summarize some key conclusions from the transport study.

2. Transport Logistics and Multimodal Transport

The EU countries and their Mediterranean Partners should strive for the creation of a 'common transport space' in complement to the free-trade area. To minimize transaction costs and economic distance in the emerging FTA, frictions in individual modes, at modal interfaces, and at national borders need to be removed. As long as cross-border transport remains more costly, time-consuming, or unreliable than domestic transport, it will impose non-tariff barriers. To address these issues, policy reforms should precede new infrastructure investments for a number of reasons. Policy reforms tend to be a more cost-efficient way to facilitate trade, they help to create a more conducive environment for subsequent private investments, and they influence the type of infrastructure that will eventually be needed. Most of the required reforms will have to take place at the national level, but they should be complemented by efforts to coordinate and harmonize policies between jurisdictions. In cases where the rules of the European Single Market reflect international best practice and seem

[13] (1) Müller-Jentsch 2001and Müller-Jentsch 2002a. The ideas on deeper integration presented here have been developed in Müller-Jentsch 2002b.

suitable for adoption by the MPs, they should be used as a basis for regulatory harmonization. Done in a systematic fashion, this would amount to a southward extension of the Single Market in the transport sector (i.e. the EU-internal transport space).

Just as the liberalization of tariffs will create a free trade area, the reform and harmonization of sector policies will create a common transport space. On the one hand, this would allow achieving the objective of deeper integration for this specific sector. On the other hand, it would permit the transport sector to fulfill its important function as a facilitator for deeper integration in other markets, such as those for manufactured products or for tourism services. More efficient transport would permit the MPs to increase exports, attract more foreign direct investment, and to participate in increasingly complex cross-border supply-chains. It should be noted, that the idea of a common transport space not only provides a policy vision, or ultimate goal for reforms in the sector. The concept can also be regarded as a 'paradigm' to guide the analysis of national and regional policies in the sector. By comparing the status quo with the benchmark case of frictionless multimodal transport, reform needs and reform priorities can be identified. This provides a conceptual tool for the development of a comprehensive regional reform strategy for the sector.

Within the EU such a common transport space already largely exists. A range of laws, regulations, and institutions provide a coherent sector framework for the 15 member states. Air transport for both passengers and cargo has been fully liberalized; the majority of flag carriers and many key airports have been privatized; regulations for ground handling and airport charges are being modernized; and air traffic control will be re-organized to create a 'Single European Sky.' Road freight has been fully competitive for about a decade, border controls have been abolished, and a vibrant logistics industry is consolidating across national borders. The EU's strict competition and state aid rules have repeatedly been applied throughout the sector and the Commission has drafted new legislation to liberalize port services. In rail transport, a pan-European route network comprising 50,000 kilometers of track is being opened to private freight train operators. With much of the sectoral reform agenda in the EU now complete, efforts are underway to extend this common transport space to the accession candidates of Eastern and Central Europe. By the time the Euro-Mediterranean free-trade area is implemented around 2010, the European Single Market for transport is expected to be fully liberalized, privatized, and integrated across national borders. With 13 official accession candidates already in the process of adopting EU regulations, this market will comprise 25 to 30 countries with 450 to 500 million consumers.

An interesting example for the role that transport sector reforms can play in the dual pursuit of economic adjustment and regional integration is Mexico. In 1989 trucking was liberalized and between 1996 and 2001 the maintenance of 88 percent of the primary road network was contracted out to the private sector.[14] Between 1989 and 1994, a large concession program doubled the country's toll road network to 10,000 kilometers but due to poor planning many of the private companies subsequently went bankrupt.[15] A 1993 port law created autonomous port authorities, introduced competition and private participation in port services, and abolished restrictive labor rules.[16] Air transport liberalization started in 1990 and while it improved sector performance, the government eventually had to bail out two airlines, which are supposed to be re-privatized. The country's airports were grouped into four concession packages and starting in 1998 three of them were sold to strategic investors, with the remaining shares to be floated on the stock exchange.[17] Starting in 1995, the rail network was subdivided into four concessions and sold for $2 billion. As far as cross-border issues are concerned, the liberalization of air traffic rights between the United States and Mexico; comprehensive customs reforms; the award of two rail concessions along the border to US-

[14] Giugale, Lafourcade, and Nguyen 2001: 395.
[15] Ruster 1997.
[16] Giugale, Lafourcade, and Nguyen 2001: 398–399.
[17] Oxford *Analytica* (28 March 2001).

Mexican consortia; and efforts to harmonize technical standards in land-transport were part of the reform agenda. Even though the adjustment process was at times difficult, several billion of dollars of private investments were mobilized, sector efficiency increased considerably, and a modern transport system has become a catalyst for deeper economic integration between Mexico and its northern neighbor. Seventy-five percent of Mexico's exports now go to the United States and 60 percent of FDI comes from its northern neighbor.[18] In the manufacturing sectors, Mexico has been successfully integrated into US supply networks and an impressive border-spanning industrial complex between the two countries has emerged.[19]

Transport flows and transport costs in the Euro-Mediterranean are characterized by some general patterns.[20] First, the majority of cross-border traffic flows through maritime and air chains, especially in the countries of North Africa. Second, traffic tends to be heavily concentrated on a small number of ports, airports, and land-corridors. Third, about 50 percent of MP trade is conducted with the EU and south-south trade is limited to 5 percent of the total. One policy implication is that reforms and investments should focus on a network of priority ports and airports, as well as a backbone network of roads and railroads. Another key implication is that maritime and air chains deserve specific attention from policy makers. The analysis of transport costs in the southern Mediterranean countries indicates a need for further reforms. Benchmarking of macroeconomic freight costs against best practice (see Table 1) suggests that the potential economic benefits of comprehensive transport reforms in the eight Arab MPs could be as high as €3 and €5 billion per year. Microeconomic and efficiency indicators support this assessment. There are still southern Mediterranean ports where it takes longer to obtain customs clearance for a container than to ship it all the way from Hong Kong. The Lebanese government has sunk $450 million into a loss-making airline, while Jordan's flag carrier accumulated debt of over $850 million.[21] In Algeria, private sector sources have calculated that the costs of customs inefficiencies in the port of Algiers alone amounted to $ 200 million —equivalent to the construction of 14,000 social housing units per year.[22]

To understand the linkages between transport sector reform and deeper integration, the analysis of the 'business perspective' on these issues can be instructive. The role of transport logistics and supply chain management for firms is one of the key issues in this context.[23] The quality, reliability, and cost of transport services have always mattered to companies, but a number of developments have dramatically increased the importance of these parameters. Trends like lean manufacturing, just-in-time production, shorter time-to-market and product cycles, and global sourcing, all need to be supported by highly efficient logistics systems. As a reaction, many companies now use supply-chain management to organize their supply and distribution networks as part of a 'virtual enterprise' and to integrate other business-processes closely with logistics functions. At the same time, the trends to outsource and focus on core competencies has lead to a 'slicing' of the production process, while more efficient global transport and communication have made individual production stages geographically 'footloose.'

These changes have profound implications for the integration of developing countries in the international economy. Supply-chains in the emerging 'global conveyor belt' are highly sensitive to transport-related disruptions. If countries want to participate in global production networks and benefit from the disproportionate FDI, technology spill-overs, and human capital formation that are associated with outward-processing trade (OPT), they will need access to state-of-the-art logistics services.[24] The southern Mediterranean is becoming increasingly sidelined in the global economy. The merchandise trade of the largest Arab MP

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[18] *Financial Times* Deutschland (28 March 2001).

[19] Lakshmanan Anderson. 2001: 17–18.

[20] For a detailed analysis of these patterns see Müller-Jentsch 2002: 8–10. Most of the data was taken from the *MED-Trans Database* of Eurostat.

[21] *Middle East Economic Digest* (MEED) (5 June 1998 and 18 May 2001).

[22] *Liberté*, Algiers (31 October 2001).

[23] For a detailed discussion of supply chain management issues see Müller-Jentsch 2002: 12–15.

[24] Organization for Economic Cooperation and Development 2001: 25–30.

Egypt, for example, declined from 15 percent of GDP to 6 percent between 1990 and 1998, while its share in world merchandise exports dropped by a third to 0.1 percent.[25] Comprehensive transport reforms will have to be an integral part of a strategy to reverse that trend.

Another aspect of the business perspective on transport logistics is the analysis of the third-party logistics industry.[26] Logistics intermediaries play a critical role in delivering the multimodal transport services that companies demand. For decades, freight forwarders have bundled different transport services into tailor-made packages and handled paper work on behalf of their clients. Increasingly, integrators offer all transport services in-house, reducing what can be up to 40 different steps in a transport chain to as little as 11. In particular, express carriers have perfected this business to offer over-night, time-definite delivery across the world. Another trend in this rapidly changing industry, which reflects changes in technology and client needs, are value-added services like warehousing, reverse logistics, or light assembly. Already, 78 percent of European and 58 percent of US companies use logistics service providers.[27] An increasing number of them appoint lead logistics providers to whom they outsource their entire logistics needs and related activities. The increasing sophistication of logistics systems and the associated elimination of buffer stock, has allowed leading companies to reduce total logistics costs by 50 percent in less than a decade.[28] As the boundaries between freight forwarders, integrators, carriers, and even postal operators blur, a small number of players are eventually expected to emerge from a consolidated industry.

The case of Eastern Europe demonstrates that logistics companies have an important role to play in the creation of a common transport space between countries. In anticipation of EU accession, the CEECs are in the midst of adopting the legal and regulatory framework of the Single Market, including in the transport sector. They are also privatizing formerly state-owned transport companies and removing bottlenecks at national borders. Once policy-makers create a conducive environment for the sector, it is up to private companies to provide the logistics services that clients demand. The express carrier DHL, for instance, employs 3,000 staff in 160 offices, after having invested more than $100 million in the CEECs.[29] Other examples are a logistics firm that provides time-definite delivery of heavy-weight shipments across 20 European countries, or private train operators that run refrigerated banana trains from Antwerp to Prague and meat trains from Spain to Russia.[30] Near Budapest, international investors have set up a large logistics park with access to rail, road, and inland waterways, to service the Central European region. These and other examples show that trade facilitation requires transport facilitation and that the creation of a common transport space requires a conducive policy environment for the development of the third-party logistics industry. They also show that deeper integration involves adjustments at the company level.

Another facet of the business perspective on transport logistics is the critical importance of information and communication technology (ITC) for this highly information-intensive industry.[31] The effective processing of information and exchange of documents is a prerequisite for the smooth flow of goods. Currently, paper-based systems are estimated to swallow up a total of $ 420 billion each year (7 percent of the value of world trade).[32] Modern ITC tools that are being used to reduce such frictions include warehousing software, satellite-based fleet management, online transfer of documents, tracking and tracing software, and electronic data-interchange (EDI). The effective application of such tools, however, requires

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[25] World Bank 2001a: 2–3.

[26] For a detailed discussion of the third-party logistics industry see Müller-Jentsch 2002: 21–25.

[27] Holland International Distribution Council 1998: 29.

[28] *Financial Times* (1 December 1998).

[29] World Bank. April 1999. *Transition*.

[30] *Financial Times* (9 December 1999).

[31] For a detailed discussion of the role of ITC in transport logistics see Müller-Jentsch 2002: 26–28.

[32] *Financial Times* (23 August 1999).

changes in the way the transport sector operates. Commercial management and competition in all parts of the sector is needed, as is the adoption of EDI by customs authorities and the reduction of bureaucratic frictions. In most of the MPs, outdated sector structures still prevent the effective use of modern ITC tools. Another technological innovation that has transformed the industry and creates significant pressure to modernize sector structures, is the containerization of cargo. This has not only dramatically reduced the costs and time needed for modal transfer and thus door-to-door transport, it has also exposed the inability of many state-owned ports and railway companies to cope with technological progress. In fact, outdated port equipment and bureaucratic customs procedures help explain why containerization rates in most MPs remain far below those of comparator countries.

Two case studies of cross-border supply chains in the Mediterranean region show the relevance of logistics for deeper integration.[33] Tunisia, for instance, recently lost a bid for the location of a new factory by a German car part manufacturer for logistics reasons. FDI of $ 12 million and 1,700 jobs went to Romania instead, because a one-day time saving in each direction was vital for an industry that is reducing order-to-delivery cycles from 9 to 6 days. One of the reasons why Israel is the MP with the largest share in the European market for fresh-cut flowers is the fact that it is in the position to provide a reliable 'closed cooling-chain' for the transport for this highly perishable product. Specialized ground-transport services, dedicated fresh-cut flowers cargo planes, specific customs procedures for these trades, and a public authority that oversees the development of this market, have helped Israel to become the largest exporter of fresh-cut flowers to Holland (the main distribution platform in Europe). The $5 million-worth of fresh-cut flowers shipped to this country by all other MPs together, pale in comparison to the $160 million-worth of flowers coming from Israel alone.

Transport users no longer 'move goods but manage flows,' and policy makers need to take account of this reality by adopting a systems approach to the sector. Governments and donors should pay less attention to physical infrastructure and more attention to logistics services. They need to focus reform efforts on the removal of actual bottlenecks and frictions that hamper transport flows. The public sector should withdraw from direct sector involvement and create an environment conducive to market dynamics. The interplay between competition and private sector initiative is needed to permit for the comprehensive reconfiguration of the region's multimodal system. Most state-owned ports, shipping lines, airports, airlines, and logistics companies that currently dominate transport markets in the MPs have failed to adapt to the changing needs of their clients. At the same time, red tape, exclusivity rights, and other distortions have prevented change or created perverse incentives to pursue rent-seeking activities. Privatization, liberalization, and regulatory reform are needed. Governments should also overcome their ad-hoc and fragmented approach to sector policy and build the required institutional capacity at the sector level.

Another integral part of a systems approach is the focus on multimodal transport. As goods and people flow through intermodal chains, modal transfer at network nodes (especially ports) needs to be facilitated. A conducive environment for the development of the third-party logistics industry will allow these intermediaries to play their role in the integration of different modes. Since a chain is only as strong as its weakest link, all parts of the multimodal system need to work efficiently, including banking and insurance markets. To permit an efficient division of labor between modes, policy-induced distortions to the modal mix need to be removed. At the same time, effective modal competition needs to be encouraged. Many of these policy principles for multimodal transport have been defined in a 1997 Commission communication on intermodality and the MPs should also consider factoring them into their own sector reforms.[34]

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[33] These two case studies are based on the author's own research. For further details see Müller-Jentsch 2002: 15 and p.18.

[34] European Commission 1997.

National borders account for some of the most notorious bottlenecks in regional transport chains and removing the frictions they impose will require a number of reforms at the national level. In general, the worst source of disruptions are cumbersome border controls, especially customs. In Egypt, for example, around 1,500 tariff lines are subject to product standards and different forms must be submitted to several agencies for clearance.[35] In Jordan 51,000 import transactions were subjected to tests by the standards institute in one year, even though only 65 (or 0.1 percent) failed the tests.[36] It is not uncommon for cargo imported through ports to require 10 to 20 days for customs clearance. In countries like Morocco or Lebanon, customs reforms have reduced delays dramatically and other MPs have now started to tackle border-related frictions. While most such reforms will have to take place at the national level, cross-border cooperation will also be needed. A harmonization of customs procedures and product standards, juxtaposed controls at border crossings, and coordinated facilitation measures along main land corridors should be priorities. In aviation, the liberalization of bilateral air traffic rights is a key issue and the creation of a regional civil aviation area should be considered. A regional backbone network of roads and railways, as well as a network of key ports and airports should be identified. Along these main corridors and nodes of the multimodal system, governments and donors could coordinate policy reforms and infrastructure investments. Moreover, a large number of international conventions to facilitate cross-border trade and transport exist, which the MPs could ratify and implement. Of 16 key UN transport facilitation conventions, for instance, Italy ratified 16 and France 15—compared to 4 in the case of Algeria and 5 in the case of Tunisia.[37] Finally, more reliable and consistent performance statistics for the sector are needed to allow policy makers and donors to identify reform needs, assess the impact of policy initiatives, and to benchmark performance across countries. Key statistics such as customs clearance times, ship dwell times, or the amount of subsidies paid to flag carriers remain patchy, outdated, or impossible to obtain.

3. Air Transport

Air transport appears to be the mode that lends itself most readily to deeper integration. The EU has a well-developed legislative, regulatory, and institutional framework for aviation; and regulatory harmonization at the European level was an important catalyst for sector reform in the member states. More importantly, this framework seems well-suited to be extended to neighboring countries, and in fact the Eastern European accession candidates are already adopting it. In the multimodal transport system of the Euro-Med region, air transport plays a critical role for the transport of passengers (including tourists) and high value-added, time-sensitive goods. This is illustrated by the fact that in terms of weight only 1 percent of trade between the two sides of the Mediterranean was carried by air, while in terms of value it was around 16 percent.[38] Whereas only about 5 million people arrive in the MPs by sea each year, the figure for air transport is about 40 million. More than two thirds of tourists arrive by air and tourism receipts in the 12 MPs amount to more than $20 billion annually (the most important service export of the MPs).[39] Thus cheap and efficient air transport is vital for trade in services, foreign currency receipts, and employment. With traffic heavily concentrated on some key airports and international routes, these should be a priority for reforms.

Domestic and cross-border liberalization in the Americas could provide an interesting precedent for similar reforms around the Mediterranean. At the country level, the privatization of flag carriers and the removal of regulatory restrictions to competition have triggered restructuring, price reductions, and efficiency improvements.[40] At the regional level, the deregulation of cross-border traffic rights and a sequence of open skies agreements have

[35] Kheir-El-Din 2000: 215 and p.220.
[36] Al Khouri, Riad 2000: 146.
[37] Martin 2001.
[38] These transport statistics were taken from the *MED-Trans Database* of Eurostat. For a detailed discussion see Müller-Jentsch 2002: 40–42.
[39] World Bank 2001b: 362–364.
[40] The Avmark Aviation Economist (January 1998).

boosted traffic volumes and competition. The US market (the largest in the world) was liberalized in the late 1970s and early 1980s. During the 1990s, the mutually reinforcing trends of privatization and liberalization also transformed aviation markets in Latin America. An example for north-south integration in this sector are the open skies agreements between six Latin American countries and the United States that entered into force between 1997 and 1998. Within a year, these Latin American countries saw traffic levels rise by an average of 21 percent, while other markets in the region barely grew.[41]

One critical reform challenge in air transport is the restructuring and privatization of state-owned airlines. This tends to increase sector efficiency, reduces government transfers, and facilitates cross-border consolidation through strategic alliances. Some MP flag carriers, such as Tunis Air or Royal Air Maroc, are relatively well managed, but most still under-perform. Load factors of virtually all MP airlines, for example, are below world averages by 10 to 20 percent.[42] Royal Jordanian accumulated losses of $848 million, or around 10 percent of the country's GDP. Despite heavy losses, the state-owned Middle East Airlines in Lebanon maintained a staff-aircraft ratio of about 500:1 for several years.[43] State-ownership in MP flag carriers still averages 95 percent—in contrast to Latin America, where virtually all flag carriers are now in private hands (see figure 1).[44] The comprehensive restructuring of Royal Jordanian after years of mismanagement, provides a precedent for other countries.[45] The reduction of an over-extended route network, balance-sheet restructuring, layoffs, a clear separation of public service obligations from commercial activities, and the outsourcing of non-core activities (engine maintenance, catering, duty free shops) were all part of the restructuring. The 1990s have also been a decade of airline restructuring and privatization in the EU. Between 1991 and 1997, national governments still transferred $10 billion to their flag carriers.[46] The Commission, however, made the approval of subsidies conditional on strict restructuring and privatization measures. In the meantime, most EU airlines have been privatized.

Regulatory reform is also needed if sector performance is to be enhanced and regional integration is to be facilitated. A wide range of regulatory constraints at the national and the international level continue to distort market dynamics in aviation. The impact of competition on air-fares is well-documented. A Commission report, for example, found ticket price on routes with two operators 5 to 17 percent cheaper and with three operators 10 to 24 percent lower than on monopoly routes.[47] Greater competition and less political interference in operations can even induce state-owned airlines to excel, as the example of Emirate Airlines shows. Operating in the open-skies environment of Dubai, without subsidies or protection, Emirates has won more than 150 quality awards and makes profits of about $100 million a year.[48] Regulatory reforms that individual governments need to address at the national level are the liberalization of licensing rules and market access.[49] Several MPs have started to dismantle the exclusivity rights granted to flag carriers and have issued licenses to private operators. Most of those newcomers, however, remain niche players and the incumbents continue to influence sector policies to tilt the playing field in their favor. In Egypt, for example, the tourism industry has long complained about the grip of Egypt Air on the market and a special aviation minister recently had to be appointed to oversee reforms. In the EU, the

[41] The Avmark Aviation Economist (February 2000).

[42] International Air Transport Association (IATA) 2001.

[43] Royal Jordanian debt figures from: MEED (5 June 1998) and MEA statistics from: MEED (18 May 2001).

[44] The methodology employed to compile the data for Figure 1 was the following: The percentage of public ownership for each country's flag carrier was multiplied with the carrier's revenue-passenger-kilometers (RPK) for scheduled traffic and the average percentages for each region was then calculated. Charter flights and airlines other than the flag carrier are not included in the calculation. In two cases, where privatized airlines had gone bankrupt, the largest carrier of those countries was used instead.

[45] For details about the restructuring of Royal Jordanian see Müller-Jentsch 2002: 47.

[46] United Kingdom Civil Aviation Authority 1998: 339.

[47] European Commission 1996a.

[48] MEED (4 September 1998 and 16 November 2001).

[49] For a comprehensive discussion on regulatory reform in air transport see OECD 1999b.

‘third package’ of liberalization measures deregulated licensing, market access, and fares across member states in the mid-1990s, while making the EU’s strict competition rules fully applicable to the sector. During that period, the efficiency of EU carriers measured in terms of revenue-passenger kilometers rose by 48 percent and total employment in civil aviation increased from 435,000 to 490,000.[50] The low-cost market segment is still growing at around 25 percent per annum, while the market share of incumbents continues to decline.[51]

Cross-border liberalization of traffic rights is another important aspect of sector reform, especially since most MP markets lack critical size. Market access, capacity, and other important parameters in cross-border traffic continue to be governed by bilateral air service agreements (ASAs) between governments. Several MPs have started to relax the provisions of the agreements they negotiate, but most ASAs in the region remain restrictive. Jordan and Morocco have both reached open skies agreements with the United States and are liberalizing traffic on other international routes.[52] The most far-reaching reforms to date took place in Lebanon, which adopted a general open skies regime. For most MPs, the EU accounts for the majority of cross-border traffic (e.g. 80 percent in the case of Tunisia) and the ASAs governing those routes should be a priority for liberalization.[53] Bilateral and regional reforms play a particularly important role in this sector, since the multilateral framework is still governed by the Chicago Convention of 1944 and has not yet been incorporated into the GATS negotiations. Inside the European Single Market, all ASAs have been abolished. In fact, the EU is a global pioneer in transcending the limitations of a multilateral regulatory framework still based on the concept of national sovereignty over airspace. After completing the civil aviation area within the EU, the Commission reached an agreement with ten accession candidates in 2001, to create a European Civil Aviation Area (ECAA).[54] This will liberalize air traffic rights and oblige all signatories to generally adopt EU rules and regulations in the air transport market. From an efficiency point of view, a joint civil aviation area between the EU and the MPs would also be desirable. Domestic liberalization, the reform of bilateral ASAs, and the Inter-Arab Freedom of the Air Program currently under implementation, could all serve as building blocks for a common transport space in aviation.

Two market segments that are of particular importance for deeper economic integration in the region and thus deserve additional policy attention are air cargo and charter traffic.[55] Specific reform measures for air cargo include compliance with the Immediate Release Guidelines of the World Customs Organization, liberal licensing for operators of all-cargo planes, or the development of underutilized secondary airports into cargo hubs. An example for regulatory constraints in the cargo segment is Morocco, where express carrier DHL lost an important contract after it was refused regulatory permission to operate a larger aircraft.[56] In the United States and the EU, air cargo liberalization preceded the liberalization of passenger traffic and some countries like Mexico have a more liberal regulatory regime for cargo traffic. Since the majority of freight is transported in the belly-hold of passenger planes, however, the effective liberalization of air cargo in most MPs will require broader sector reform. Charter traffic (non-scheduled flights), is particularly important for tourism. It is also the market segment where liberalization is most advanced in the southern Mediterranean, and can thus be regarded as a successful pilot case for more far-reaching reforms. Eventually, the MPs should follow the EU example and remove regulatory distinctions between scheduled and non-scheduled services, by liberalizing the latter. This would do away with an artificial market segmentation that reduces overall sector efficiency.

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[50] European Commission 1999b: 11.
[51] *World Air Transport* (July 1998) and *The Economist* (26 May 2001).
[52] World Bank and European Commission 2000 : 14 and 16; MEED (9 October 1998).
[53] World Bank 1997c: 157.
[54] Agence Europe (14 July 2001).
[55] For a detailed discussion of air cargo and charter traffic see Müller-Jentsch 2002: 58–62.
[56] World Bank and European Commission 2000 : 14 and 25.

Other items on the regulatory reform agenda in air transport are the liberalization of ground handling, the regulation of airport fees and slot allocation, privatization of airports, as well as the reform of air traffic control. Costs related to airports and air traffic control can account for up to a quarter of airline expenses. In most groundhandling services, the introduction of private participation and competition is feasible. In practice, however, regulatory restrictions as well as vertical integration with the operations of flag carriers or airport management often prevent this from happening. A European study found that prices for ramp handling were 40 to 75 percent higher when provided by a monopolist than when subject to competition.[57] In the EU, a directive formally liberalized ground-handling in the late 1990s, but competitive dynamics have been slow to unfold.[58] The core services provided by airports represent a natural monopoly and therefore, airport charges also need to be regulated. The Commission drafted a directive to introduce and harmonize key principles such as cost-relatedness, non-discrimination, and transparency. With this legislation blocked by some EU member states, however, the Commission used the application of general competition rules in some precedent-setting cases, to counter anticompetitive abuses. Airport slots influence market access and competition and thus fair rules for slot-allocation should be part of the regulatory framework. Again, the EU acquis in this area defines some general policy guidelines that the MPs could adopt—even though capacity constraints and thus slot scarcity are less of an issue in those countries than they are in Europe. As with the other parts of the acquis, however, the transposition of EU principles would be a precondition for ECAA membership.

One policy area in air transport where reforms are gathering considerable momentum in the southern Mediterranean is airport privatization. Examples for inefficient investment planning under public ownership in MP airports include the expansion of Cairo (Egypt) and Algiers (Algeria), where budget constraints caused years of delays, as well as excessive and thus uneconomical capacity expansions in Tabarka (Tunisia) and Agadir (Morocco).[59] Egypt has successfully issued six private concessions for secondary airports, with private investment commitments amounting to hundreds of millions of dollars.[60] The privatizations of the airports of Algiers, Beirut, and Cyprus are planned or under preparation, while Tunisia would like to see a private investor build a new $ 400 million airport close to a key tourist resort. To date, however, none of the major airports in the MPs has actually been privatized, with the exception of the partial privatization of Malta's airport in 2002. Again, the reform process is much more advanced in Latin America (privatization receipts in Argentina alone were $2 billion) and in the EU, where many major airports have already been privatized (e.g. London, Frankfurt, Rome, Vienna, Athens).[61] The new operators of these European hubs are investing heavily and are positioning themselves to participate in future privatizations abroad. The acquisition of Antalya (Turkey) airport by Frankfurt airport illustrates how policy reforms (both airports were privatized) can facilitate deeper regional integration at the company level.

In air traffic control (ATC) restructuring and privatization are also needed. While national sovereignty over airspace remains sacrosanct for most countries, the EU is developing strong supranational institutions for the provision of ATC services. Eurocontrol has long been a driving force for technical harmonization and the common management of the upper airspace.[62] With the fragmentation of Europe's airspace a major source of delays, however, EU countries have taken the bold decision to create a Single European Sky by 2004.[63] A European Aviation Safety Agency is also being established to harmonize and enforce safety regulations. All three initiatives are in principle open to participation by non-EU countries

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[57] OECD 1999b: 67. Cranfield University carried out this study on behalf of the Association of European Airlines (AEA).

[58] European Commission. 1996b.

[59] MEED (4 June 1999, 2 June 2000, 6 April and 2 November 2001); World Bank 1997b: 37.

[60] MEED (5 June and 28 August 1998; 2 June and 13 October 2000) and Reuters (24 November 2000).

[61] Silva 1999. For an overview of European airport privatizations see Müller-Jentsch 2002: 71–72.

[62] Eurocontrol website (*www.eurocontrol.be*).

[63] European Commission 2000b; European Commission 1999a.

(Eurocontrol already has 29 members) and the eventual participation of the MPs could be an important building block for deeper regional integration in the sector.

4. Maritime Transport

In the MPs and especially in North Africa, the vast majority of cross-border transport flows through maritime chains. Bulk cargo like oil and phosphate accounts for a large percentage in terms of transport volumes, while general cargo and especially unitized cargo in the form of containers and RoRo (roll-on, roll-off) ferries play a critical role for the exchange of high value-added products. As in air transport, traffic is heavily concentrated in a few ports and traffic with the EU plays an important role. Unlike in air transport, transit traffic in the region is significant, as global shipping routes traverse the Mediterranean. While reliable performance indicators are hard to come by, there is clear evidence that port inefficiencies constitute major bottlenecks in maritime chains. Streamlining their operations should thus be a reform priority. In Egypt, the direct and indirect economic costs of port inefficiencies have been estimated at up to $ 2 billion annually, while customs delays for containers in Algeria cost around $ 200 million annually (the average time needed for clearance is 28 days).[64]

In the EU, the regulatory framework in maritime transport is less elaborate than in air transport. Nonetheless, a number of reform trends and policies could provide guidance for similar reforms in the MPs. First, several EU member states have implemented comprehensive sector reforms, and others are forced to follow suit, as the borderless Single Market brings ports from different countries into direct competition with each other. Second, the Commission has established important policy principles through the application of general competition rules to ports and shipping lines. Third, it has now drafted sector-specific legislation in the form of a port directive in order to harmonize sector policies between member states.[65] If implemented, this would separate regulatory and commercial functions, while opening port services to competition and private participation.

Some additional lessons for southern Mediterranean countries come from the reform experience of the Baltic Sea region, where maritime transport has played an important role in economic integration between the two sides of a common sea.[66] At the regional level, a high-level policy dialogue; systematic cooperation between maritime authorities; a regional sector strategy prepared by the Swedish government; and cross-border facilitation of hinterland traffic along the Via Baltica road corridor have been part of the reform process. At the national level, the former socialist economies bordering the Baltic have privatized ports, port service companies, and shipping lines and are adopting European legislation in preparation for EU accession. Intra-regional traffic already accounts for a third of port throughput and continues to grow considerably faster than underlying GDP. Additional lessons of international best practice come from Latin America, a developing region where maritime reforms are well advanced. Colombia and Argentina are two well-documented cases where comprehensive sector reforms in the 1990s led to impressive improvements in a range of performance indicators.[67] Costs and prices fell, government transfers were all but eliminated, significant private investments were mobilized, and traffic volumes rose.

Other than in air transport, where the liberalization of cross-border traffic rights is a major issue, the main bottlenecks in maritime chains are mostly located in ports. As entry points into a country, ports are not only the place where cargo is transferred between modes, but also the location where it ‘hits the administration.’ Goods change hands several times and multiple transfers of ownership titles, insurance certificates, documentary credit, customs forms, and other administrative documents are required. Regarding institutional and regulatory reforms,

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[64] World Bank 1997a.; *Liberté,* Algiers (31 October 2001).
[65] European Commission 2001a.; European Commission 2001b.
[66] For a review of maritime sector reforms in the Baltic Sea region see Müller-Jentsch 2002: 78.
[67] Gaviria 1998.; Estache and Carbajo 1996.

an international best practice has emerged.[68] The 'landlord port' operational model involves three institutional layers: a government agency that defines sector policy, port authorities that are in charge of regulation, and private companies that compete in the provision of port services. The landlord port model is becoming the norm in the EU and a survey found that 88 of the world's 100 largest ports have already adopted this operating structure.[69] For smaller ports, the 'tool port' model is more appropriate, whereby the port authority owns the equipment and rents it to private operators. In the Arab MPs institutional reforms have started, but are still at an early stage. Most ports continue to be managed by public port authorities, with ill-defined incentive frameworks and insufficient accountability. Exclusivity rights, unregulated monopolies, collusive practices, and labor problems hamper competition and undermine efficiency. So far, landlord ports barely exist in the southern Mediterranean.

Whereas regulatory reforms have a long way to go, private participation in port investments is more advanced. For modern container terminals and certain bulk cargo terminals, vertical integration of port management and service provision is needed for operational efficiency. In these cases, concessions should be awarded to private operators on the basis of competitive tenders and accompanied by transparent regulation to prevent an extraction of monopoly rents. As one of the first Arab MPs, Egypt has issued concessions for a container terminal in East Port Said, for a petroleum terminal in Alexandria, as well as for a port in a new industrial zone at the southern end of the Suez Canal.[70] In East Port Said alone, private investment commitments amount to $480 million. Morocco has granted a 20–year concession for a coal terminal to a private power plant operator and has long toyed with plans for a private container terminal in Tangier. In 1999, Lebanon issued a concession for a container terminal in Beirut, but the investor subsequently pulled out—due to poor project planning and an ill-defined regulatory framework. While these examples show that reforms have started, none of the large ports in the southern Mediterranean has yet been privatized.

Competition between ports can be another way to induce efficiency improvements, but it requires overlapping hinterlands. Several MP ports—especially in the Middle East—would be well placed to serve catchment areas in neighboring countries. In practice, however, regulatory restrictions, and especially the disruptions caused by controls at land-borders, prevent this from happening. In Egypt, one of the few MPs where several large domestic ports share a potentially contested hinterland, state ownership and decreed prices restrict competition. Especially in the eastern Mediterranean, a number of ports could potentially compete effectively to act as gateways to the Middle East if the policy environment were more conducive. This contrasts with Europe, where such deeper integration in the maritime sector is already a reality. A customs union, the removal of border controls, and efficient hinterland connections bring ports from different countries into direct competition with each other. Rotterdam and Antwerp, for instance, are two of the continent's largest ports but with a mere 90 kilometers between them, they compete vigorously. Thanks to heavy investments and upgraded hinterland connections, even the port of Barcelona is now competing with these northern European ports for certain hinterland traffic (e.g. in France).

Another important item on the maritime reform agenda, facilitated by the introduction of landlord ports, is the introduction of private participation and competition in port services. A wide range of services are being provided to ships and cargo, and many of them lend themselves to such reforms. There is neither an economic justification for public sector involvement or exclusivity rights in services such as general cargo handling, warehousing, bunkering, banking and insurance services nor for restrictions to the operation of shipping agents and freight forwarders on port premises. Ideally, the role of the port authority should be confined to issuing licenses to private operators, creating a level playing field for competition, and coordinating port development. Exceptions are pilotage, tug services, port

[68] A detailed overview over the legal and institutional aspects of port reform can be found in Juhel 1998.

[69] World Bank. *Transport Subsectoral Issues at a Glance: Ports, Maritime, and Logistics*. World Bank transport website (*www.worldbank.org/transport/*).

[70] MEED (25 June and 20 August 1999, 26 January 2001, 8 March 2002).

security, and health services, where public provision or at least strict but transparent regulation is required. Once again, most MPs have initiated reforms in this policy area, but are found to be lagging if benchmarked against best practice or the status of reforms in the EU Single Market. Overstaffing and state-ownership in key services are still prevalent in countries such as Egypt, Morocco, and Tunisia. Algeria has adopted some bold legislative reforms, but implementation is at an early stage. In Lebanon, the situation is somewhat reversed: most services are provided by private companies, but they operate in an outdated regulatory framework, while cartelized structures reduce competition.

Port reforms are the most pressing issue in maritime transport, but the shipping market also deserves some attention by policy makers.[71] In principle, the shipping industry is highly globalized and competitive. Regulatory restrictions to market access and route networks are relatively rare but where they exist, they should be removed. Other issues on the reform agenda are the application of anti-trust rules in cases where liner conferences try to restrict competition on certain routes, as well as the privatization of state-owned shipping companies. An illustrative example for the inefficiencies that state-ownership can breed is the mismanagement that government authorities in Morocco exposed at the shipping line Comanav.[72] Finally, inefficient port operations can deter international shipping lines from servicing certain ports, as the case of Damietta in Egypt shows.[73] Different cargoes—such as dry and liquid bulk, general cargo, or containers—constitute specific market segments as they involve different types of terminals and vessels.

General cargo and especially container, and RoRo traffic play a key role for the flow of manufactures and high value-added goods. In the Mediterranean, container traffic rose by an annual average of 13 percent and container transshipment by 20 percent between 1990 and 1998.[74] Nevertheless, containerization rates in most MPs remain relatively low and for the sake of smoother intermodal traffic, governments should try to encourage greater use of containers through customs reforms and through the concessioning of container terminals to experienced international operators. Container transshipment is an internationally mobile activity and countries in the region are already competing fiercely for the associated jobs and investments. However, sector consolidation will only leave room for a few large transshipment ports and one of the most promising strategies to attract such hub functions are comprehensive policy reforms in maritime transport.

5. Land-Based Transport and Other Sector Issues

Efficient hinterland connections for ports and airports, as well as the smooth flow of cargo and passengers along a backbone network of roads and railroads, are priorities in land-based transport. While urban and public transport also involve important policy decisions, they are of little relevance for cross-border flows and thus beyond the scope of this paper. As far as regional cooperation is concerned, the identification of bottlenecks along these corridors and a coordination of appropriate facilitation measures are obvious areas for cooperation between countries. With land-borders a major source of disruptions, a streamlining of procedures, juxtaposed controls, but also adequate staffing and physical facilities are needed.

The extension of the Trans-European Networks (TENs) to the southern Mediterranean countries has often been discussed and a comparison with the TEN extensions to the Eastern European accession countries is occasionally being made. However, the applicability of this concept to the MPs appears limited for a number of reasons. First, European countries are connected by land-borders that are physically crossed by roads and rail tracks. Therefore, the coordination of investments in infrastructure is more important than in the case of the MPs, where cross-border traffic flows almost exclusively through ports and airports. Second, the

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[71] A detailed overview over policy issues in the shipping industry can be found in OECD. 1999a. &&
[72] *La Vie Economique* (18 January 2002).
[73] World Bank 1997a: 3.
[74] Drewry Shipping Consultants 2000: 9.

TEN projects focus on physical infrastructure and pay little attention to actual logistics flows or policy reforms needed to facilitate transport services. These, however, seem to be the main sector priorities for most MPs. In fact, the EU also addressed policy issues first by establishing the Single Market, before addressing physical infrastructure bottlenecks through the TENs. Third, MP governments sometimes seem to be under the impression that TENs could become a vehicle to mobilize additional funding. However, it is mainly a planning tool to coordinate investments by individual governments. Even in the CEECs, the Commission provides less than € 1 billion per year for the TENs, despite estimated investment needs of € 91 billion until 2015.[75] All this suggests that a corridor concept that focuses on logistics flows, policy reforms, as well as maritime and air chains, would be more appropriate for the cross-border coordination of transport policies in the southern Mediterranean.

Roads account for the vast majority of land-based freight transport and the effective regulation of the trucking industry is an important policy issue. In most MPs, the industry is private-sector dominated and rather competitive, but further deregulation of prices and market access would enhance efficiency. In cross-border haulage, a harmonization of standards for equipment and personnel, as well as cabotage and rights of establishment would be desirable from an economic point of view. Overloaded trucks do significant damage to roads, and a violation of safety and environmental rules can impose substantial externalities. As in maritime and air traffic, well-targeted and strictly enforced environmental and safety standards are thus called for. On all these issues, European reforms could provide guidance for the MPs.[76] Starting in the 1980s, the EU de-regulated prices and market access, liberalized cabotage and the right of establishment, removed border controls and harmonized technical standards to create a level playing field for competition. As in other parts of the transport market, regulatory harmonization at the European level proved to be a catalyst for sector adjustment at the country level. Studies found that border controls imposed costs between € 400 and € 800 million prior to reforms and that ton-kilometers performed by trucks increased by 50 percent and more as a result of liberalization.

Another interesting precedent for deeper integration in the road sector is the Interbus Agreement between the EU and the CEECs.[77] It harmonizes and liberalizes cross-border bus travel. Like the ECAA in aviation, it is a multilateral agreement that provides for a de facto extension of EU-internal rules to non-members in Eastern Europe (plus Turkey). A final policy theme in the road sector is infrastructure investments. MP governments should adopt international best practice by outsourcing construction as well as operation and maintenance work to the private sector. The concessioning of new roads to private investors is much more difficult and the Cross-Israel Highway with investment commitments of $1.3 billion might remain the only such project in the region for some time to come.[78] However, mixed private-public projects, such as subsidized concessions for new roads or the sale of existing toll roads to private operators, might be feasible reform alternatives.

In the multimodal logistics system of the southern Mediterranean, rail seems well placed to carry long-distance freight above 500 kilometers. In this mode, the restructuring of state-owned companies tends to be the policy measure with the largest efficiency effect. Morocco has implemented a comprehensive and successful restructuring program in recent years, which other MPs might want to replicate. It has rationalized operations, laid off surplus staff, introduced commercial management, and returned a heavily loss-making operation to profitability. In rail, opportunities for the introduction of private participation and competition are more limited than in other modes. However, the outsourcing of operation and maintenance work to private companies is a promising measure, as the example of Egypt shows. The concessioning of routes dedicated to high-volume freight traffic might be another option, as a

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[75] World Bank 2000b: &&35–36.

[76] This and the following information on road freight in the EU from European Commission 1994: 11–20 and 36–38.

[77] European Commission 2000a. : 2–4. &&

[78] MEED (12 November 1999) and *Der Spiegel* (issue No. 47, 2001).

precedent case in Jordan suggests. With regard to private participation, the MPs lag considerably behind international reform trends. According to a study, developing countries mobilized $14 billion of private investments in the sector between 1990 and 1997, of which 81 percent were in Latin America but none in the Middle East and North Africa.[79]

With regard to cross-border traffic, the facilitation of rolling stock transfer at border crossings, and the opening of key routes to private freight operators could yield significant benefits. Mexico, for example, split its national network into separate concessions and awarded the two concessions along its northern border to US-Mexican consortia to facilitate cross-border traffic. A 'NAFTA railway' now runs regular freight trains from Mexico all the way to Canada.[80] Another example of how private participation and liberalization can facilitate cross-border logistics comes from Europe. The German company Eurokai operates port terminals in Germany and Italy and thanks to regulated network access, it is in the position to offer train connections from its ports all the way to Central Europe.[81] The EU regulatory framework for rail transport is still evolving, but EU legislation codifies some policy principles for this mode, which the MPs could usefully adopt. The separation of railway accounts from those of the state, a transparent licensing regime, rules on track access and a harmonization of technical regulation should all increase sector efficiency. The planned creation of the European Railway Agency could provide an institutional counterpart for the MPs. An important deeper integration initiative in this mode is directive 2001/12/EC, which identifies 50,000 kilometers of tracks to be opened to private operators by 2003.

Customs reform is one of the items on the policy agenda with the highest payoff in terms of transport facilitation. In this regard, the Lebanese experience with customs reforms can provide some useful lessons for other MPs. With the help of donor technical assistance from the World Bank and UNDP, the government streamlined procedures (from 13 to 4 steps) and reduced the number of forms from 26 to 1. A tariff reform simplified the nomenclature and brought it in line with international standards. A computer system was rolled out to permit for electronic data entry and processing, while generating more reliable statistics as an important by-product. All border-related regulations were summarized in one table and all checks are to be performed in one go. During the first two years of reforms, the number of shipments cleared without inspection quadrupled from 10 to 40 percent, the average tariff rate collected remained constant, and clearance times declined from 6 to 4 days (see figure 2).

Even though postal services are rarely considered part of the transport sector, its boundaries with other logistics services have long been policy-induced and are now vanishing. In the EU, the postal service market with an annual turnover of € 80 billion is gradually being liberalized by the European Commission.[82] While some member states have already fully opened these services to competition, the others have to gradually reduce the weight-limit of packages that remain subject to a legal monopoly. EU rules require that 85 percent of all mail has to be delivered within 3 days and 97 percent within 5 days. In what appears to be one of the most elaborate EU benchmarking exercises to date, one million test letters are sent around Europe each year and the performance of all national operators is published on a quarterly basis. Many EU postal operators have been partially privatized and some of them are aggressively diversifying into general logistics services. Thanks to policy reforms and commercial management, former state-owned postal monopolies are actively participating in the convergence and consolidation that is transforming the European logistics industry. While this illustrates the long-term trend in the sector, MP postal operators will have to deal with more basic reforms first. High up on the policy agenda are the separation of regulatory and operational functions, the clear delineation of universal service obligations, the introduction of commercial management and restructuring (e.g. staff reductions, corporatization).

[79] Tynan 1999.
[80] Reuters *Business Briefing* (27 November 2001).
[81] *Financial Times Deutschland* (15 June 2001).
[82] *Financial Times* (20 November 2000).

However, the example of Lebanon shows that leap-frogging in the reform process might be possible. After postal services ceased to operate during the civil war, the government issued a private concession in 1998. Despite an erratic regulatory environment and continued government interference, LibanPost re-established country-wide services, invested up to $ 90 million, pays an annual concession fee, and delivered 19 million letters in 2000.[83]

Another important policy issue in the transport sector is the application of cross-sectoral competition laws. The Commission, which enforces the EU's strict competition and state aid rules, has repeatedly applied these to the transport sector. While cross-sectoral competition policy tends to be complementary to sector-specific regulation, it can also be a substitute. In the case of airport charges, for example, EU legislation was blocked by some member states and the Commission eventually enforced its main provisions (cost-relatedness, non-discrimination, and transparency) by ruling on a number of precedent-setting cases. Other cases in air transport concerned state aid, airline alliances, predatory pricing, and slot allocation. In maritime transport, the main rulings concerned anticompetitive behavior of shipping conferences (price fixing, predatory pricing) as well as tariffs and market access for port services. Many southern Mediterranean countries have adopted competition laws, but their enforcement will require considerable capacity-building. In the meantime, a more promising route to transport sector reform appears to be sector-specific regulation.

A final case study that illustrates some key policy issues in the sector is a comparative analysis between the Panama and the Suez canals.[84] There are striking similarities between these two global waterways in terms of traffic volumes and their relevance to international trade. The policies of the two governments and the economic performance of the respective areas around the canals, however, have differed considerably. Panama has used private sector participation and a liberal sector framework to foster the development of a multimodal logistics cluster. The privatization of two existing ports and the concessioning of two new ports on both sides of the canal, a private railroad concession parallel to the waterway, and a liberalization of air traffic have mobilized hundreds of millions of private investments and led to impressive increases in traffic volumes.[85] The Colon Free Zone accounts for 10 percent of Panama's GDP. Its annual imports of $ 5.5 billion and re-exports of $ 6.2 billion are testimony to its role as a regional distribution center.[86] An ongoing restructuring program of the Panama Canal Authority is introducing commercial management to a state-owned entity, while a reform of the constitution shields it from interference by policy makers.[87] A national maritime strategy and a National Maritime Authority are meant to further strengthen Panama's position as a regional logistics hub. In summary, the country has managed to leverage its geographic position to build a thriving multimodal logistics cluster. This contrasts notably with Egypt, where the absence of competition and private participation have long stifled the development of similar structures around the Suez Canal. Most ports remain state-owned and relatively inefficient, the Suez Canal Authority has long been known for its bureaucracy, private investments in the sector have been very limited, air traffic reforms are slow to gather pace, and the government has not yet formulated a multimodal strategy. Efforts are now underway to address these problems, but considerable reforms will be needed if a multimodal logistics cluster resembling the one around the Panama Canal is to develop.

6. Conclusions

In the southern Mediterranean, the processes of regional integration (mainly confined to tariff dismantling) and national economic adjustment have thus far run parallel, rather than in sync. Deeper integration would entail much stronger linkages between the two, since it requires not

[83] *The Economist* (5 January 2002).
[84] For the full case study see Müller-Jentsch 2002: 142–146.
[85] *Financial Times* (12 October 2000), World Bank Viewpoint No. 193 (9/1999), Oxford Analytica Brief. (29/8/97), *The Journal of Commerce* (30 June 1998).
[86] *Economist Intelligence Unit*. 2000. "Country Profile Panama." London; *Financial Times* (9 October 1998).
[87] *Financial Times* (22 March 2002).

only tariff reductions at borders, but also regulatory and institutional reforms. As the Arab MPs try to accelerate economic adjustment in an effort to increase their competitiveness in a free trade environment *(mise à niveau)*, they should factor the requirements of deeper regional integration into those reforms. On the other hand, deeper integration pursued through such instruments as GATS commitments (liberalization of trade in services) or amendments to the Euro-Mediterranean Association Agreements (e.g. a harmonization of product standards or competition policy) could become an important driver for national economic adjustment. In economic terms, such deeper integration can also be conceptualized as the partial extension of the European Single Market to the southern Mediterranean. Economic integration between the EU (itself a deeply integrated market with 15 countries) and the developing countries in its proximity is basically a continuum between trade liberalization and full membership. The MPs should try to gradually move along that continuum.

The first section of this paper argued that deeper integration should be pursued in a selective manner and that it should focus on a small set of horizontal policies and especially on a limited number of priority sectors—such as transport, telecommunications, financial markets, and electricity. The remaining sections explored the implications of deeper integration in the transport sector. It was argued that the Euro-Mediterranean partners should complement their free trade area for industrial goods with a 'common transport space.' Transport is not only a sector, which would lend itself to deeper integration, but also a sector whose efficient functioning is a precondition for deeper integration in markets for industrial products (i.e. the participation of the MPs into European production networks) and tourism. It was shown that the EU has an elaborate regulatory and institutional framework in the transport sector, which could guide reforms in the MPs and serve as a basis for harmonization across the region. It was suggested that air transport would be particularly well suited for deeper integration (a civil aviation area similar to the ECAA might be an option). And it was shown how transport reforms in Eastern Europe and Mexico have been an integral part of the process of deeper integration. Similar reforms in the MPs are needed, if regional integration is to be deepened and the development impact of the Euro-Mediterranean Partnership is to be increased.

References

Abbott, Frederick. 1995. Law and Policy of Regional Integration: The NAFTA and Western Hemispheric Integration in the World Trade Organization System. Dortrecht, Holland: Martinus Nijhoff Publishers.

Bhagwati, Jagdish and Robert Hudec, eds. 1996. Fair Trade and Harmonization - Prerequisites for Free Trade?. Cambridge, MA: MIT Press.

Drewry Shipping Consultants. 2000. Mediterranean Container Ports and Shipping. London.

Estache, Antonio and José Carbajo. 1996. "Competing Private Ports—Lessons from Argentina." World Bank Viewpoint Notes Series 100. Washington, D.C.: The World Bank.

European Commission. 1994. Road Freight Transport in the Single European Market. Brussels.

———. 1996a. Communication on the Impact of the Third Package of Air Transport Liberalization Measures. Brussels.

———. 1996b. Council Directive 96/67/EC on Access to the Groundhandling Market at Community Airports. Brussels.

———. 1997. Communication on Intermodality and Intermodal Freight Transport in the EU. Brussels.

———. 1999a. Communication on the Creation of the Single European Sky. Brussels.

———. 1999b. Communication on the European Airline Industry: From Single Market to World-Wide Challenges. Brussels.

———. 2000a. Proposal for a Council Decision on the Signature of the Interbus Agreement on the International Occasional Carriage of Passengers by Coach and Bus. Brussels.

———. 2000b. Single European Sky—Report of the High-Level Group. Brussels.

———. 2001a. Communication on Reinforcing Quality Service in Sea Ports: A Key for European Transport. Brussels.

———. 2001b. Proposal for a Directive on Market Access in Port Services. Brussels

Gaviria, Juan. 1998. "Port Privatization and Competition in Colombia." World Bank Viewpoint Note Series 167. Washington, D.C.: The World Bank.

Giugale, Marcelo, Olivier Lafourcade, and Vinh Nguyen. 2001. Mexico—A Comprehensive Development Agenda for the New Era. Washington D.C.: The World Bank.

Holland International Distribution Council. 1998. World-Wide Logistics—the Future of Supply-Chain Services.

International Air Transport Association (IATA). 2001. World Air Transport Statistics 2001. Geneva: IATA.

Jovanovic, Miroslav. 1998. International Economic Integration—Limits and Prospects (2nd edition). London: Routledge.

Juhel, Marc. 1998. Globalization, Privatization, and Restructuring of Ports. Washington, D.C.: The World Bank.

Kaminski, Bartlomiej and Francis Ng. 2001. "Trade and Production Fragmentation: Central European Economies in EU Networks of Production and Marketing." World Bank Policy Research Working Paper Series 2611. Washington, D.C.: The World Bank

Kheir-El-Din, Hanaa. 2000. "Enforcement of Product Standards as Barriers to Trade: The Case of Egypt." In Bernard Hoekman and Hanaa Kheir-El-Din, eds. Trade Policy Developments in the Middle East and North Africa. Washington, D.C.: Mediterranean Development Forum and World Bank Institute.

Al Khouri, Riad. 2000. "Trade Policies in Jordan, Lebanon, and Saudi Arabia." In Bernard Hoekman and Hanaa Kheir-El-Din, eds. Trade Policy Developments in the Middle East and North Africa. Washington, D.C.: Mediterranean Development Forum and World Bank Institute.

Lakshmanan, T. and William Anderson. 2001. "Transport and Trade in the North American Free Trade Agreement." In World Bank Transport and Trade in the North American Free Trade Agreement. pp.17–18.

Magold, Martin. May 2001. Transport Facilitation in Europe. Geneva: UN Economic Commission for Europe.

McDonald, Frank and Stephen Dearden. 1999. European Economic Integration (3rd edition). Harlow, UK: Longman.

Müller-Jentsch, Daniel. 2001. The Development of Electricity Markets in the Euro-Mediterranean Area—Trends and Prospects for Liberalization and Regional Integration. World Bank Technical Paper Series 491. Washington, D.C.: World Bank.

———. 2002a. Transport Policies for the Euro-Mediterranean Free-Trade Area—An Agenda for Multimodal Transport Reform in the Southern Mediterranean. World Bank Technical Paper Series 527. Washington, D.C.: World Bank.

———. 2002b. "Deeper Economic Integration in the Euro-Mediterranean Region—A General Assessment with Specific Reference to the Transport Sector." Ph.D thesis, University of Nürnberg-Erlangen (Germany).

Organization for Economic Cooperation and Development (OECD). 1999a. Discussion Document on the Regulatory Reform in International Maritime Transport. Paris: OECD.

———. 1999b. Regulatory Reform in International Air Cargo Transportation. Paris: OECD.

———. 2001. The Development Dimension of Trade. Paris: OECD.

Piazolo, Daniel. 2001. The Integration Process Between Eastern and Western Europe. Kiel Institute of World Economics Studies Series 310. Berlin: Springer Verlag.

Ruster, Jeff. 1997. "A Retrospective on the Mexican Toll Road Program (1989–94)." World Bank Viewpoint Note Series 125. Washington, D.C.: The World Bank.

Silva, Gisele. 1999. "Private Participation in the Airport Sector—Recent Trends." World Bank Viewpoint Note Series 202. Washington, D.C.: The World Bank.

Tynan, Nicola. 1999. "Private Participation in the Rail Sector—Recent Trends." World Bank Viewpoint Note Series 186. Washington, D.C.: The World Bank.

United Kingdom Civil Aviation Authority. 1998. The Single European Aviation Market—The First Five Years. Cheltenham, England: Westward Digital Limited.

World Bank. 1997a. Egypt—Ports Sector Note. Washington, D.C.: The World Bank.

———. 1997b. Morocco: Private Participation in Infrastructure—Synthesis. Washington, D.C.: The World Bank.

———. 1997c. Tunisie: Etude sur la Stratégie des Transportes. Washington, D.C.: The World Bank.

———. April 1999. Transition.

———. 2000a. Trade Blocks—A World Bank Policy Research Report. New York: Oxford University Press.

———. 2000b. Transport Sector Restructuring in the Baltic States—Proceedings of a Seminar. Riga: World Bank and Latvian Ministry of Transport and Communications.

———. 2001a. Egypt Country Assistance Strategy. Washington, D.C.: World Bank.

———. 2001b. World Development Indicators 2001.

World Bank and European Commission. 2000. La Réforme du Transport Aérien au Maroc. Brussels.

Figure 1: State-Ownership in Airlines: South America and the Arab MPs Compared

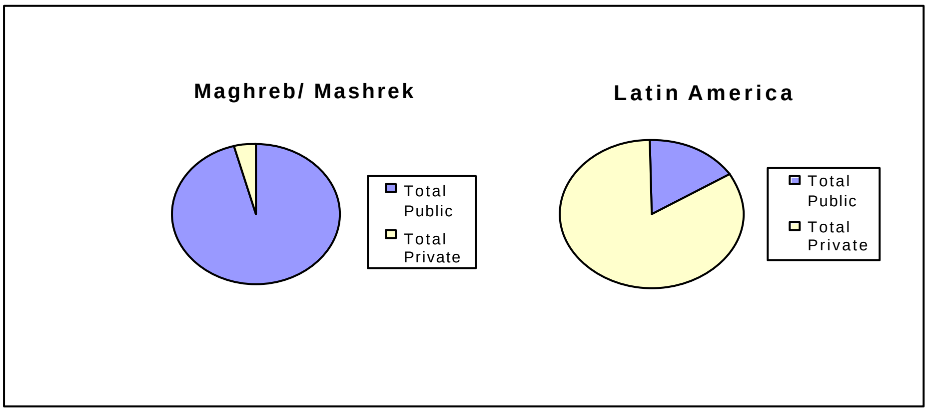
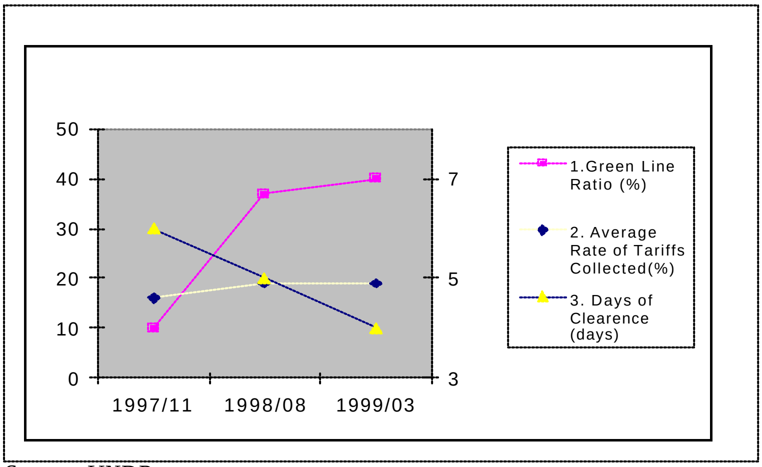


Figure 2: Lebanon Customs Performance



Source: UNDP.

Table 1: Freight Costs for Imports (2000)

Country	Imports($ billion)	Freight Cost ($ million)	Freight Cost (%)
Algeria	10.0	1,144	11.4
Egypt	21.7	2,620	12.1
Lebanon	6.2	657	10.6
Jordan	4.5	574	12.8
Morocco	12.4	1,776	14.3
Syria	5.3	687	13.0
Tunisia	8.6	627	7.3
Total/Av.	68.7	8,085.0	11.8
Israel	36.8	2,993	8.1
Turkey	54.5	2,556	4.7
Chile	16.7	1,004	6.0

Source: UNCTAD (based on IMF statistics)

Table 2: Maritime Transport Flows (2000)

Country	Passengers	Freight Loaded ('000 tons)	Freight Unloaded ('000 tons)	Loaded as % of unloaded	Growth (97-00 %)	Share of Major Port (%)
Algeria	587,247	81,772	18,529	441	12	36
Egypt	2,568,003	37,233	8,608	433	-15	n.a
Jordan	638,542	7,193	5,360	134	2	100
Lebanon	46,001	352	5,195	7	-14	89
Morocco	2,668,392	23,884	29,560	81	17	37
Syria	30,711	20,705	8,959	231	5	57
Tunisia	414,222	7,005	14,432	49	8	25
Total/Av.	6,953, 118	178,144	90,643	197	8	57
Cyprus	n.a.	1,805	5,475	33	-3	42
Israel	158,000	13,866	29,196	47	11	43
Malta	210,650	577	5,134	11	67	51
Turkey	1,242,639	45,322	103,707	44	23	21

Source: Eurostat (MED-Trans Database).

Notes: (1) loaded/unloaded 2000 data for Egypt from Egyptian Maritime Databank;

(2) passengers do not include cruise traffic

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