

OVER THE HORIZON A NEW LEVANT



OVER THE HORIZON: A NEW LEVANT

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ABBREVIATIONS AND ACRONYMS

AAs	Association Agreements	DCFTA	Deep and Comprehensive Free Trade
ACAC	Arab Civil Aviation Commission		Agreements
AGP	Arab Gas Pipeline	DFID	Department for International
AGROMAP	Agro Market Access Program		Development
ALI	Air Liberalization Index	DPR	Diversified Payments Rights
AMU	Arab Maghreb Union	ECA	Europe and Central Asia
ASEAN	Association of South-East Asian	EDPA	Export Development and Promotion
	Nations		Agency
ASEZA	Aqaba Special Economic Zone	EEC	European Economic Community
	Authority	EFSA	Egyptian Financial Sector Authority
ASYCUDA	Automated System for Customs	EFTA	European Free Trade Association
	Data	ENP	European Neighborhood Policy
ATFP	Arab Trade Financing Program	EPZ	Export Processing Zone
AVEs	Ad-Valorem Equivalents	EU	European Union
BIST	Borsa Istanbul	FDI	Foreign Direct Investment
BPO	Business Process Outsourcing	FTAs	Free Trade Agreements
BRSA	Banking Regulatory and Supervisory	FTZs	Free Trade Zones
	Agency (Turkey)	GAFTA	Greater Arab Free Trade Agreement
CE	Conformite Europeene	GATS	General Agreement on Trade in
CGE	Computable General Equilibrium		Services
COLIBAC	Council Libanais d'Accreditation	GATT	General Agreement on Tariffs and
COMESA	Common Market for Eastern and		Trade
	Southern Africa	GCC	Gulf Cooperation Council
COSQC	Central Organization for Standardization	GDP	Gross Domestic Product
	and Quality Control	GFTO	General Foreign Trade
CPA	Coalition Provisional Authority		Organization

GOFZ	General Organization for Free	MNE	Multinational Enterprise
	Zones	MoET	Ministry of Economy and Trade
GTAP	Global Trade Analysis Project	NAFTA	North American Free Trade
IA	Investment Agreements		Agreement
IAC	Investment Advisory Council	NBFI	Non-Bank Financial Institution
ICAO	International Civil Aviation	NGOs	Non-Government Organizations
	Organization	NIC	National Investment Commission
ICSID	International Center for Settlement of	NIIC	National Integrated Industries
	Investment Disputes		Services
ICT	Information and Communication	NPL	Non-Performing Loan
	Technology	NSSF	National Social Security Fund
IDAL	Investment and Development Agency of	NTMs	Non-Tariff Measures
	Lebanon	OECD	Organization for Economic Cooperation
IPZ	Investment Projects by Zone		and Development
ISO	International Organization for	OIZ	Organized Industrial Zone
	Standardization	OLS	Ordinary Least Squares
IT	Information Technology	PAFTA	Pan-Arab Free Trade Agreement
JFDA	Jordan Food and Drug	PATH	Product Distance
	Administration	PET	Polyethylene Terephthalate
JIB	Jordan Investment Board	PP	Primary Products
JIEC	Jordan Industrial Estates Corporation	PPP	Purchasing Power Parity
JISM	Jordan Institute for Standards and	PRODY	Average Productivity Content
	Metrology	PSD	Private Sector Development
JTFTA	Jordan-Turkey Free Trade	PTAs	Preferential Trade Agreements
	Agreement	QIZs	Qualifying Industrial Zones
KOSGEB	Small and Medium Enterprises	R&D	Research and Development
	(Turkey)	RCA	Revealed Comparative Advantage
LAFTA	Latin American Free Trade	RE	Renewable Energy
	Association	ROA	Return on Assets
LAS	League of Arab States	SAPTA	South Asian Association for Regional
LBF	Levant Business Forum		Cooperation
LFTZ	Levant Free Trade Zone	SASMO	Syrian Arab Standards and Metrology
LIBNOR	Lebanese Standards Institution		Organization
LNG	Liquefied Natural Gas	SCT	Special Consumption Tax
MEDA	Mediterranean Assembly	SEBC	Syria Enterprise and Business
MENA	Middle East and North Africa		Center
MFN	Most Favored Nation	SIA	Syrian Investment Agency
MIGA	Multilateral Investment Guarantee	SIC	Supreme Investment Council
	Agency	SIDA	Swedish International Development
MIM	Ministry of Industry and Minerals		Agency
MIT	Ministry of Industry and Trade	SMEs	Small and Medium Enterprises

SPS	Sanitary and Phytosanitary	UNIDO	United Nations Industrial Development
STR	Services Trade Restrictions		Organization
TBT	Technical Barriers to Trade	USAID	U.S. Agency for International
TDZ	Technology Development Zone		Development
TIKA	Turkish International Cooperation and	VAT	Value Added Tax
	Development Agency	WBES	World Bank Enterprise Survey
TRI	Tariff Restrictiveness Index	WBG	West Bank and Gaza
TSE	Turkish Standards Institution	WITS	World Integrated Trade Solution
TTB	Temporary Trade Barrier	WTO	World Trade Organization
TURKAK	Turkish Accreditation Agency	YOIKK	The Coordination Council for
UNCTAD	United Nations Conference on Trade and		the Improvement of Investment
	Development		Environment
UNDP	United Nations Development		
	Program		

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EXECUTIVE SUMMARY

omplementarities between Egypt, Turkey, Jordan, Lebanon, Iraq, Syria, and the Palestinian Territories are significant, pointing at substantial potential welfare gains from increased trade and investments and economic integration. This group of seven countries, defined as the "New Levant" for the purposes of this study, appears to be well positioned to benefit from dynamic gains of integration given the geographical proximity to major markets. Furthermore, similarities in stages of economic development, resources endowment, or factor costs generate high potential to benefit from competitiveness and complementarities. The volume and structure of trade and investment flows among the New Levant countries indicate that there are large untapped potentials for deeper and wider integration in the sub-region. This report discusses how to tap these large potentials for mutual benefit.

Economic integration is one key means to benefit from regional opportunities. Most of the countries in the sub-region have some common challenges, including: (i) limited diversification of production and exports, (ii) weak regional and global economic integration through trade and investment, and (iii) large youth unemployment. Coordination among the Levant countries could help address common economic and social development issues. Despite some progress toward economic integration, albeit with political disruptions, there exists the potential for great benefit from further collaboration. An economic zone is an ultimate outcome for the medium to long term, but in the short term—given the current political situation—tangible results can be reached through sub-regional cooperation in specific areas. Economic integration is the first-best scenario, but, the current political situation could further hurt the overall economic

relations and political barriers to reform could go beyond the current turmoil. This means turning to second- or third-best reform scenarios, which are reachable in the short-term in competitive sectors where public and private sectors in the region are willing to act together for the welfare benefit of the people.

A critical need to reduce regional uncertainty and revive investment and economic activity within the region—and thereby increase macroeconomic stability—provides strong motivation. Governments in the region are aware that there is an opportunity cost of not benefiting from untapped potentials. Although ongoing political and security issues in the sub-region have weakened integration efforts, the New Levant countries, both individually and collectively, have a clear interest in deepening economic and regulatory ties within the region, especially in view of the security dividends implicit in closer

cooperation on the economic front. The Arab countries already have a trade agreement among themselves but through deeper integration with Turkey and the rest of Europe, these countries can better integrate into global and regional value chains that exploit their comparative advantage and take advantage of preferential treatment.

Increased trade and investment flows among the Levant countries can help promote growth and structural change in the region, thereby paving the way for the most efficient use of the region's resources, value addition, human capital, and diffusion of technology. Trading partners can benefit from complementarities and competitiveness through regional trade integration. As Turkey, Lebanon, or Jordan climb up the ladder of their dynamic comparative advantage, more labor-intensive industries can potentially move to lower wage countries such as Syria and Egypt. These developments have already started in the textile and garments sector, in particular in Syria before the start of the 2011 upheavals. Conversely, higher wage countries such as Lebanon and Jordan can benefit from technology spillovers from Turkish investors in exchange for providing access to regional market and distribution networks.

Egypt and Turkey are potential growth poles for the sub-region with possible spillover effects

Egypt and Turkey are poised to form substantial growth poles for a more open economic space in the sub-region. During the last decade, Egypt has experienced a promising rise of trade in goods with Turkey and other regional partners. Egypt provides an important connection to Arab markets, especially while conflict continues in Syria. At the same time, Turkey provides a large and geographically close potential market for Arab countries' goods and services. Turkey is a successful example of combining trade liberalization with economic reforms to generate robust economic growth and development. All countries can benefit from exploiting economic complementarities in the sub-region through specialization in their most productive sectors, integrating further in foreign direct investment (FDI) and value chains, and importing low-cost consumer and

intermediate goods from the region. Egypt and Iraq are well placed to attract capital investments from Turkey due to competitive labor costs. The gains from capital investments can be particularly high if domestic and international firms cooperate in joint ventures.

However, despite growth in goods trade, Egypt and Turkey are still under-trading in the region relative to fundamentals suggesting an untapped potential for both countries to deepen their trade integration. The gravity trade model developed for this report suggests a significant untapped potential for Egypt and Turkey to deepen their trade integration in the region. For both countries, actual realized trade flows are lower than predicted by trade fundamentals in the model, which is an indication of under-trading. Regional bilateral exports to these two countries are also less than what is expected given their economic structures. In fact, Jordan, Lebanon, and Tunisia are under-exporting to both countries. Also, another interesting finding is that Egypt does not over-trade with any regional partner. In contrast, the results show that Jordan and Iraq are over-trading (both in exports and imports), and Iran and Iraq are over-exporting to Turkey.

In addition to Egypt-Turkey prospects, there are significant economic complementarities and trade and investment potentials among other Levant countries

Intra-group trade among Egypt, Jordan, Lebanon, Syria, Iraq, and Turkey has increased substantially in the past 10 years. Primary trends in regional trade flows show that intra-group trade among these countries increased seven-fold from US\$4.2 billion in 2000/02 (three year average) to US\$29.7 billion in 2008/10. This significant increase in intra-group trade partly reflects the improvement in the policy environment so far. Regional trade flows have responded positively to previous liberalizations of trade regimes. Export growth took place both on the intensive margin (exporting more of the same product) and extensive margin (exporting new products) as indicated by both increased value and number of products exported by all countries. Turkey had

Data on the Palestinian Territories are not available.

the largest increase in intra-group trade both in terms of value (over 13-fold) and number of products (six-fold) from 2000–02 to 2008–10. In terms of value increase, Lebanon ranks second at about 11-fold, Syria ranks third at over eight-fold, Iraq ranks fourth at three-fold, and Jordan ranks fifth at over two-fold.

Despite this high growth, there is still significant untapped potential in terms of bilateral trade flows in the Levant. The combined share of Turkish exports to Jordan, Lebanon, Syria, and Iraq accounted, on average, for only 6.6 percent of total Turkish exports in 2008/10. Likewise, exports of Mashreq countries to other Arab countries, including the Gulf, are much more significant than exports destined for Turkey; Lebanon has the highest share of exports destined for Turkey at 4.2 percent, exceeding the value of Lebanese export destined for Iraq or Jordan. But there are substantial differences even among the Arab countries. The high bilateral export shares between Syria and Lebanon, respectively, as well as the high share of Syrian or Jordanian exports to Iraq stand out; in contrast, bilateral trade between Jordan and Lebanon is still relatively limited.

Similar to potential in higher regional trade flows, there is a great opportunity for expansion of foreign direct investments. FDI inflows are currently concentrated in real estate, construction, tourism, and oil sectors. The Gulf Cooperation Council (GCC) countries were by far the most important investors into Arab countries. Total investments from the GCC between 2003 and 2010 represented 75 percent of total FDI inflows for Lebanon, 69 percent for Jordan, 61 percent for Syria, 59 percent for Egypt, and 46 percent for Iraq. FDI from GCC countries into Turkey accounted for nine percent of Turkey's total FDI inflows. In the oil importing countries with strong GCC links, such as Lebanon and Jordan, the share of FDI in GDP increased considerably. For instance, the share of FDI in total gross fixed investment is high by international comparisons in Jordan and Lebanon where it was over 40 percent on average between 2005 and 2010, compared to 10 percent in Syria. Regional FDI flows within the Levant remained relatively low between 2003 and 2010 except for Turkish FDI flows into Iraq. But, it is important to note that GCC will remain as a potential source of capital to the entire Levant region.

The potential for intra-group trade has increased since 2001 and has reached levels comparable to regions that have a history of successful multilateral trade agreements. To assess how well the export structure of one country matches the import structure of trading partner, trade complementarity indices are estimated at the aggregate level. The results show that, in particular, the prospects of Levant countries to increase exports to Iraq and Turkey improved substantially. The increase in the export potentials to Turkey reflects that these countries' manufacturing exports tended to diversify into products that Turkey imports. The substantial increase in export potential to Iraq reflects the stark increase in the number of goods that Iraq imports since the second Gulf war. The analysis also shows that Jordan and Lebanon have a relatively good potential to export to Iran and Libya. The potential to export to Tunisia increased for almost all countries. The findings show that trade complementarities among Levant countries are relatively high and comparable to index levels among countries that historically formed successful regional trade agreements. The six founding members of the European Economic Community (EEC) had an average trade complementarity index of 53 when they signed the agreement; the free trade area between Canada and the U.S. had a founding value of 64. The index for the Eastern enlargement (Bulgaria, Hungary, Poland, Czech Republic, and Slovak Republic) of the European Union (EU) was 61. As a comparison, Turkey, Egypt, Jordan, Lebanon, Syria, and Iraq are relatively well positioned for a regional trade agreement with trade complementarity indices of 40-50 on average.

The structure and specialization of countries' exports baskets are changing

The Levant countries are specializing in different products within traditional as well as modern manufacturing industries. Revealed comparative advantages (RCA) show that apart from Iraq, recent export

performances reveal a diversification from traditional sectors towards new, potentially higher value added sectors in all Levant countries. Nevertheless, traditional sectors (i.e., food, textiles, garments and footwear, and mineral goods) are still dominant in the sub-region. There appears to be direct competition for regional and world markets shares in traditional export sectors among Lebanon, Turkey, Jordan, Syria, and Egypt. Product level export performances suggest a pattern whereby regional manufacturing for several products in traditional industries shifted from Lebanon and Jordan to Egypt and to a lesser degree Syria between 2000 and 2010. In contrast, Turkey maintained strong export performances in predominately traditional products and industries, and even expanded its share in world markets in some cases. Egypt experienced strong export growth in predominantly low technology industries. Nevertheless, the industry level export data also suggests potential for increased intra-regional trade, in part for manufacturing sectors that have a higher potential for productivity.

Jordan maintained a strong export performance in several chemical products including medicaments. Jordan is successfully exporting medicaments; these are mostly generic drugs with relatively lower profit margins but recently the pharmaceutical firms in Jordan are attempting to move up the value chain by developing patents. Between 2005 and 2009, Jordanian firms faced increasing regional competition from low cost generic drugs produced in Syria. Jordan has an RCA exporting pharmaceuticals. Turkey is a large potential market for Jordanian pharmaceuticals, which are already exported to Lebanon.²

However, the overall degree of export sophistication has not moved significantly towards higher value goods in terms of knowledge or technology content The overall degree of export sophistication in Arab countries has shown some progress over the last decade, however the performance is weak. The export baskets of Jordan, Lebanon, Syria, and Egypt have slowly started to become somewhat more sophisticated. However, compared to exporters in Turkey and fast-growing East Asian countries, Arab firms show only weak export diversification towards higher productivity products.

There are potentials for firms in the Levant to diversify into higher value added industries through economic complementarities

Country-specific diversification potentials complement each other. The product space analysis presents potential economic complementarities in more detail at the industry and product level. Turkey is the most diversified country in terms of manufacturing in the region as well as a potentially large source of demand, foreign investment, or productivity (technology) spillovers. Products manufactured in the relatively lower wage countries-Egypt and Syria—experienced a strong increase in competitiveness in similar industries, with the potential to benefit strongly from more trade and investment integration with Turkey. In particular, there are large potential gains from knowledge and technology spillovers through integrated production chains with Turkish manufacturers; the latter could, in turn, benefit from low local wage costs and duty- and quota-free access to Arab markets. Jordanian and Lebanese exports were already fairly diversified in the 1990s, in particular in core manufacturing industry clusters, but diversification has stagnated since. Both countries must specialize in higher value-added manufacturing niches to escape regional and international cost competition in traditional export sectors. Nevertheless, in manufacturing industries there are significant potential gains from trade and investment integration between Jordan, Lebanon, and Turkey. Iraq has the least diversified export basket; it is highly concentrated in petroleum products. Tunisia's export structure is more diversified than Egypt's or Syria's, while its manufacturing exports focus on the European market where Tunisia will potentially compete with Turkey.

However, there exists a domestic Turkish pharmaceutical industry, which primarily targets the domestic market and appears to be de facto protected by non-tariff barriers from Jordanian products.

Significant economic complementarities and trade and investment potentials in the subregion will provide welfare benefits for all countries involved

The benefits of expanding economic ties in the Levant will be significant for all countries in the sub-region.

To assess the medium-term economic effects of reforms aimed at deepening of trade relations in the sub-region, a computable general equilibrium (CGE) model is developed for the purposes of this study and consideration is given to four scenarios emphasizing different aspects of trade relations among Egypt, Iraq, Jordan, Lebanon, Syria and Turkey:3 (i) the removal of tariffs on agricultural goods and processed food; (ii) reducing the restrictiveness of non-tariff measures (NTMs); (iii) liberalizing transport services in the zone, resulting in reduced trade transport costs; and (iv) services trade liberalization within the zone. As it becomes established, the benefits of establishing a zone will increase with the deepening of the commitments. In all cases, the trade effects for some sectors are expected to be sizable. Levant countries are estimated to gain in welfare terms under all policy scenarios.

Potential welfare gains accrue to all countries under the scenarios of deepening economic integration, but the impacts on aggregate welfare and export volumes of reforms are estimated to be larger in the case of services liberalization. The welfare gains from services liberalization will represent the lion's share of all gains associated with the four reform scenarios. With a cumulative welfare increase of US\$12 billion (11 percent increase in welfare), Egypt is expected to benefit the most in absolute terms, while Iraq will likely gain the most in relative terms as its welfare rises by almost 17 percent or US\$2.5 billion, followed by Syria (11.6 percent increase), Jordan (6.5 percent increase), and Lebanon (3.3 percent increase). Turkey will garner close to US\$10 billion, which due to its large size translate into a 1.7 percent increase in per capita income. Nearly all of these gains are a result of deeper integration through services trade.

The impact on exports varies by country, sector, and reform instrument, and is sizable for some sectors. In

Turkey, reforms will either have no effect or, in the case of services liberalization, will have a small negative impact on aggregate exports. Services liberalization in Turkey's trade with Levant partners is expected to affect the construction sector. The productivity boost expected in construction will stimulate domestic activity in Turkey, but not exports. In the other Levant countries, the impact on aggregate exports will be positive under all scenarios, but the magnitude of the effect will be sizable only in the case of services liberalization. Agricultural liberalization and improved transport logistics will boost bilateral exports of farm and processed food products among Levant countries. Reducing the restrictiveness of NTMs will increase exports of farm, petroleum, resource-based, and metal products from Turkey, manufactures from Jordan and Lebanon, and crude oil, petroleum, and manufactures from Syria. Services liberalization will improve the supply response and encourage services exports from Jordan, Lebanon, and Syria. The effect on Iraq's exports will be negligible.

There is high potential in the Levant to integrate further through services trade, and liberalization in the services sector is critical for all countries to benefit from potential welfare gains

The centrality of services to the economic structure of the Levant region offers a compelling motivation for devising a cooperation agenda aimed at facilitating expanded services trade and the adoption of competition-enhancing regulatory regimes. There is a clear preponderance of the service sector in the Levant in both aggregate output and employment terms. During the last decade, services exports exhibited the fastest growth in Jordan, Lebanon, and Syria. Jordan and Lebanon have large services sectors and show strong export performance. Services trade in the Levant has been dominated by travel, transport, and other services but exports of communication, financial, and insurance services

The model excludes the Palestinian Territories because of lack of data.

witnessed more rapid change over the last decade. Prospects of competitiveness are also favorable. The Levant countries have revealed comparative advantages in at least one services sector. Egypt, Iraq, Jordan, Lebanon, Syria, Turkey, and the Palestinian Territories have a comparative advantage in the export of travel services. In addition, transport services stand out as a sector where Egypt, Jordan, and Turkey possess a revealed comparative advantage in exporting. Besides travel services, Lebanon has comparative advantages in the financial sector, along with construction and computer services exports.

However, Levant countries are not benefiting fully from regional opportunities because of restrictiveness of services trade policies. Egypt stands out for the high level of restrictiveness of its applied regulatory regimes in services. Lebanon has the highest level of restrictiveness in cross-border supply. All Levant countries have highly restrictive regulatory regimes governing the temporary mobility of services providers. The sub-region is characterized by the paucity of mutual recognition initiatives aimed at facilitating the mobility of skilled professionals. Egypt and Turkey stand out for the high level of restrictiveness of their applied regulatory regimes in movement of natural persons. When compared globally in services regulation, the sub-region ranks among the world's most restricted in services trade, with an aggregate level of restrictiveness across all sectors and modes of supply.

A major issue emerging from the restrictiveness of services regimes in the Levant concerns the preference of governmental authorities to retain a considerable degree of policy autonomy and regulatory discretion. Even in areas that are free of explicit restrictions, de jure openness may not always imply or translate into a commensurate degree of de facto openness. Across different sectors, the allocation of new operating licenses remains unduly discretionary in many countries. A key reform issue is therefore how regulatory discretion can be reconciled with the need to have clear rules for service providers.

There is a clear need for greater multilateral efforts towards services liberalization in the region. For a deeper regional integration in the services trade, the Levant countries should make significant cooperation and liberalization efforts. As measured in this report, intra-regional integration of services markets will be (net) welfare-improving for all Levant countries. While liberalization of services offers direct benefits much like it does for goods trade, the policy literature suggests that more pervasive systemic benefits are likely to stem from the positive impact of services liberalization on manufacturing productivity. The benefits from services liberalization for the Levant countries will certainly be larger than those deriving from goods trade liberalization. These issues need to command greater attention among regional policy makers.

Throughout the Middle East and North Africa (MENA) region, policy makers confront a number of common challenges calling for collective action initiatives and the supply of regional public goods able to tackle the region's most pressing needs. Several such challenges appear amenable to service-centric responses and policy reforms including the need to promote greater market integration across a range of service industries through efforts aimed at enhancing investment climates and initiating the progressive dismantling of key obstacles to trade and investment in services. In the services realm, cooperation in the Levant entails the possibility of preferential negotiations with the Gulf Cooperation Council (GCC) and an intensification of efforts under existing regional agreements. Expanded service exports are most likely to arise from higher quality regulatory environments. For this to occur, Levant governments must strive to improve the quality of regulatory institutions and endow them with adequate resources and requisite competencies.

Liberalization of trade in financial services would help Levant countries take advantage of regional opportunities

An analysis of financial services trade in the sub-region reveals that Lebanese and Jordanian financial institutions have the potential to grow further. Development of cross-border financial services activities exhibits a rather more asymmetric picture than that of merchandise trade activities between Turkey and MENA region countries. There are eight fully licensed MENA-origin banks now operating in Turkey. These banks are headquartered in Lebanon, Jordan, Libya, and the GCC. It is especially noteworthy that Lebanese and Jordanian financial institutions are the most active in regional activities. The activities of these banks demonstrate trade-in-services opportunities from increased regional economic activity for those economies of the region that have relatively less natural resource endowment. These banks also play important intermediary role between the large capital pool in the Gulf area and the biggest economy of the region, which has a considerable current account deficit. All of these observations reveal substantial and multi-dimensional benefits accruing to all sides from enhanced economic linkages between Turkey and MENA region.

Proceeding with necessary financial sector reforms as well as maintaining of macro-financial frameworks which are conducive to support the reform process is essential. Financial institutions of the region provide fairly adequate payment related services such as foreign exchange and fund transfers services to support the current trade volumes. However, financial sectors lack depth and breadth virtually all across the region. The systems mainly consist of commercial banks because non-bank financial services are underdeveloped. Consequently, financial backing of trade transactions is weak. The lack of cross-border financial intelligence services and effective contract enforcement mechanisms also render proper risk assessment very difficult, if not impossible. Thus, provisioning of cross-border trade credit becomes scarce as well. It should also be noted that financial prices in many countries are hardly market determined. Although the mechanisms employed to set these prices provide some sort of stability, the possibility and/or probability of relatively large discrete movements in key financial prices bring about another element of risk for financial market participants.

There is a clear need to focus on the energy sector to stimulate private sector growth and to benefit more from regional economic opportunities

The demand for energy, especially in the electricity sector, is high in the region; however there are bottlenecks in expanding the capacity of electricity generation. A range of electricity interconnection infrastructure exists among the grids of Mashreq countries (Iraq, Syria, Lebanon, Jordan, Egypt, and the Palestinian Territories), Maghreb countries (Libya and Tunisia) and outlying countries (Turkey and Iran). Tunisia (along with Algeria and Morocco) is interconnected to the European grid and operates synchronously with them. The Mashreq countries and Turkey have been trading electricity for over a decade and a half, though the volume of trade is far below the potential. The main bottleneck is a shortage of power in most of the Mashreq countries and the inability to add capacities based on gas, which, during the past decade has become scarce and much higher priced than before. Rapidly rising electricity and gas demand in Egypt has rendered the only two existing regional gas pipelines (the Arab gas pipeline and Arish-Ashkelon gas pipeline), practically unutilized.

The Mashreq countries need to compete in the international market place for gas. The sub-region needs additional transmission lines to relieve local bottlenecks for cross border flows and also it needs to sharply improve its ability to operate the grids synchronously in a sustained fashion through upgrades of grid codes and regulatory arrangements. Gas trade infrastructure, by way of liquefied natural gas (LNG) import terminals exist in Turkey, are being constructed/pursued in Jordan, Egypt, Lebanon, and Syria, and are planned in Iraq. These will support the growth of LNG trade. The Mashreq region has large gas reserves, and 94 percent of these reserves are in two countries, Iraq and Egypt. However, both Egypt and Iraq face significant constraints in expanding their gas production capacity to meet the demand. For Egypt the constraint is the size of its gas reserves, and for Iraq the constraint is its implementation capacity. Iraq has the

potential to develop as a major supplier of pipeline gas. A positive development is the discovery of offshore gas for Lebanon. It is estimated that the technically recoverable hydrocarbon reserves in the Levant basin region covering 83,000 sq.km in the Eastern Mediterranean (Lebanon, Israel, Cyprus, Turkey, Egypt, and Syria have territorial stakes in this region) at around 1,689 million barrels of oil and 122.4 tcf (3.5tcm) of gas. Significant natural gas discoveries have been made in the offshore areas of Israel (especially in the Leviathan field), and in 2010 a U.S. hydrocarbon exploring company confirmed the commercial viability of the gas deposits. Lebanon planned to divide its offshore area into blocks and carry out international rounds of biddings to award exploration and production contracts.

Connectivity can be improved through ICT and transport services

There are complementarities to be realized from trade in information technology (IT) services in addition to the benefits of enhanced information and communications technology (ICT) services as an enabling platform for trade in other sectors. There is a large opportunity for telecommunications services trade. In some of the Levant countries, FDI in telecommunications has represented up to 40 to 50 percent of all FDI in the past few years. Also, there is a strong opportunity for the mobile app and software markets to grow beyond national borders and create greater value added at a regional level, benefiting from larger economy of scales. However, the region is lagging behind the world in crowdsourcing, which could otherwise have a great potential for job creation through ICT-enabled trade of professional services. There is limited scope for trade in hardware, or to develop a hardware industry for export purposes.

In addition to being an important sector of the economy, ICT, and broadband in particular, is a powerful enabler of trade development. Wallsten (2007) estimates that a 10 percent increase in broadband penetration is associated with an increase in exports by over 4 percent. Countries traditionally identified as superior

benchmarks in terms of trade performance have international communications prices that are up to ten times cheaper compared to some of the Levant countries. Turkey is the leader in the region, with international communications charges about 11 times cheaper than Tunisia. A reform path similar to the one followed by Turkey in telecommunications is a condition for higher trade development and integration in the sub-region. IT is an enabler of complex supply chain integration. The region can benefit from enhanced business process outsourcing that apply specifically to the textile and automobile manufacturing industries if appropriate reform is introduced in the telecom and broadband sector.

Government policies are needed to enhance investment in telecom infrastructure and to reduce prices.

A low-cost, high-speed Internet infrastructure is important to facilitate integration. There is a great potential to be realized from enhanced interconnectivity among the Levant countries. To reach this goal, countries in the sub-region need to strengthen competitiveness in telecommunications, following the examples of Jordan and Turkey. The removal of existing entry barriers would create a favorable environment for regional and sub-regional investment in broadband infrastructure. This would translate in a rapid decline of the price of international communications. Lebanon could take the opportunity to move to 3G and 4G services. The migration to broadband in a liberalized environment will be an essential priority for the Levant region, but will involve the management of a political and economic transition.

Current air passenger traffic levels in the region are low, however higher growth rates have been observed in recent years in selected regional markets, suggesting that fast growth is possible. Indeed, air passenger markets in the Middle East are changing rapidly. Turkey, which aspires to serve the region as a hub, has seen rapid growth in air passenger traffic, within the region and with the rest of the world. Turkey is in fact already emerging as a de facto hub with striking increases in traffic in recent years with all countries in the region, including Iran. This growth has occurred despite the fact

that Turkey still has more restrictive bilateral air services agreements with many countries of the region than those countries have with each other. Turkey is not a member of the plurilateral arrangement that governs air passenger traffic between most of the Arab states: the Inter-Arab Freedom of the Air Programme of the Arab Civil Aviation Commission (ACAC). Instead, World Trade Organization (WTO) measures suggest that Turkey's bilateral passenger traffic arrangements with these countries are quite restrictive. Moreover, the ACAC agreement seems to not have lived up to its potential and has been less liberal in practice than its formal terms would suggest.

More liberal policies are associated with more passenger traffic, but this relationship is substantially weaker in plurilateral arrangements like the ACAC. A gravity model was estimated for the purposes of this work analyzing the links between bilateral traffic and policy while controlling for other determinants of traffic. A set of empirical models of air passenger traffic was used in order to better understand the relationship between air transport policy and international traffic. WTO index measures of policy commitments in both bilateral and plurilateral air services agreements were used, and measures were related to International Civil Aviation Organization (ICAO) data on air passenger traffic. The results suggest that there are significant gains (in terms of higher likelihood of direct flights and the magnitude of passenger traffic) to be had from establishing and fully implementing a regional open skies agreement.

Tourism services should be part of regional trade arrangements to recover and reform the sector

In tourism services, beyond the already existing links, there is a case for further integration in the sub-region and the promotion of complementarities to develop a more complete tourism offer. Coordination among the Levant countries can improve competitiveness and increase the attractiveness of the sub-region by providing a wider range of tourism offerings and packages and contribute to boosting tourism receipts by increasing

the amount of spending per tourist, and diversifying the origin of the tourists. Possible sub-regional cooperation could focus on different themes, such as infrastructure and transport, regulation of the hospitality sector (norms, quality), ease of transit and movement of people (visas, open sky agreements), and training. A regional tourism cluster could make use of the tourism complementarities and promote tourism in the region. The promotion of complementarities would help to develop the diverse tourism offers that are sought after by the new generation of tourists.

There is a need for reforms in the tourism sector especially after the Arab Spring disruptions. The tourism sector in the Levant took a sharp hit as a consequence of the Arab Spring and economic instability in Europe. Between 2010 and 2011, tourist arrivals decreased by 32.4 percent in Egypt, and Syria's tourism sector's contribution to Gross Domestic Product (GDP) declined by US\$1 billion. To recover from the crisis and to benefit more from complementarities, efforts are needed at the sub-regional level. The facilitation and growth of the tourism sector in the Levant requires the removal of obstacles. This includes tourism services, but also a range of other services critical to tourism, such as transport, energy, ICT, or financial services. While most countries have unilaterally removed obstacles to trade in the tourism sector, there remain a number of restrictions on all modes of tourism services supply. Domestic reforms alone will not suffice to increase the countries' competitiveness in the tourism sector. Tourism should be part of the regional trade agreements' priorities for action and adequate instances should be put in place to promote it.

Trade in services and foreign direct investments require mobility of the skilled labor for a deeper economic integration

The Levant countries have highly restrictive regulatory regimes governing the temporary mobility of services providers. There is strong evidence showing that labor market restrictions are imposing a much greater burden on the global economy than the remaining trade

restrictions. The gains from integration—in goods, capital and people—are based on harnessing economic advantage from differences in endowments. While General Agreement on Trade in Services (GATS) Mode 4 suppliers are typically subjected worldwide to the most acute regulatory hurdles, the level of restrictiveness in the Levant countries attests to a region of highly fragmented labor markets, weak employment performance, and high unemployment (particularly among skilled youth), reflecting in turn a structural mismatch between labor market needs and the supply of skills emanating from tertiary educational institutions throughout much of the region. The Levant, like MENA more broadly, is characterized by the paucity of mutual recognition initiatives aimed at facilitating the mobility of skilled professionals. Egypt and Turkey stand out for the high level of restrictiveness of their applied regulatory regimes in movement of natural persons. For a deeper regional integration in the services trade, the Levant countries should make significant cooperation and liberalization efforts on labor mobility issues.

Demographic forces provide "arbitrage" opportunities for the Levant where skilled labor can move as part of services trade or FDI skills-transfer to facilitate economic integration. The Mediterranean area is in a critical stage in terms of regional integration of labor markets. Many countries in Europe are facing rapidly aging populations that will be accompanied by shrinking labor forces in the next decade. Even though most of them have entered their own demographic transitions with declining fertility rates, most countries of Southern and Eastern Mediterranean still have relatively young and educated populations who are facing bleak labor market prospects. These current diverging patterns are creating unique welfare enhancing "arbitrage" opportunities for the region where skilled labor can move as part of services trade or FDI skills-transfer to facilitate economic integration. Given the geographic proximity and historical migration trends, there are potential demographic benefits of increased mobility between Europe and within the Levant.

Labor mobility should be managed within a regional framework where the sending and receiving countries coordinate their policies and actions so that efficiency gains are maximized for all parties involved while the potential distortions and disruptions are minimized. Regional cooperation helps in creating opportunities for better-managed cross-border labor movement. Coordination is crucial to construct a viable legal framework which will achieve multiple objectives: (i) help to prevent concerns about undocumented migration which is one of the main sources of political opposition in Europe to any relaxation of migration restrictions, (ii) lead to stronger protection of the migrants' rights, including social protection and pensions; and (iii) lower all transactions and implementation costs required to establish and maintain labor mobility agreements which can be significant if done unilaterally. Despite the technical and conceptual limitations of the GATS Mode 4, it remains the only collective action response to labor migration governance issues. It is therefore worth preserving and empowering this mechanism; one way to do so would be to move the focus towards "contract-based" movement of service suppliers rather than employment-based movement. The advantage of contract-based movement is that it would help make temporariness more credible as contracts would be time bound and between firms; in addition it would allow workers to be hired based on competence and performance.

There are significant barriers to trade in the Levant, not allowing countries to reach their potentials and to benefit from regional economic opportunities

With global economic liberalization and reduction of tariff protection, the potential for non-tariff measures to act as trade barriers has increased in the last decade.

NTMs are policy measures and do not have necessarily a trade protectionist intent, and can be introduced to achieve other policy objectives such as to preserve human health or the environment. In fact, NTMs can promote trade by providing consumers with information, limiting transaction costs, facilitating comparison and reducing uncertainty. Therefore, not all NTMs are barriers, and the challenge with NTMs is to make them the least trade restrictive while achieving other important policy objectives.

NTMs may have the potential to create market access barriers especially for companies from developing markets. For instance, compliance with the technical requirement of destination countries can necessitate investment in production facilities, in design, and in packaging of the final product. Demonstration of compliance with the technical requirements often calls for certification either because exporting countries do not have internationally recognized certification bodies and laboratories or because the destination countries do not recognize international certificates. Pre-shipment inspection and other formalities are frequently associated with time delays that can be substantial in developing countries due to lack of infrastructure and qualified personnel. The private sector often complains about the related procedures, delays, cost, and corruption. Suppliers of fresh vegetables and fruits are particularly vulnerable since the shelf life of their product is very limited.

Most of the NTMs in the MENA region materialize in the form of sanitary and phytosanitary measures or technical barriers to trade depending on the sector. The first type of regulation is important in the food sector, affecting 60.5 percent of the product lines that belong to this category. The impact of technical barriers to trade (TBT) ranges from 15.1 percent of the product lines in the food industry, and 49 percent in the chemical sector. In addition, pre-shipment inspection is important in the food sector affecting 30 percent of the product lines. Egypt's NTM pattern resembles the average of the region. Sanitary and phytosanitary (SPS) measures affect 72.1 percent of the product lines in the food category. However, the relevance of TBT is higher in Egypt than the average of MENA, ranging from 54.7 percent of the product lines in the food industry to 99.1 percent in the base metal category. Syria's NTM structure reveals high regulations in food and chemicals. SPS is important in Syria's food sector affecting 78.2 percent of the product lines; while TBT is relevant in the chemicals sector corresponding to 73.1 percent of the product lines. The impact of NTMs in Lebanon is very low. The effect of SPS in Lebanon's food sector is below the average for the region, 11.7 percent. TBT is mainly imposed in chemicals (24.4 percent), and textiles and footwear (30.9 percent).

Among the trading partners, the sub-region's exports are highly exposed to NTMs in China and the EU. The Levant countries' exports to the European Union are primarily affected by TBTs. The coverage ratio ranges from 77.1 percent of exports from Jordan to almost 100 percent of exports from Iraq, Syria, and Egypt. Among the trading partners, almost all of sub-region's exports to China are subject to many forms of NTMs. 100 percent of the exports from Turkey to China are affected by regulations such as SPS, TBT, price and quantitative controls, and anti-competitive regulations. The exposure of Turkish exports to TBT in Europe is also high accounting for 87 percent of the exported products. The impact of NTMs on Egypt's exports to Lebanon is negligible; but TBTs have a large effect on Egypt's trade with the EU. Charges, taxes, and other para-tariff regulations, as well as pre-shipment inspection in Tunisia affect 43 percent of Egypt's trade flows. More than 90 percent of Syria's exports flowing into the EU, Egypt, and China are vulnerable to TBT regulations. Charges, taxes, and para-tariff measures impact 46 percent of Jordan's exports to Egypt.

Dealing with market access barriers such as NTMs is not an easy task. There are, however, certain policies that countries can implement to help deal with this issue. First, countries can follow an offensive strategy to improve market access through bilateral negotiations focused on particular products or sectors. This can consist of mutual recognition of standards and certifications or preferential treatment. Under mutual recognition, each government has sovereignty over its own technical regulations but a limited ability to project those policies onto its trading partners. Third, countries can choose the standards of their trading partners on products for

which there is a huge market potential. However, this may impose additional costs to local producers that are not exporting to the countries whose standards were adopted. It is important to involve the private sector in order to identify areas where negotiations can lead to favorable outcomes for developing countries. In addition, since many of problems are related to implementation at the border, a trade facilitation agenda aimed at speeding up the clearance process and avoiding duplication of requirements can also help to reduce NTMs.

The MENA region suffers from high trade costs mostly due to supply chain inefficiencies and weak trade facilitation framework, including transport services and customs procedures. A way to assess the integration of countries is to refer to trade costs. Trade costs represent the price wedge between domestic consumption and trade with another country. Bilateral trade costs capture the obvious impact of distance but also the effect of the "thickness" of the border of each of the countries: trade facilitation, trade policy, connectivity, and logistics. The cost of trade between neighbors is typically twice as high among MENA countries as compared with those in Western Europe. Trade costs are consistently higher for agricultural products. On the other hand, Turkey has had a declining trend of its trade costs with its partners, reflecting the increased competitiveness of Turkish economy. Turkey has its lowest costs with EU countries and Israel. However, trade costs with Arab countries, even adjusting for distance, are typically 80-100 percent higher, including with the nearby Arab countries in Western Asia.

Trade facilitation and logistics issues constitute important barriers to deeper integration of countries at a sub-regional level. These factors affect the competitiveness of the Levant countries. The major issues are deficits in logistics performance and facilitation bottlenecks. Infrastructure is a less significant issue in the region compared with constraints related to trade processes and the low quality of logistics services. In addition, the transit traffic has been especially affected by the absence of active cross-border cooperation, resulting in very heavy and delay-prone control systems at borders between Arab

states. Together with inefficient trucking industries, the associated transit regime causes significant impediment to sub-regional integration and to the improvement of trade competitiveness. Although there is some development in customs modernization in the sub-region, differences in customs reform targets of individual countries, depending on whether control or implementation techniques are influenced by EU practices or not, might create a problem for cross-border harmonization in the Levant. Apart from the GCC, which is already a single market, little has been done to facilitate cross-border trade between neighbors and along trade corridors.

The Levant countries are particularly weak in logistics performance for customs, infrastructure, and the ability to track and trace consignments. An empirical investigation of World Bank indicators of logistics performance suggests that countries in the region have subpar logistics systems, but they do not lag too far behind expected levels of performance. A cross-country model of logistics performance for the Levant region suggests that, on a 5-point scale, the sub-region lags expected logistics performance by 0.25 points. This average level of underperformance obscures some important heterogeneity, however. Iraq has logistics performance measures that lie well below the model prediction. Egypt also lags significantly, but not to the same degree. A more detailed assessment of the logistics performance measures indicates that the sub-region is especially weak in three of six categories of logistics performance: customs, infrastructure, and the ability to track and trace consignments. Egypt and Iraq underperform across most all areas of logistics performance. Tracking and tracing is an area of weakness in almost every country in the sub-region. Lebanon is unusual in that it scores well above the model prediction in one sub-category—logistics competence. More broadly it appears that Lebanon outperforms its peer countries in that category.

Although current regional trade agreements generated some positive impacts, they were unable to remove obstacles

In addition to their bilateral free trade agreements (FTAs), the countries in the sub-region participate in a number of regional integration arrangements. Turkey's role is important in current dynamics. Furthermore, the EU is an important partner affecting the overall picture and the potential incentives. Turkey joined the EU Customs Union in 1996. Egypt, Jordan and Lebanon concluded Association Agreements (AA) with the EU in 2001, 2002 and 2006, respectively, as part of the Euro-Mediterranean (Euro-Med) Partnership. Syria initialed an AA with the EU in 2008, but has not yet ratified it. With 12 other Arab countries Jordan, Lebanon, Egypt, and Iraq participate in the Pan-Arab Free Trade Area (PAFTA), entered into force in 1998. Jordan, with Egypt, Algeria, and Morocco established the Agadir Free Trade Area as part of the Euro-Med Partnership, which became effective in 2007. Also, Turkey, Syria, Jordan, and Lebanon initiated negotiations to establish the Levant Free Trade Zone (LFTZ) in 2010. The negotiations were suspended after political disruption in Syria.

Despite slow progress in implementation, trade agreements have generated some positive impacts for regional trade. Most of the preferential trade agreements (PTAs) within MENA included negotiations to reduce the restrictive impact of NTMs on trade. Some MENA countries have made considerable progress towards this goal. The decline in NTMs has been most dramatic for agricultural products. Considering the great dependence of MENA countries on imported food and the increase in food prices over the past decade, this is a positive development.

However, the sub-region has yet to reap the full benefits of existing regional arrangements. There is scope for additional regional liberalization of trade policies. Despite steady advances made in liberalization of trade in goods, the achievements remain significantly below potential. Apart from Turkey, the Levant countries have failed to take full advantage of the network of trade agreements with both the EU and among themselves. In some cases this is due to the design of the agreements (shallow agreements). Others are explained by the weak

implementation capacity of the signatories or lack of enforcement and implementation mechanisms accompanying the agreements. In particular, with the exception of Pan-Arab Free Trade Agreement (PAFTA) and Agadir, existing regional agreements cover essentially trade in industrial goods and target elimination of tariffs as binding legal commitments.⁴ As a result, the agreements have led to "shallow" integration. Exclusion of services and agriculture from integration undermined the trade promotion effects of tariff reductions. Furthermore, the complementary behind-the-border reforms regarding the business environment and investment climate were not included in the agreements as legally binding constraints—an important design flaw that adversely affected improvement of competitiveness particularly in the less developed countries.

An economic zone is an ultimate outcome for the medium to long term, depending on the outcomes of the ongoing political upheaval

When the political conditions permit, the "New Levant" countries have the potential to move forward towards a deeper regional integration. If political and security situations are normalized in the medium to long term, Turkey, Jordan, Lebanon, Syria, Iraq, Egypt, and the Palestinian Territories could start discussing a potential economic zone—a sub-group that is likely to form a deeper integration based on large economic potentials discussed in this report. A key requirement for successful regional integration in a variable geometry environment is the consistency of the integration policies adopted by the sub-groups. A variable geometry approach is preferred in strengthening regional integration, which allows sub-groups to move faster than the whole group or move to a deeper form depending on country-specific

⁴ Association Agreements (AAs), PAFTA, and Agadir include additional negotiations on elimination of NTMs pertaining to technical standards, SPS, and trade facilitation as well as gradual liberalization of agriculture and services, competition policy, government procurement, investment, and capacity building. However, progress on these negotiations has been very limited.

conditions. All countries (except for Iraq) are members of the Med12. Therefore, the Levant initiative could be part of the Barcelona process. It is important to find a solution to include Iraq to this potential zone as a preferential partner to increase the benefits of deeper economic integration in the sub-region. Currently, the EU Customs Union membership does not allow Turkey to establish a FTA with Iraq because it is not a Euro-Med member.

In the long-term, a Levant Economic Zone could consolidate the bilateral FTAs that Egypt, Lebanon, Jordan, and Syria have with Turkey, and improve market access for Turkey and Iraq to each other's economies. Egypt, Lebanon, Jordan, and Syria already have bilateral FTAs with Turkey and, as members of PAFTA, benefit from free trade in goods amongst MENA countries. If political commitment is strong, opportunities exist to realize economic benefits by moving from "shallow" bilateral FTAs to "deep and comprehensive" integration within a common economic zone. If it is designed well and implemented effectively, the "New Levant" could play an important role in realizing the Euro-Med objective of a deep and comprehensive FTA between the EU and the Med12. It would also replace the bilateral FTAs among the Levant partners. Reforms can be anchored in trade agreements to help governments implement longterm plans.

However, even in the short-term, Levant countries could benefit from sub-regional cooperation in specific areas through publicprivate sector partnership

The reform process should start with improving the existing agreements with parallel behind-the-border policy measures. A deeper economic zone in the Levant will improve access of the signatories to each other's market. However, this may not be sufficient to expand trade, diversify production, and accelerate growth in the member states. A wide-range of policy weaknesses and supply-side constraints in the member economies inhibit competitiveness and a strong supply response to

improved market access. Substantial improvement in the complementary behind-the-border policies and harmonization of the business and investment climate will be necessary to take full advantage of better market access. Closer collaboration in these areas in the context of the broader Barcelona Process is essential. Improvement of the behind-the-border policies is particularly important for Syria, Jordan, and Lebanon to be able to raise their competitiveness.

The Levant countries should take unilateral measures to remove barriers to trade. Deepening and widening of integration will require improvement in the trade regime and trade facilitation in each country. The countries will need to undertake reforms unilaterally to remove trade barriers, especially customs procedures and NTMs. In a few particular sectors NTMs are significantly more restrictive on imports from Turkey than on imports from other sources. This is the case for Turkey's exports of coal products to Tunisia, primary agriculture to Jordan and Syria, and resource-based manufactures to Egypt and Syria. Unilateral reforms and liberalization of selected sectors in the short-term can feed into overall long-term integration agenda.

The reforms associated with the formation of the Levant Economic Zone could promote domestic reform. Formulating clear rules and putting an effective implementation mechanism in place will be essential for the success of the "New Levant" as a sub-regional integration zone. The Levant countries should review a widerange of policy weaknesses in member economies that could obstruct a strong supply response. For example, countries will need to improve national and cross-country infrastructure, implementation capacity in partner countries, as well as harmonize business and investment climate rules and regulations. Particular emphasis should be placed on advancing private sector development in the sub-region. In this content, the zone could be used as an engine for domestic reform.

There are lessons to be learned for MENA countries that have not yet signed FTAs with major partners, or who are not yet in the WTO system. While their trade policies are not triggered with pressure to "adjust," these countries frequently have export sectors that are affected by policy changes elsewhere. For example, the trade policy changes are impacting significant exports of steel rebar, ceramic tiles, blankets, and cotton and synthetic yarn from Syria; cement, ceramic tiles, and steel rebar from the Palestinian Territories; and blankets, cotton textile products, and ceramic tiles from Lebanon. Governments that undertake reforms to the trade regime almost inevitably face some pushback from domestic industries that struggle to adjust to new conditions of competition. For non-WTO member economies in the region, renewed effort should be placed on making the reforms necessary to complete the WTO accession process. Trading partners do not guarantee most-favored-nation (MFN) treatment to non-members; furthermore, non-members do not have access to the highly effective arbitration and dispute settlement procedures of the WTO system to protect their market access interests abroad. The initiation of the WTO accession process can benefit countries' trade performance while triggering deeper integration.

While WTO member economies may have lower applied tariffs than WTO non-members in a number of instances, there is still much trade liberalization work to be done even among the WTO member countries in MENA. For example, Tunisia has bound relatively few of its tariffs, and Egypt's tariff bindings continue to be extremely high. Because economies like Egypt, Jordan, and Tunisia also have relatively high MFN applied tariffs, their implementation of preferential tariff commitments through FTAs with Turkey and other major economies runs the risk of leading to trade diversion. One important way to address this concern is to continue to lower MFN applied import tariffs and to take on additional commitments to lower WTO import tariff bindings.⁵ As a general rule, the economies that are members in the WTO not only are relatively more open, but because there is also some external, multilateral oversight and agreed-upon surveillance over their trade policies through the WTO's Trade Policy Review Body, and WTO committees and reporting requirements.

Eventually, the transformational nature of successful regional integrations provides expected benefits to countries in terms of growth, employment, and diversification. Almost all fast-growing countries, i.e., countries which have grown at average annual rates of seven percent or more for at least 25 years, integrated into the global economy during their high growth periods through increased trade and foreign direct investment. Integration into global value chains is likely to have contributed to high sustainable productivity growth in these countries based on a continuous process of international knowledge and technology flows channeled through trade, FDI, or international migration. For instance, Turkey's GDP growth amounted to, on average, six percent per year from 2002 to 2011 when the country benefited from FDI from EU countries as well as trade integration into European value chains. A number of empirical studies demonstrate the importance of international trade flows to explain technology spillovers and productivity growth. Moreover, Baldwin and Forslid (2000) argue that trade liberalization improves the incentives to invest in new technologies through competition and better financial intermediation. Thus, trade integration provides mechanisms for international technology diffusion and can be a pivotal ingredient for economic development, in particular, when paired with economic behind-the-border policy reforms making domestic firms more competitive and domestic markets more attractive.

The private sector in the Levant is taking the lead in implementing short-term actions and long-term economic integration agenda in partnership with the public sector

⁵ Estevadeordal, Freund and Ornelas (2008) present evidence to suggest that this may have been a strategy adopted by a number of economies in Latin America after their regional integration efforts led to adoption of a number of preferential trade agreements in the 1990s. After the adoption of FTAs, which would have otherwise resulted in large tariff preference margins, such economies subsequently lowered applied MFN tariffs toward imports from nonmembers in order to minimize the likelihood of costly trade diversion.

There is a clear interest from private sector representatives in the region to take the leadership role for addressing common challenges in the region. "The New Levant Initiative" could provide a platform to private sector champions in the region to identify constraints that impede regional economic activities especially related to trade flows, labor and capital mobility, and offer solutions and actions through debate and discussion as well as consultation with authorities in their own countries. This initiative could activate a "Levant Private Sector Network" that institutionalizes a regional private sector lobbying group that brings together private sector firms

in the region for the common purpose of advancement of economic integration of the sub-region. The World Bank is working closely with private sector and governments in the region to introduce a regional economic integration agenda with an aim to implement short- and medium-term actions. International and bilateral development partners will be able to assist Levant countries in implementing trade reforms either through facilitating the dialogue by bringing together the stakeholders, or providing technical assistance and policy recommendations and supporting implementation by providing finance and mobilizing resources.

INTRODUCTION

with a combined population of 224 million, land area of 2.4 million km², and nominal GDP of US\$1,408 billion, complemented with its proximity to major markets, and access to transportation corridors, the "New Levant" countries (Egypt, Jordan, Lebanon, Turkey, Iraq, Syria, and the Palestinian Territories) have significant economic importance in the region. This sub-region presents opportunities and potential for a successful regional integration. Although trade in goods and services has been expanding and investment flows have been growing, the potential for deeper and wider integration has not been fully realized, notwithstanding the progress that has been made. There is a great potential to change the economic dynamics in the region through trade integration, if designed well and implemented effectively. Deepening and widening integration in the region would benefit all countries in terms of diversifying trade, strengthening FDI and technology transfers, improving competitiveness, and securing economic and political stability in the region. In addition to the "core" countries listed above, linkages between other countries in the region are also considered in specific sectors including Tunisia, Libya, Israel, and Iran that make up the "outer circle" countries.

This study identifies the areas of economic complementarities among the New Levant countries, assessing untapped potentials in investment and trade in goods and services. The work is aligned with the four priority areas identified in the World Bank's Trade Strategy: (1) trade competitiveness and diversification; (2) trade facilitation, transport logistics, and trade finance; (3) support for market access and international trade cooperation; and (4) managing shocks and promoting greater inclusion. Guided by this strategy, the report discusses that complementarities in the sub-region are significant, pointing at substantial potential welfare gains from increased trade and investments and economic integration,

and addresses the following key policy questions: (i) What are the economic complementarities among the Levant countries in the region, in specific terms? To what extent do the countries take advantage of the complementarities? (ii) Who benefits from potential deeper integration, and by how much? (iii) What are the barriers to deeper regional integration? What are the policies to remove these barriers? (iv) Could an economic zone be an answer, and under which circumstances?

Analytical work was complemented with policy dialogue with governments and qualitative interviews with private sector representatives on the ground. The task team undertook major technical and consultative

missions to Turkey, Jordan, Lebanon, Egypt, and Iraq in participation with World Bank management, country economists from Europe and Central Asia (ECA) and MENA regions, and consultants. High-level meetings were held with government officials and initial findings were presented. Also, technical teams met with chambers and private sector representatives, and held focus group meetings, particularly in services trade areas.

The expected outcome is a well-defined policy and implementation road map, on which a broad consensus is reached among all governments in the Levant. Despite the political disruptions, the Levant countries have an interest in deepening economic regulatory ties within the region, and these efforts are currently driven by the private sector. The private sector is proactive in the Levant and is increasingly taking a leadership role in the region's welfare improvement. Their strategic motivation is that within the region deeper economic integration could increase welfare gains for all countries involved and pave the way for stability. Although creation of a well-functioning economic zone is a long-term goal, because of the current political and security situation short-term actions can be delivered in specific sectors that have the potential to improve regional prosperity. These chambers of commerce in the Levant are leading the agenda, and acting in close collaboration with their governments.

The main counterparts for this work are Ministries of Economy, Trade, or Finance in the Levant countries. These ministries have participated in the conduct of this work. The audience for this work is senior policy makers and technical staff at these ministries along with other key government entities, private sector representatives, international partners, think tanks, and World Bank staff.

The report is organized as follows. The report begins by providing an analytical basis for the evaluation of potential bilateral economic complementarities between Jordan, Lebanon, Syria, Iraq, Egypt, Turkey, and the

Palestinian Territories (where data is available) in Chapter 1. The analysis goes beyond the aggregate level in order to examine the scope for regional trade and investment in particular industries or products. Building on an analysis of economic complementarities and trade and investment potentials in the sub-region, Chapter 2 analyzes the economic implications of a deeper regional integration. A CGE model examines four scenarios emphasizing different aspects of trade relations among possible members of a new economic integration zone. Chapter 3 reviews and compares the trade and investment regimes of the Levant countries with a view to identifying the areas of reforms needed to harmonize their policies in order to improve competitiveness collectively and increase trade and investment flows among them.

Chapter 4 reviews the services sectors and levels of regulatory restrictiveness in the context of efforts at regional and global integration of Levant economies. The chapter identifies existing and potential barriers to integrating services markets of the sample countries within the Levant region, and advances a number of policy recommendations centered on the promotion of closer regulatory ties in services markets and expanded trade in services. Chapter 5–8 focus on five sectors for an indepth analysis (financial services, energy, ICT and air transport, and tourism) discussing how liberalization of services trade under the framework of deeper regional economic integration would help countries take advantage of the regional opportunities, including an overview for trade in services in the sub-region.

Chapter 9 analyzes barriers to deeper regional integration in the Levant, focusing on non-tariff measures, trade facilitation, and logistics issues, and proposes policies to remove these barriers. Finally, Chapter 10 reviews the current regional agreements, identifies the weaknesses and proposes recommendations for a possible economic zone in the medium to long term.

ECONOMIC COMPLEMENTARITIES

his chapter provides an analytical basis to evaluate potential bilateral economic complementarities between Jordan, Lebanon, Syria, Iraq, Egypt, Turkey, and the Palestinian Territories (where data is available). The core of the analysis is extended to include the following outer circle countries: Iran, Libya, and Tunisia. The key hypothesis to be verified in this chapter is that these countries do not take sufficient advantage of the region's economic complementarities, meaning that regional trade and investment is below potential. The analysis goes beyond the aggregate level in order to examine the scope for regional trade and investment in particular industries or products.

The analyses of aggregate and industry or product level trade patterns and specializations focus on identifying the potential for trade in the region as a whole, as well as in particular sectors. The chapter first focuses on an analysis of aggregate trade flows to quantify the potential for trade in the region. Then it reviews the disaggregate structure and specialization of trade in detail for all countries. In turn, industry and product specializations are contrasted between countries in order to identify sectors with the highest potential for trade.

The Levant countries experienced relatively high economic growth during the last decade.

With the exception of Iraq and the Palestinian Territories, the average growth in GDP among the Levant countries (Egypt, Jordan, Lebanon, Syria, Turkey)

between 2000 and 2011 was considerably higher than the world average of 2.7 percent. Table 1 tracks the annual growth of GDP in Turkey and the MENA economies over the 2000-2011 period. The data reveal significant volatility in GDP growth across the sub-region, especially in Iraq and Palestinian Territories. Even for the remaining economies, GDP growth fluctuated between -6 and +13 percent during 2000-05, with relatively greater stability thereafter. The MENA region as a whole experienced average growth of 4.5 percent during this period, with Iran and Jordan experiencing higher growth than the MENA average; Iraq, Tunisia and Palestinian Territories falling considerably short. Apart from Iraq and the Palestinian Territories, the average annual growth in individual countries of the Levant was higher than the world average.

 Table 1
 Annual GDP Growth in MENA and Turkey (%, 2000–2011)

Country/ Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average
Egypt	5.4	3.5	2.4	3.2	4.1	4.5	6.8	7.1	7.2	4.7	5.1	1.8	4.6
Iran	5.1	3.7	7.5	7.1	5.1	4.6	5.9	7.8	2.3	1.8	n.a.	n.a.	5.1
Iraq	-4.3	-6.6	-7.8	-41.3	46.5	-0.7	6.2	1.5	9.5	4.2	0.8	9.9	1.5
Jordan	4.2	5.3	5.8	4.2	8.6	8.1	8.1	8.2	7.2	5.5	2.3	2.6	5.8
Libya	3.7	-4.3	-1.3	13.0	4.4	9.9	5.9	6.0	3.8	2.1	n.a.	n.a.	4.3
Lebanon	1.3	4.0	3.4	3.2	7.5	1.0	0.6	7.5	9.3	8.5	7.0	3.0	4.7
Syria	2.7	5.2	5.9	0.6	6.9	6.2	5.0	5.7	4.5	6.0	3.2	n.a.	4.7
Tunisia	4.3	4.8	1.7	5.5	6.0	4.0	5.7	6.3	4.5	3.1	3.0	-1.8	3.9
Turkey	6.8	-5.7	6.2	5.3	9.4	8.4	6.9	4.7	0.7	-4.8	9.2	8.5	4.6
WB/Gaza	-5.6	-14.8	-10.1	6.1	6.2	6.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-2.0
Algeria	2.2	2.6	4.7	6.9	5.2	5.1	2.0	3.0	2.4	2.4	3.3	2.5	3.5
Morocco	1.6	7.6	3.3	6.3	4.8	3.0	7.8	2.7	5.6	4.8	3.7	4.5	4.6
Yemen	6.2	3.8	3.9	3.7	4.0	5.6	3.2	3.3	3.6	3.9	7.7	-10.5	3.2
MENA	5.4	1.7	2.1	5.1	6.6	5.3	5.9	5.1	4.9	1.8	4.5	5.2	4.5
Mashreq+	2.6	0.7	2.0	1.8	9.1	5.1	5.3	5.3	5.0	3.5	4.5	2.3	3.7
World	4.2	1.7	2.0	2.7	4.0	3.5	4.0	3.9	1.3	-2.2	4.3	2.7	2.7

Source: World Bank, World Development Indicators.

Intra-group trade has increased substantially during the last decade, in terms of the value and the number of products. But, despite this high growth, there is still untapped potential in the region.

Intra-group trade between Egypt, Jordan, Lebanon, Syria, Iraq, and Turkey increased 7-fold from US\$ 4,225 million in 2000/02 (three year average) to US\$ 29,713 million in 2008/10.6 The increase in sub-regional trade was not only due to a higher intensive margin but also to a higher extensive margin: the number of products traded within this group increased more than four-fold from US\$93.9 million to US\$406 million in the same period. Table 2 shows that the increase was broad based; that is, each member of the group managed to increase the number of products exported to all other members with the exception of the number of Iraqi goods exported to Turkey and Jordan, which declined slightly. In the case of Iraq, the increase in exports primarily originates from higher oil prices and

thus an increase in the value of oil. Because of disruption in production, Iraq has been relying increasingly on imports from its neighbors, explaining the substantial increase in exports to Iraq from all members of the group, particularly Turkey and Syria. With the addition of Iran, Libya and Tunisia, intra-group trade increased 5.7-fold from US\$6,181 million in 2000/02 (three year average) to US\$35,121 million in 2008/10, accounting for a share in total exports from all countries in the region of 10.7 percent. In particular, Iran and Tunisia increased their exports to Turkey significantly, albeit from low levels.

Intra-group trade is particularly important for Syria, Jordan, Lebanon, and Iraq. Table 2 shows that Syria's exports to the region accounted for almost half of its total exports in 2008/10 whereby Iraq alone absorbed more than one-third of Syrian exports. Regional

Oata for the Palestinian Territories are not available.

 Table 2
 Intra-Group Trade

			t value nillion)	Share in to (per	tal exports cent)	-			
Exporter	Partner	2000/02	2008/10	2000/02	2008/10	2000/02	2008/10		
Turkey	Group	1,458	14,419	4.60	12.41			5,445	
	Syria	244	1,462	0.77	1.26	137	434	1,182	
	Jordan	112	496	0.35	0.43	176	302	529	
	Lebanon	167	656	0.53	0.57	133	314	390	
	Iraq	0	5,026	0.00	4.33		563	4,682	
	Iran	310	2,366	0.98	2.04	160	551	-4,601	
	Egypt	375	2,098	1.18	1.81	228	448	1,324	
	Libya	109	1,602	0.34	1.38	83	432	1,507	
	Tunisia	141	713	0.45	0.61	111	292	433	
Syria	Group	899	6,193	15.17	47.34			811	
	Turkey	459	494	7.75	3.77	23	104	-1,427	
	Jordan	63	311	1.07	2.38	31	153	80	
	Lebanon	283	256	4.78	1.95	38	146	66	
	Iraq	0	4,485	0.00	34.28		271	3,779	
	Iran	11	19	0.19	0.15	1	19	-1,052	
	Egypt	39	298	0.67	2.28	26	97	-577	
	Libya	31	318	0.53	2.43	13	78	-29	
	Tunisia	11	11	0.19	0.08	3	36	-28	
Jordan	Group	593	1,474	28.00	25.67			-387	
	Turkey	16	38	0.76	0.66	12	34	-502	
	Syria	44	228	2.09	3.97	36	118	-138	
	Lebanon	44	166	2.06	2.90	41	80	87	
	Iraq	426	859	20.14	14.97	21	211	680	
	Iran	8	9	0.40	0.15	4	7	-3	
	Egypt	22	106	1.04	1.84	33	83	-570	
	Libya	25	40	1.20	0.70	21	34	47	
	Tunisia	6	28	0.30	0.49	11	21	14	
Lebanon	Group	169	999	18.47	26.76			-719	
	Turkey	28	181	3.10	4.84	14	30	-453	
	Syria	28	223	3.10	5.98	46	144	-119	
	Jordan	37	109	4.03	2.93	61	145	-124	
	Iraq	29	269	3.17	7.20	23	142	264	
	Iran	14	63	1.51	1.69	1	18	2	
	Egypt	22	134	2.41	3.60	41	93	-229	
	Libya	6	11	0.67	0.28	12	8	-42	
	Tunisia	4	8	0.47	0.23	3	13	-18	

(continued on next page)

Table 2 Intra-Group Trade

			t value nillion)		otal exports cent)	Number o	f products	Trade Balance
Exporter	Partner	2000/02	2008/10	2000/02	2008/10	2000/02	2008/10	
Iraq	Group	670	2,084	5.73	4.47			-11,240
	Turkey	0	1,099	0.00	2.36	16	20	-5,409
	Syria	0	773	0.00	1.66	20	8	-4,325
	Jordan	642	143	5.50	0.31	3	3	-792
	Lebanon	1	6	0.01	0.01	3	4	-291
	Iran	12	55	0.10	0.12	29	18	38
	Egypt	1	9	0.01	0.02	5	2	-456
	Libya	0	0	0.00	0.00			0
	Tunisia	14	0	0.12	0.00	1		-5
Iran	Group	829	6,869	3.39	7.04			3,938
	Turkey	781	5,834	3.20	5.98	60	144	3,144
	Syria	0	943	0.00	0.97	10	81	951
	Jordan	10	8	0.04	0.01	11	19	1
	Lebanon	27	36	0.11	0.04	16	19	-39
	Iraq	0	0	0.00	0.00	78	360	-42
	Egypt	7	34	0.03	0.03	10	24	-19
	Libya	0	0	0.00	0.00	7	9	0
	Tunisia	4	14	0.02	0.01	7	7	-58
Egypt	Group	437	4,544	8.63	17.57			2,166
	Turkey	94	828	1.86	3.20	32	184	-874
	Syria	55	740	1.08	2.86	41	194	462
	Jordan	54	796	1.06	3.08	31	207	615
	Lebanon	68	467	1.35	1.80	51	165	433
	Iraq	77	383	1.53	1.48	22	126	414
	Iran	7	96	0.14	0.37	3	36	96
	Libya	56	1,006	1.11	3.89	63	267	874
	Tunisia	25	229	0.50	0.89	21	147	146
Libya	Group	1,085	1,664	9.60	3.60			-3,200
	Turkey	724	353	6.40	0.76	12	18	-1,739
	Syria	22	315	0.20	0.68	3	6	-37
	Jordan	1	1	0.01	0.00	1	3	-51
	Lebanon	10	35	0.08	0.08	3	2	36
	Iraq	0	0	0.00	0.00	1		0
	Iran	0	0	0.00	0.00			0
	Egypt	47	244	0.41	0.53	20	32	-1,025
	Tunisia	281	716	2.49	1.55	23	16	-385

(continued on next page)

Table 2 Intra-Group Trade (continued)

		Export value (US\$ million)			otal exports cent)	Number o	Trade Balance	
Exporter	Partner	2000/02	2008/10	2000/02	2008/10	2000/02	2008/10	
Tunisia	Group	479	1,419	7.45	8.89			-404
	Turkey	59	244	0.91	1.53	14	32	-530
	Syria	5	25	0.08	0.16	5	8	24
	Jordan	6	14	0.10	0.09	5	24	-17
	Lebanon	5	15	0.08	0.09	9	21	15
	Iraq	66	5	1.02	0.03	20	9	5
	Iran	45	142	0.71	0.89	3	5	50
	Egypt	31	90	0.48	0.57	19	48	-174
	Libya	262	883	4.07	5.53	176	250	223
Total	Intra-group	6,181	35,121	1.78	10.69			

Source: UN COMTRADE (United Nations Commodity Trade Statistics) Database, IMF Direction of Trade.

exports accounted for one-fourth of total Jordanian and Lebanese exports. The export shares of Iraq, Libya, and Iran to the region are relatively low due to their high share of crude oil exports to the rest of the world. Turkey and Tunisia's manufacturing exports focus on the EU market. Nevertheless, Turkey's share of exports to the extended group of MENA countries increased significantly to 12.4 percent in 2008/10 while Tunisia's increased to 8.9 percent.

All countries benefitted from higher intra-group exports, but to varying degrees. Turkey had the largest increase in intra-group exports both in terms of value (over 13-fold) and number of products (six-fold) between 2000/02 and 2008/10. In contrast, export values increased approximately 11-fold in Lebanon, 10-fold in Egypt, eight-fold in Syria and Iran, three-fold in Tunisia and Iraq, and two-fold in Jordan and Libya. The increase in the number of exported products by Turkey, Syria, as well as Egypt and to a lesser degree also Lebanon and Jordan to the region between 2000/02 and 2008/10 is striking. It reflects a trend in the diversification of regional trade from raw agricultural and mining products into other manufacturing sectors as reported in Table 2;

despite this recent trend, however, trade in the region is still predominantly resource based. Turkey's performance is explained by its higher competitiveness compared to the other countries. Compared to the other countries in the sub-region, Turkey has made a higher degree of improvement in both its trade policies and behind-the-border policy environment—both needed for enhancing competitiveness.

Despite high growth, there is still significant untapped potential in terms of bilateral trade flows between Turkey and the Mashreq countries. The combined share of Turkish exports to Jordan, Lebanon, Syria, and Iraq accounted, on average, for only 6.6 percent of total Turkish exports in 2008/10. Likewise, exports of Mashreq countries to other Arab countries, including the Gulf, are much more significant than exports destined for Turkey; Lebanon has the highest share of exports destined for Turkey at 4.2 percent, exceeding the value of Lebanese export destined for Iraq or Jordan. But there are substantial differences even among the Mashreq countries. The high bilateral export shares between Syria and Lebanon, respectively, as well as the high share of Syrian or Jordanian exports to Iraq stand out; in contrast,

bilateral trade between Jordan and Lebanon is still relatively limited.

The product composition of intra-group trade reveals that exports are predominantly resource based. Turkey has a relatively well-diversified economy.

Despite a recent trend towards trade in other manufacturing goods, exports in the sub-region are still predominantly resource based, including several raw agricultural and mining products as well as processed textiles, food, base metal, and chemical products. Table 3 reports the five products with the largest bilateral export shares among all countries in the group, respectively. Many of these products are related to mining, agricultural, or base metal products: i.e., petroleum, cement, phosphate, inorganic acids, food and beverages, vegetables, cotton, steel bar, or iron and steel (tubes, plates, and pipes). More sophisticated intermediate or final goods are primarily imported by Iraq from all other countries including household refrigerators, insulated wire and cable, medicaments, and metal tanks. Moreover, Turkey exports several intermediate base metal products to Mashreq countries including metal tanks, seamed tubes, or steel railroad material as well as motor vehicles to Egypt. In turn, Mashreq countries and Turkey predominantly trade processed textile (cotton yarn, synthetic yarn, and woven fabrics), food (beverages, dried legumes, and food preparations), and, chemical products (fertilizers, inorganic acids, medicaments, and organic detergents) with each other.

Turkey has the most diversified manufacturing base in the region followed by Lebanon, Egypt, and Tunisia. Figure 1 illustrates the total number of exported products in which each country had a revealed comparative advantage (RCA) in 2009 as well as the share of the 20 largest export items in total exports. It shows that Turkey's export base is the most diversified in this group: Turkey had an RCA in exporting 226 manufacturing products (out of 749 total exported products) in 2009 while the largest 20 export products accounted for only 40 percent of total export. In contrast, exports

are highly concentrated in Iraq, Iran, and Libya due to the high share of petroleum in total exports. The other countries are in between, whereby, somewhat surprisingly, the degree of diversification of Jordanian exports in 2007/09 appears to be comparable or even slightly lower than the ones of resource rich Egypt or Syria according to these approximate measures.

A relatively large number of firms in the region are reliant on trade; the share of firms importing intermediate goods is particularly high in Lebanon, Syria, and Jordan. Figure 2 (left) indicates that the share of firms exporting is 59 percent in Syria, 44 percent in Lebanon, and 25 percent in Jordan and Egypt, respectively.8 Similarly, revenues from exports appear to be important for a relatively large share of firms in the region. For instance, the share of sales obtained from exports is 27 percent in Syria (Figure 2, right); only Malaysia and Thailand have comparably high shares among the selected emerging economies. The share of sales obtained from exports is 18 percent in Lebanon, 14 percent in Jordan, and 10 percent in Egypt, which are still relatively high. Moreover, a large number of firms in Lebanon, Syria, and Jordan are importing inputs (Figure 3): the share of imported inputs exceeds 50 percent among surveyed firms in these three countries.

Similar to potential in higher regional trade flows, there is a great opportunity for expansion of foreign direct investments. Currently, the composition of FDI inflows is concentrated in real estate, construction, tourism, and oil sectors.

In all Levant countries, foreign direct investment (FDI) increased markedly between the 1990s and the 2000s, however, only Lebanon and Jordan achieved high shares of FDI in GDP (above 10 percent) by international standards. The FDI takeoff in the region

⁷ The derivation of the indicator is provided in Annex 3.

The information is obtained from the World Bank Enterprise Surveys (WBES) for different years between 2006 and 2008. The data are not available for Iraq, Iran, Libya, and Tunisia.

 Table 3
 Product Composition of Exports

	Partners	Largest five export items (percent of total export to the partner country, SITC 4-digit), 2010
Turkey exporting to	Syria	Cement (12.3), electric energy (6.2), iron prod (3.6), wheat (3.2), iron/steel railroad material (2.4)
	Jordan	Seamed tubes (19.0), seamed pipes (7.5), manufactured tobacco (4.2), metal tanks (3.4), wooden boxes (2.5)
	Lebanon	Hot-form steel bar (14.2), fresh fish (3.4), cigarettes (3.0), jewelry (3.0), plated steel (2.8)
	Iraq	Hot-form steel bar (5.4), flour of wheat (5.1), cement (4.6), insulated wire (3.7), seamed tubes (3.1)
	Iran	Semi-fin iron<25% (6.3), fiberboard (4.9), hot-form steel bar (4.7), motor vehicle parts (4.1), woven syn fil yarn (2.9)
	Egypt	Hot-form steel bar (14.8), cement (4.8), semi-fin iron>25% (4.3), motor vehicles (4.0), semi-fin iron<25% (3.8)
	Libya	Hot-form steel bar (12.0), iron structures (6.7), cement (5.2), insulated wire (3.1), semi-fin iron<25% (3.0)
	Tunisia	Woven cotton (9.4), motor vehicles (9.1), semi-fin iron<25% (6.7), cigarettes (3.3%), knitted fabrics (3.2)
Syria exporting to	Turkey	Petroleum (38.2), raw cotton (13.4), cotton yarn (9.0), syn fil yarn (4.0), woven cotton fab (3.6)
	Jordan	Milk/cream (8.6), raw sugars (8.0), petroleum (6.9), nuts (5.5), oil cake by-products (4.0)
	Lebanon	Petroleum (30.9), natural phosphates (11.9), vegetables (5.2), organic detergents (5.1), cheese (4.2)
	Iraq	Organic detergents (12.2), eggs in shell (5.7), fruits (5.3), beverages (4.6), cereals (4.0)
	Iran	Olive oil (35.8), amino resins (21.7), textile bags (4.2), mattresses (3.2), motor veh parts (2.8)
	Egypt	Cotton yarn (23.1), petroleum (18.7), apples (9.2), raw cotton (5.8), dried legumes (4.2)
	Libya	Electrical transformers (12.1), plastic footwear (6.4), manmade fab (5.6), insulated wire (4.7), footwear (4.7)
	Tunisia	Women's coats (17.8), spices (17.7), woven syn fil yarn fab (15.1), raw cotton (8.3), food proc machines (7.3)
Jordan exporting to	Turkey	Nat phosphate (20.5), inorganic acids (17.0), manufactured tobacco (12.8), alcoholic beverages (8.4), beer (8.3)
	Syria	Vegetables (23.4), tomatoes (14.4), metal tanks (8.2), fruits (6.2), paper board (2.8)
	Lebanon	Gold (35.8), medicaments (17.4), metal tanks (9.1), vegetables (4.2), paper cut (2.9)
	Iraq	Insulated wire (7.6), metal tanks (7.5), medicaments (6.5), tomatoes (5.5), food preparations (4.4)
	Iran	Potassic fertilizer (28.5), flourides (24.3), chemical fertilizers (17.4), manufactured tobacco (9.6), paper cut (8.4)
	Egypt	Potassic fertilizer (19.8), medicaments (14.5), paper products (7.2), chemical fertilizers (6.2), corrug paper (5.9)
	Libya	Medicaments (39.9), indust wadding (11.8), electrical transformers (10.0), chemical products (7.2), potassic fertilizer (3.8)
	Tunisia	Medicaments (31.6), plastic foil (12.5), chemical fertilizers (9.0), nitrates (6.2), organic chemicals (5.6)
_ebanon exporting to	Turkey	Scrap cast iron (64.8), inorganic acids (16.5), ferrous waste (7.8), edible nuts (2.1), iron/steel articles (1.1)
	Syria	Cement (15.3), banana (7.2), paper products (4.4), sugar conf (3.7), durum wheat (3.6)
	Jordan	Food preparations (4.3), paper products (4.1), furniture (3.7), beef preparations (3.2), paper cartons (2.8)
	Iraq	Book/pamphlet (16.1), dom refrigerator (14.1), electric generators (9.7), hair care prep (3.1), insulated wire (3.0)
	Iran	Phosphat fertilizer (81.8), veg flour (2.8), insulated wire (2.2), artics cu/ni/al/pb/zn/sn (1.8), conveyor (1.6)
	Egypt	Office equip parts (24.2), electron circuits (15.6), digital processing units (11.4), apples (6.4), inorganic acids (4.3)
	Libya	Book/pamphlet (58.2), women suit (9.3), women dress (8.0), motor veh parts (6.0), machinery minerals (2.9)
	Tunisia	Lead alloys (15.8), iron structures (12.3), book/pamphlet (11.3), veg flour (9.4), organic detergents (8.2)
raq exporting to	Turkey	Petroleum (96.2), gold (2.8), alkyl-benzene (0.3), plastic waste (0.1), bovine (0.1)
	Syria	Alkyl-benzene (70.6), color for glass (18.3), fresh fruit (3.7), sheep skin (1.9), sulfur (1.5)
	Jordan	Petroleum (91.3), alkyl-benzene (8.2), ferrous waste (0.4), carpets (0.0), sulfur exc (0.0)
	Lebanon	Alky-benzene (64.6), fresh fruit (17.8), fresh jams (12.5), animal materials (3.7), polyethylene (0.8)
	Iran	Metal waste (41.7), aluminum (29.2), organo-sulfur (4.5), tires new for busses (4.3), tires new for cars (2.6)
	Eaunt	Fruits (53.5), bovine hide (41.8), animal materials (2.3), cotton yarn (1.0), bovine whole hides (0.8)
	Egypt	11 ale (00.0), both that (11.0), animal materials (2.0), obtain jum (1.0), both that (0.0)
	Libya	. Tallo (55.5), 55.1116 11106 (17.5), ariinta materiale (2.5), 55.101 (17.5), 55.1116 11106 (6.5)

(continued on next page)

Table 3 Product Composition of Exports

	Partners	Largest five export items (percent of total export to the partner country, SITC 4-digit), 2010
Iran exporting to	Turkey	Petroleum (81.4), copper (5.2), polyethylene (3.8), propylene (1.3), polycarbonates (1.2)
	Syria	Insulated wire (27.7), gas turbines (11.8), copper wire (7.8), milk/cream (7.5), motor vehicle bodies (5.0)
	Jordan	Colled rolled steel-4 (15.7), grapes (7.5), iron ore (6.7), cellulose (6.6), petroleum jelly/waxes (6.5)
	Lebanon	Nuts (54.2), carpets (15.1), food preparations (6.5), crustaceans frozen (4.2), yeasts/baking powders (3.4)
	Iraq	Passenger motor vehicles (7.9), cements (7.5), apples (7.0), vegetables (5.9), non-refract bricks (5.5)
	Egypt	Acyclic alcohols (29.2), nuts (19.0), polyethylene (18.5), grapes (7.8), quartz (3.7)
	Libya	Taps/cocks/valves (37.7), grapes (19.4), nucleic acids (11.2), medicaments (7.5), wine/cords/cables (4.0)
	Tunisia	Passenger motor vehicles (46.3), polyethylene (25.1), nuts (13.6), grapes (2.9), figs (1.9)
Egypt exporting to	Turkey	Alkyl-benzene (9.8), carbon (7.9), cotton yarn (7.4), nitrogenous fertilizers (6.9), polyvinyl chloride (5.8)
	Syria	Natural gas (15.6), copper plate (13.7), rice (13.7), insulated wire (4.7), non-refract bricks (3.1)
	Jordan	Natural gas (28.9), electrical energy (7.1), gold (6.1), copper plate (4/8), inorg bases (4.1)
	Lebanon	Electrical energy (10.9), natural gas (9.9), copper plate (9.7), gold (7.8), non-refract bricks (5.7)
	Iraq	Artics cu/ni/al/pb/zn/sn (11.6), cheese (10.8), cheese processed (9.5), medicaments (7.8), plastic articles (4.2)
	Iran	Citrus fruit (43.7), hot coil bar ir/st (26.6), tobacco (12.5), kitchen glassware (7.6), furniture (1.3)
	Libya	Rice (13.7), insulated wire (10.1), non-refract bricks (6.4), copper plate (5.5), quarried stone (3.3)
	Tunisia	Vegetable materials (10.9), Iron structures (5.9), dried legumes (.31), other ferro alloys (2.7), furniture (2.6)
_ibya exporting to	Turkey	Polyethylene (27.6), acyclic alcohols (25.5), hydrocarbon gas (16.3), iron granule (13.8), nitrogenous fertilizers (10.6)
	Syria	Liquefied butane (64.9), sulfur (18.2), nitrogenous fertilizers (14.5), rice (1.6), sheep skin (0.2)
	Jordan	Nitrogenous fertilizers (59.1), fruit juices (17.0), book/pamphlet (13.4), non-refract bricks (4.5), homogenized food (3.3)
	Lebanon	Liquefied butane (97.4), liquefied propane (2.5), fruits (0.1), builders wood materials (0.0), seeds (0.0)
	Iraq	
	Iran	Milk/cream (20.7), medicaments (10.5), grapes (8.6), vitamins (8.1), taps/cocks/valves (7.4)
	Egypt	Liquefied butane (40.5), iron granule (26.6), acyclic hydrocarbons (17.7), flat rolled steel (3.5), polyethylene (3.0)
	Tunisia	Petroleum (82.4), liquefied butane (4.7), flat rolled steel (4.0), polyethylene (3.1), polyvinyl chloride (1.6)
unisia exporting to	Turkey	Chemical fertilizers (70.2), inorganic acids (7.5), phosphates (4.3), insulated wire (2.8), fruits (2.4)
	Syria	Phosphates (85.5), fish (6.4), springs and leaves (2.2), batteries (1.5), non-refract bricks (0.8)
	Jordan	Phosphates (17.2), motor vehicle parts (11.9), metal waste (10.8), olive oil (7.6), batteries (5.1)
	Lebanon	Olive oil (36.5), non-refract bricks (9.3), quarried stone slabs (11.3), chemical fertilizers (8.6), margarines (6.4)
	Iraq	Electric switching (36.9), insulated wire (20.6), non-refract bricks (17.9), electric lamps (4.7), food preparations (2.7)
	Iran	Phosphatic fertilizer (96.4), motor vehicle parts (1.2), phosphates (1.0), iron wire (0.5), olive oil (0.3)
	Egypt	Phosphates (41.9), iron wire (7.7), flourides (6.8), olive oil (5.5), bulk paper (5.2)
	Libya	Paper products (10.2), cements (6.7), iron structures (5.2), chemical fertilizers (4.6), non-refract bricks (3.5)

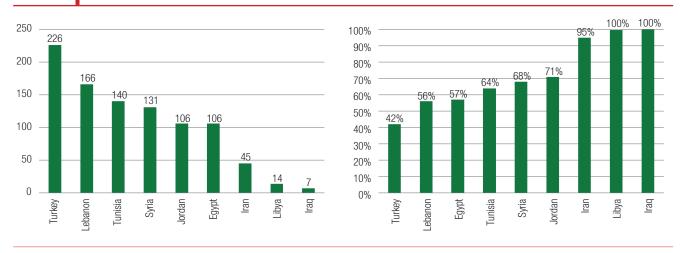
Source: UN COMTRADE Database.

was apparent after 2002, and in most cases increases in FDI flows happened from a low base (Figure 4). In the oil importing countries with strong GCC links, such as Lebanon and Jordan, the share of FDI in GDP increased considerably. For instance, the share of FDI in total gross fixed investment is high by international comparisons in

Jordan, Egypt, and Lebanon where it was over 40 percent on average between 2005 and 2010,9 compared with 10 percent in Syria.

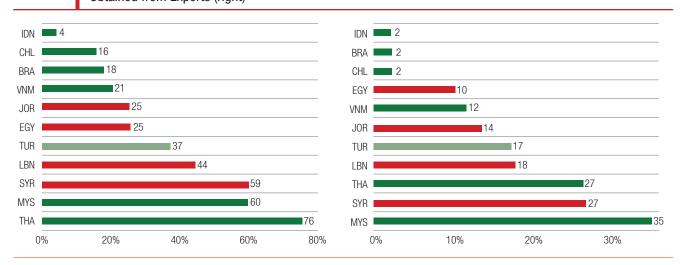
⁹ The share of FDI in investment is high in Egypt also due to the relatively low private domestic investment rate.

Figure 1 Number of 4-digit Products with RCA in 2007/09 (left), Share 20 Largest Products in Total Exports 2007/09 (right)



Source: UN COMTRADE Database.

Figure 2 Percentage of Firms Exporting (left), Percentage of Firms' Sales Obtained from Exports (right)

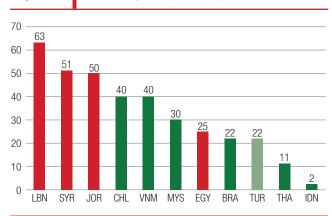


Source: World Bank Enterprise Surveys (WBES), years ranging from 2006 (Jordan) to 2008 (Syria).

Intra-region FDI flows between the Mashreq countries and Turkey were relatively low between 2003 and 2010 except for FDI flows into Iraq. Table 4 reports the total bilateral FDI flows in the region including greenfield and expansion projects between 2003 and 2010. While bilateral investment has experienced rapid growth in recent years, it remained at very low levels compared to the FDI inflows each country received from the rest

of the world; FDI inflows from other Mashreq countries or Turkey accounted, on average, for less than one percent of total FDI investments into Jordan, Lebanon, and Turkey. This suggests that there remains a great potential for expansion. Iraq received the highest FDI share from this group of countries accounting for 15 percent of total FDI inflows; the largest regional investor into Iraq was Lebanon whose investments into the country exceeded





 $\it Source$: World Bank Enterprise Surveys (WBES), years ranging from 2006 (Jordan) to 2008 (Syria).

investments from every other country 10-fold. Almost all FDI inflows into Iran from these countries originated

from Turkey; the share of Turkish FDI in Iran's total FDI inflows, however, still accounted for only three percent. Syria received the bulk of its FDI from Iran (three percent or US\$1.5 billion) and Turkey (1.8 percent or US\$914 million). Overall, Lebanon was the largest investor among these countries with investments focusing on Iraq and Egypt.

The Gulf Cooperation Council countries (GCC) were by far the most important investor into Mashreq countries. Total investments from the GCC between 2003 and 2010 represented 75 percent of total FDI inflows for Lebanon, 69 percent for Jordan, 61 percent for Syria, 59 percent for Egypt, and 46 percent for Iraq. FDI from GCC countries into Turkey and Iran still accounted for nine percent of Turkey's total FDI inflows and 5.5 percent of Iran's, respectively.

Table 4 FDI Inflows 2003–2010

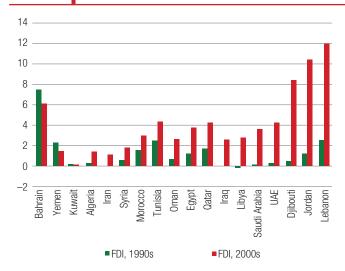
	Egypt	Iran	Iraq	Jordan	Lebanon	Syria	Turkey	GCC
			(in m	illions of US\$)				
Egypt		21	596	55		253		5,279
Iran	55				37	1,550		43
Iraq				48	18		20	82
Jordan	226		441			37	2	904
Lebanon	1,890		5,750	68		332		1,323
Syria							40	48
Turkey	135	1,360	494	44	24	914		1,369
GCC	64,698	2,526	23,008	18,875	9,316	31,828	8,415	87,986
Total FDI	110,000	45,900	50,200	27,300	12,500	52,200	93,300	421,130
			(in per	cent of total FDI)				
Egypt		0.04	119	0.20		0.49		1.25
Iran	0.05		103		0.30	2.97	0.20	0.01
Iraq				0.17	0.14		0.02	0.02
Jordan	0.21		0.88			0.07	0.00	0.21
Lebanon	1.72		11.47	0.25		0.64		0.31
Syria		_					0.04	0.01
Turkey	0.12	2.97	0.98	0.16	0.19	1.75		0.33
GCC	59.01	5.49	45.87	69.18	74.77	61.00	9.02	20.89

Source: FDI markets.

Note: Greenfield and Expansion invstments. fDi Markets tracks all new projects and expansions of exisiting investments.

Join ventures are only included where they lead to a new physical (Greenfield) operation. Mergers and Acquisitions (M&A) and other equity investments are not tracked.

Figure 4 Inflows of FDI as a Share of GDP in 2000s versus 1990s (left) and FDI Inflows (in US\$ millions) 2006–2010 (right)



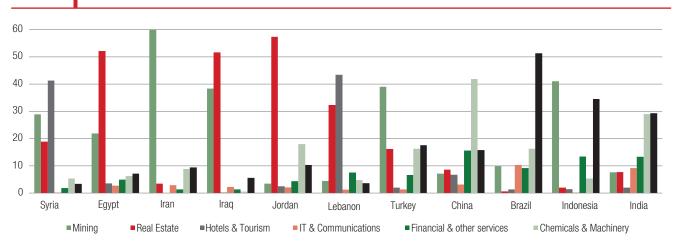
	2005	2006	2007	2008	2009	2010
Iraq	515	383	972	1,856	1,452	1,426
Jordan	1,984	3,544	2,622	2,829	2,430	1,704
Lebanon	3,321	3,132	3,376	4,333	4,804	4,955
Syria	583	659	1,242	1,467	1,434	1,381
Turkey	10,031	20,185	22,047	19,504	8,411	9,071
Iran	3,136	1,647	1,670	1,615	3,016	3,617
Egypt	5,376	10,043	11,578	9,495	6,712	6,386

Source: World Bank MENA Economic Development and Prospects, Investing for Growth and Jobs, based on United Nations Conference on Trade and Development (UNCTAD) data.

The composition of total FDI inflows into Mashreq countries is strongly concentrated in real estate, construction, tourism, and oil sectors. Figure 5 disaggregates FDI flows into the main economic sectors. Investments into the real estate sector, primarily from GCC countries, accounted for more than half of FDI inflows into Egypt, Jordan, and Iraq as well as more than 30 percent into Lebanon. The high share of FDI flows into the

real estate sector in these countries relativizes the importance for economic development since capital accumulation in this sector typically has very limited scope for technology or knowledge spillovers, expanding production capacities, or generating employment effects beyond construction periods. Moreover, the hotels and tourism sector in Syria and Lebanon received large foreign investments that accounted for more than 40 percent of

Figure 5 | Share of FDI Inflows by Sector, 2003–2010



Source: FDI markets database.

total FDI into both countries. While the potential for foreign technology spillovers is limited in this sector, investments typically create domestic employment opportunities, in particular for unskilled labor. For instance, 60 percent of the estimated value of greenfield projects and expansions of existing investments targeted real estate and hotels and tourism in Syria while only seven percent were directed at chemicals and machinery, financial and other services, or IT and communication. Similarly, in Jordan, Lebanon, Iraq, and Egypt real estate and hotels and tourism accounted for more than 50 percent of total FDI inflows. The share stands at around 20 percent for Turkey for these sectors. Another sector receiving significant FDI inflows was mining; its share reached 70 percent in Iran and 40 percent in Turkey. In contrast, FDI inflows into China, Brazil, Indonesia, and India were concentrated in manufacturing or high technology services, which typically have high potential for spillovers in terms of technologies, production capacities, and also employment. In most Mashreq countries, FDI into these sectors was almost negligible. The exceptions were foreign investments into the chemical and other manufacturing sectors in Turkey and Jordan. FDI in chemicals accounted for about 18 percent of FDI inflows in both countries while other manufacturing received about 18 percent of total FDI in Turkey and 10 percent in Jordan. For Jordan and Egypt, it should be noted that a significant amount of FDI in manufacturing is geared towards textile and garments located in Qualifying Industrial Zones (QIZs) with duty and quota free exporting arrangements to the U.S. However, foreign investment into QIZs has been reported to have very low linkages with the domestic suppliers.

Given the characteristics and trends in bilateral trade and investment flows, where are the trade potentials in the sub-region and what are potential mutual benefits from intraregional trade integration?

This study assesses the potential to increase trade in the region at the aggregate level. The analysis is based on trade complementarity indices and an estimated gravity trade model. The trade complementarity index measures how well the export structure of one country (or group of countries) matches the import structure of another country. The (static) index is based on bilateral exports and imports at the four-digit product level for all six countries. These are aggregated to a single index for each country pair. The index number varies between zero and 100; the higher the index number, the higher is the potential for that country's trade with the other country. The cross-country gravity model allows assessment of the level of bilateral trade between pairs of countries relative to their trade potential. The computation of bilateral trade potentials underlies a regression model estimating the impact of structural determinants on bilateral exports between 2006 and 2008. The structural determinants for each pair of countries together with the estimated regression coefficients are used to compute the bilateral trade potentials. The methodology is described in detail in the Annex 1. The empirical framework makes it possible to categorize bilateral exports as over-trading or under-trading, depending on the comparison between realized bilateral export values and the model's predictions.

The trade complementarity index suggests that the potential for intra-regional trade between the Mashreq countries and Turkey has increased since 2001; specifically, the prospects of all countries to increase exports to Iraq and Turkey improved substantially. Table 5 and Table 6 summarize the bilateral trade potentials among the six countries in 2010 and 2001 reporting the pairwise trade complementarity indices between them. Trade complementarity indices measuring the export potentials of almost all countries to Turkey and Iraq increased by around 10 and 30 points, respectively. The increase in the export potentials to Turkey reflects that these countries' manufacturing exports tended to diversify into products that Turkey imports. The substantial increase in the export potential in relation to Iraq reflects the stark increase in the number of goods that

Table 5 Trade Complementarity Index in 2010

	Imports										
	Turkey	Syria	Jordan	Lebanon	Iraq	Egypt	Iran	Libya	Tunisia		
Turkey		49	32	29	82	36	29	29	34		
Syria	53		39	38	81	40	28	33	39		
Jordan	53	96		32	82	42	55	52	39		
Lebanon	54	96	43		82	44	60	56	45		
Iraq	56	93	41	37		46	57	60	41		
Egypt	44	49	34	29	81		30	30	35		
Iran	48	49	33	30	82	35		29	36		
Libya	54	55	35	30	81	39	32		36		
Tunisia	49	51	35	29	83	39	28	30			

Source: UN COMTRADE Database.

Note: Index varies from 0 to 100; exporters in rows, importers in columns; i.e., Turkey's export potential (TC) to Iraq is 82 while Iraq's export potential to Turkey is 56. More than 5 index point better in 'blue,' worse in 'red.'

Table 6 Trade Complementarity Index in 2001

	Imports										
	Turkey	Syria	Jordan	Lebanon	Iraq	Egypt	Iran	Libya	Tunisia		
Turkey		53	42	33	54	50	24		30		
Syria	44		45	40	97	46	58		31		
Jordan	43	49		31	53	42	15		27		
Lebanon	47	48	46		52	48	19		32		
Iraq	39	90	45	35		52	59		29		
Egypt	39	52	41	32	54		20		30		
Iran	37	53	38	27	54	43			26		
Libya	43	53	38	30	54	41	15		36		
Tunisia	40	85	44	31	98	43	56				

Source: UN COMTRADE Database.

Note: Index varies from 0 to 100; exporters in rows, importers in columns; i.e., Turkey's export potential (TC) to Iraq is 54 while Iraq's export potential to Turkey is 39.

Iraq imports since the second Gulf war; it is expected to somewhat decline over time once domestic production in Iraq picks up again. The potential to export to Syria significantly increased for Jordan and Lebanon between 2001 and 2010, in part reflecting the increased diversification of the Syrian economy. The export potential to Lebanon remained almost constant during this period while the potential of exporting to Jordan and Egypt declined somewhat for a few countries according to the

trade complementarity indices. The potential to export to Tunisia increased for almost all countries, albeit from relatively low levels. Finally, it should be noted that bilateral trade complementarities are generally expected to have increased since 2010 (apart from Syria due to the impact of the ongoing conflict) due to recent bilateral free agreements (FTAs) between Jordan, Lebanon, and Turkey; these are expected to further increase bilateral trade which would lead to a better match between these

countries' export and import baskets (and hence higher indices).¹⁰

The indicators suggest that trade complementarities among Mashreq countries and Turkey are relatively high and comparable to index levels among countries that historically have formed successful regional trade agreements. The six founding members of the EEC had an average trade complementarity index of 53 when they signed the agreement; the free trade area between Canada and the U.S. had a founding value of 64. The index for the Eastern enlargement (Bulgaria, Hungary, Poland, Czech Republic, and Slovak Republic) of the EU amounted to 61. In contrast, regional trade agreements that have been cancelled afterwards had much lower values: the index was 22 for Latin American Free Trade Association (LAFTA) and 7 for the Andean pact (Bolivia, Colombia, Ecuador, Peru, and Venezuela). According to the trade complementarity indices, Turkey, Syria, and Iraq were relatively well positioned for a regional trade agreement in 2010 (the bilateral indices always exceed 53 apart from Turkey's export potential to Syria). The bilateral indices vary from 29 and 54 for Jordan, Lebanon, Egypt, and Tunisia (excluding the export potential of these countries to Iraq). In addition, the indicators suggest that Jordan and Lebanon have a relatively good potential to export to Iran and Libya. Finally, it is important to note that the index is static in the sense that it does not capture dynamic gains from trade due to technology transfers and foreign investments.

Egypt and Turkey are under-trading in the region relative to fundamentals suggesting an untapped potential for both countries to deepen their trade integration. The gravity model analysis assesses the level of bilateral trade between Egypt, Iran, Iraq, Jordan, Lebanon, Syria, Tunisia, and Turkey with respect to its potential, based on a cross-country gravity model of international trade. The methodology of the gravity trade model is presented in Annex 1. Annex 2 shows the predicted versus actual trade patterns between each country's exports and all other 181 countries in the sample. Table 7 presents the main results of the gravity trade model. The findings

of the gravity trade model indicate that the estimated potential trade volumes predicted by structural trade determinants between countries in the region are close to the realized intra-regional trade values.11 However, the results also suggest a significant untapped potential for Egypt and Turkey to deepen their trade integration in the region. For both countries actual realized trade flows are lower than predicted by trade fundamentals in the model, which is an indication of under-trading. In fact, Jordan, Lebanon, and Tunisia are under-exporting to both countries. Moreover, Egypt does not over-trade with any regional partner. The results indicate the existence of trade barriers affecting entry and expansion in the large Egyptian and Turkish markets. Investigating the source of these barriers and whether they are aimed at regional partners is crucial to identify the determinants of the lack of deeper regional integration in the sub-region. One of the chapters in this study addresses this issue.

Beyond the aggregates, which industries and products stimulated individual countries' export performances? What are the industries and products in these countries that benefitted from regional trade integration or started to face more intense regional cross border competition?

In the following, we measure the structure and specialization of countries' exports baskets in the region by analyzing the trend in recent export performances at the industry and product level. The export performance is measured by (the growth rate in) RCAs. The RCA measures a product's export share in a country relative to the product's world export share. A value larger than one

The reduction in tariffs due to the bilateral FTAs is expected to lead to more trade among these countries. An increase in trade between two countries typically implies an increase in the bilateral trade complementarity index between them as the export structure of one country better matches the import structure of the other country.

The results show, however, that Jordan and Iraq are over-trading (both in exports and imports), and Iran and Iraq are over-exporting to Turkey.

Table 7	Benchmarking Bilateral Trade Relationships
	(Averages, 2009–2011)

	Egypt	Iran	Iraq	Jordan	Lebanon	Libya	Syria	Tunisia	Turkey
Egypt		0.99	1.02	0.96	0.92*	1.07	0.97	1.00	0.93*
Iran	0.92*		_	0.96	0.95	_	1.29*	1.10	1.07*
Iraq	0.87*	1.10		1.16*	0.90	_	1.30*	0.68*	1.08*
Jordan	0.89*	1.03	1.15*		0.92	1.18*	0.90*	1.11	0.91*
Lebanon	0.90*	1.03	1.10*	0.89*		1.00	0.82*	0.94*	0.93*
Libya	1.07	_	_	1.02	1.15		1.53*	1.12*	1.05
Syria	0.95	1.11*	1.26*	0.91*	0.81*	1.38*		1.01	0.92
Tunisia	0.93*	1.22*	1.04	0.99	0.94	1.03	1.02		0.94*
Turkey	0.94	1.02	1.04	0.95	0.92*	1.00	0.94*	0.97	

Source: UN COMTRADE Database, authors' calculations.

Note: Each cell represents the log of realized bilateral exports as a share of the log of potential bilateral exports. Exporters are in rows and importers in columns. A ratio larger (smaller) than one indicates that the exporter over-trades (under-trades) with the importer. Over-trading trade relationships are colored in green whereas under-trading relationships are colored in red. Statistically significant trade relationships at 10 percent are marked with a star.

indicates that the country has an RCA in this product since the share of the product in the country's export basket exceeds the product's share in world exports. Hence, RCAs measure export performances base on outcomes that must be taken into account when interpreting the results in the presence of producer subsidies that can be a significant factor in the agricultural sector.¹²

Recent export performances reveal a diversification from traditional sectors towards new, potentially higher productivity sectors (i.e., electrical appliances) to different degrees in all countries apart from Iraq, Iran, and Libya. Table 8 compares the evolution of RCAs at the industry level in the region from 2005 to 2009.¹³ The electrical appliances sector (i.e., household and industrial refrigerators, air conditioning machines, or electrical heaters) grew strongly in Turkey, Syria, Jordan, and Egypt from 2005-2009. Tunisia already had an RCA in the industry while Turkey was close to gaining one. Likewise, Turkey already successfully exported transport equipment in 2005 and further augmented its relative export share in world markets for this industry between 2005 and 2009. Moreover, Syria, Jordan, Egypt, and Tunisia raised their relative export shares in industrial machinery, albeit from a very low level in 2005. Finally,

Tunisia experienced strong export growth in office and telecom equipment.

Nevertheless, traditional sectors (i.e., food, textiles, garments and footwear, mineral goods) are still dominant in these countries. The export baskets of Syria, Egypt, Jordan, Lebanon, Tunisia as well as Turkey are still concentrated in predominantly low productivity industries such as agricultural and mineral products, textiles and garments, fertilizers, stone, glass and ceramics, base metals, or furniture and miscellaneous manufacturing products. Apart from Tunisia, all six countries have an RCA in exporting vegetable products, processed food, garments and footwear, or fertilizers. Tunisia successfully

In the absence of major production distortions (i.e., large government subsidies), a RCA>1 implies that the endowment structure of a country is favorable to produce the good. If the production of a good is subsidized, however, the good's domestic export share also reflects the level of subsidies. For instance, farmers of specific "strategic" agricultural crops (i.e., cotton, wheat, or sugar beet) benefit from government producer subsidies in Syria. Thus, the interpretation of the RCA levels for these products has to be regarded with caution.

The underlying export data are based on 2-digit SITC product classifications that are aggregated to 23 industries; thereafter, the RCAs are computed for each industry.

 Table 8
 Export Performance (RCA) across Aggregate Categories and Countries

		Turkey			Syria		ے ا	Lebanon		5	Jordan		Eg	Egypt		Tunisia	sia		Iran			Iraq			Libya	
Industry description	05	60	Annual growth 05-09	05	60	Annual growth 05-09	05	A 9 0	Annual growth 05-09	90	An gr 09 00	Annual growth 05-09 (0 90	Ann gro 09 05-	Annual growth 05–09 05	60	Annual growth 9 05–09	nal 14h 39 05	60	Annual growth 05-09	02	60	Annual growth 05-09	05	60	Annual growth 05-09
Animal products	0.23	0.33	%6	1.80	2.66	10%	0.32	0.38	4% (0.89	0.94	1% 0	0.28 0.	06	34% 0.82	32 0.59		8% 0.12	0.07	-12%	0.00	0.00	-10%	0.02	0.01	-27%
Vegetable products	2.81	1.98	%8 -	2.14	4.19	18%	2.74	1.80	-10%	2.96	3.06	1% 2	2.96 3.	31	3% 1.24	0	.94 –7%	62.0 %	0.43	-14%	60.0	0.09	1%	0.00	0.00	31%
Organic oils and fats	1.38	0.73	-15%	4.16	1.73	-20%	1.86	0.93	-16%) 00'.	0:30	-55% 0	0.57 1.	.23	21% 10.82	32 6.00	00 -14%	80.0 %	3 0.04	-18%		0.00		0.01	0.00	-33%
Processed food	1.14	1.00	-3%	1.20	2.34	18%	3.44	2.02	-12%	1.54	1.35	-3% 0	0.67 1.	1.03 12	12% 1.15	5 0.77	77 –10%	% 0.12	0.13	3%	0.01	0.00	-30%	0.00	00.00	-11%
Mineral products	0.28	0:30	1%	4.60	2.36	-15%	0.62	0:30	-17% (0.07	60.0	7% 3	3.90 1.	1.78 –18%	3% 0.86	36 0.82	32 –1%	% 5.97	5.41	-2%	6.71	6.07	-2%	6.53	5.95	-2%
Hide and leather	0.58	0.56	-1%	0.88	1.13	%/	1.68	0.71	-19%	0.50	0.48	-1% 0	0.82 1.	.57 21	21% 4.71	7 5.00		2% 0.48	3 0.52	2%	0.08	90.0	%2-	90.0	90.0	1%
Wood products	0.42	0.62	10%	90.0	0.20	37%	1.31	1.34	%0	0.28	0.37	0 %2	0.09 0.	0.18 19	19% 0.32	32 0.36		3% 000	0.01	8%	0.00	0.00	24%	0.00	0.00	-23%
Paper products	0.48	0.71	10%	0.14	0.40	31%	2.42	2.36	-1%	1.01	2.02	19% 0	0.31 0.	0.79 26	26% 0.85	35 0.95		4% 0.01	0.01	%8-	0.00	0.00	-34%	0.00	00.00	24%
Textiles	3.93	3.44	-3%	2.69	4.05	11%	0.65	0.61	-1%	0.27 (0.27	0% 2	2.09 2.	2.70 7	7% 1.31	1.30		0% 0.53	3 0.24	-18%	0.02	0.01	-20%	0.00	0.00	%6
Garments & footwear	4.58	3.30	%8-	0.74	1.75	24%	1.08	- 29.0	-11%	7 00.8	4.61	-13% 0	0.54 1.	1.54 30	30% 8.6	.62 6.41	41 –7%	0.01	0.01	-16%	0.00	0.00	%69	0.00	0.00	-40%
Rubber & Plastics	0.77	06.0	4%	0.21	0.50	23%	0.61	99.0	2% (0.35	0.18	-15% 0	0.90 0.	0.63 –8	-8% 0.33	3 0.32	32 –1%	% 0.13	09:0	47%	0.00	0.00	-35%	0.08	0.08	1%
Fertilizers	1.55	1.65	2%	2.34	2.70	4%	6.26	4.16	-10%	37.7	41.1	2% 4	4.64 14	14.3 32	32% 9.65	90.6	ı	-2% 1.18	3 1.44	2%	0.13	0.01	-25%	0.94	0.81	-3%
Chemical products	0.28	0.28	1%	0.28	0.56	19%	0.72	0.46	-10%	1.87	1.75	-2% 0	0.30 0.	0.66 22	22% 0.59	0	.542%	% 0.25	0.44	15%	0.01	0.02	%9	0.15	0.11	%9-
Stone, ceramic, glass	1.71	2.09	2%	0.23	0.62	28%	5.04	4.89	-1%	0.54 (0.56	1% 2	2.39 2.	2.15 —3	-3% 0.87	37 1.26	26 10%	0.11	0.12	1%	0.00	0.00	-41%	0.00	00.00	%26
Base metals	1.69	2.02	%9	0.18	0.31	14%	0.80	99.0	-2%	0.45 (06.0	19% 1	1.21 1.	28	1% 0.34	94 0.69	39 19%	% 0.37	, 0.24	-10%	0.01	0.00	-34%	0.11	0.07	-13%
Fumiture, plumbing	1.45	1.55	2%	0.14	0.12	-3%	2.05	1.82	-3%	0.67	0.52	0 %9-	0.58 1.	1.13 18	18% 0.5	57 0.44	44 –6%	% 0.02	0.01	-19%	0.00	0.00	-3%	0.00	0.00	-23%
Transport equipment	1.27	1.40	2%	0.01	0.02	10%	0.10	0.14	10%	0.07	0.02	0 %97-	0.04 0.	0.06 13	13% 0.22	22 0.27		5% 0.03	3 0.04	4.	0.00	0.00	18%	0.00	0.00	35%
Industrial machinery	0.57	0.64	3%	0.04	0.08	21%	1.07	0.82	%9-	0.12 (0.19	11% 0	0.05 0.	0.11 23	23% 0.20	0.37	37 17%	% 0.03	9 0.04	11%	0.00	0.00	3%	0.00	0.00	-2%
Office & telecom equ.	. 0.48	0.25	-15%	0.00	00:00	%89	0.19	0.29	11% (0.08	0.01	-37% 0	0.02 0.	0.02	6% 0.11	1 0.45	45 41%	0.01	0.00	-19%	0.00	0.00	19%	0.00	0.00	37%
Electrical appliances	0.58	0.86	10%	0.08	0.42	20%	0.55	0.57	1%	0.29	0.48	14% 0	0.03 0.	0.36 85	85% 1.61	1.98		5% 0.01	0.02	16%	0.00	0.00	13%	0.00	0.00	-16%
Scientific & photo app.	0.09	0.12	%/_	0.00	0.01	39%	0.26	0.21	-2%	00:00	0.01	10% 0	0.01 0.	0.10 83	83% 0.56	66 0.49	49 –3%	0.02	0.02	%/-	0.00	0.00	11%	0.00	0.01	26%
Miscellaneous manuf.	. 0.92	0.84	-2%	0.18	0.47	28%	2.53	2.27	-3%	1.77	1.22	0 %6-	0.13 0.	0.40 34	34% 0.46	16 0.71	71 12%	% 0.04	0.02	-12%	0.00	0.00	12%	0.01	0.00	%6-
Coins & gold	0.53	4.45	%02				18.0	23.3) %/	0.04	2.25	168% 0	0.40 3.	61	73% 0.10	0 0.01	01 -43%	06.0 %	0.25	-28%		1.83		09.0	1.86	33%

Source: UN COMTRADE Database.

Note: "blue": good performers (RCA>1 in 2005 and not declining), "red": declining industries (RCA deteriorated <-5% annually, "green": potential rising stars (RCA-growth>5% annually and RCA>1 in 2005 and RCA>0.4 in 2009). RCA calculation is based on mirrored imports data for Iraq and Iran.

exports organic oils and fats while it lost its RCA in vegetable products and processed food in 2009. Similarly, Turkey and Egypt have an RCA in exporting base metal products (iron and steel bars, pipes, and plates) while Jordan, Syria, and Tunisia's exports in the base metal industry grew strongly from 2005 to 2009.

Iraq, Iran, and Libya have the least diversified export baskets: exports are highly concentrated in petroleum products. Table 8 shows that these three countries' exports are centered in mineral (petroleum) products. Iraqi and Libyan exports in any other industry (apart from coin and gold) are negligible. In contrast, Iran's export basket is more diversified. Iran developed some export successes in industries related to petroleum such as petrochemicals, rubber and plastics, as well as fertilizers (for which it has an RCA). Moreover, it still exported notable volumes of vegetables, textiles, or stone, ceramic, and glass products even though exports in these industries declined between 2005 and 2009.

There appears to be direct competition for regional and world markets shares in these traditional export sectors among Lebanon, Turkey, Jordan, Syria, Egypt, and Tunisia. Table 8 suggests a regional shift in export and hence production structures. Each of these six countries except Egypt lost shares in world markets exporting organic oils and fats; Egypt gained an RCA in the industry in between 2005 and 2009. In contrast, Lebanon and Jordan lost their RCA in this industry in the same period. Likewise, Lebanon lost an RCA in hide and leathers between 2005 and 2009 while Syria and Egypt gained an RCA for the same period. Turkey, Tunisia, and Lebanon lost market shares in vegetable products while Syria and Egypt expanded their market shares. Likewise, Turkey, Tunisia, Lebanon, and Jordan lost market shares exporting garments and footwear while Syria and Egypt gained an RCA in the industry between 2005 and 2009. Moreover, Turkey has already an RCA in exporting base metals while the sector is rising in Jordan and Syria; in contrast, exports in paper and wood products or electrical appliances are rising in Egypt, along with Turkey, Tunisia, Jordan, and Syria.

In particular, Lebanon lost competitiveness in manufacturing exports across various industries while Syria and Egypt experienced strong export growth in predominantly low technology industries. Lebanon's export share in world markets declined in 16 out of 23 industries. Only the relative export shares of coins and gold and transport equipment grew by more than five percent annually. In contrast, Lebanon lost competitiveness in exporting vegetable products, organic oils, processed food, hide and leather, garments and footwear, fertilizers, and industrial machinery where it lost its RCA. In contrast, Syria and Egypt had average annual growth rates above five percent in their relative export shares of animal products, processed food, hide and leather, wood and paper products, textiles and garments, or miscellaneous manufacturing products between 2005 and 2009. Moreover both countries gained RCAs in exporting hide and leather and garments and footwear while Egypt also gained an RCA exporting furniture.

However, the degree of direct competition varies among the six countries as primary export destinations are in some cases segmented, in particular for Turkey and Tunisia relative to the Mashreq countries whereby Egypt might be an intermediate case. For instance, Egypt and Jordan directly compete in exporting garments to the U.S. as both countries benefit from duty and quota exemptions in QIZs for exports to the U.S. market. In contrast, Turkey and Tunisia's garment exports focus on EU markets while garment exports from Syrian and Lebanese primarily target other Arab countries. Similarly, agricultural and food products from Syria, Jordan, and Lebanon predominantly target other Arab countries including Gulf countries, while Turkish and Tunisian exports in these industries target EU markets, which often require meeting higher quality standards. Moreover, agricultural products have been exempted in recent free trade agreements between Turkey and Mashreq countries. In contrast, all six countries apart from Tunisia appear to target the fast-growing Iraqi market, for instance, in exporting base metals products or electrical appliances (i.e., electric wire), which are absorbed by growing Iraqi oil

investments. In this regards, Iraq's strong market growth (from low levels) and high import dependency secured strong export growth rates to Iraq in various industries from all of these countries so far.

The industry level export data also suggests potential for increased intra-regional trade, in part in potentially higher productivity manufacturing sectors. For instance, Jordan has an RCA exporting chemicals, in particular pharmaceuticals. The corresponding relative exports shares are significantly smaller in all other countries despite recent growth in Egypt and Syria. Jordanian exports of inorganic chemicals derived from domestic phosphate and potash industries to Turkey accounted for 16.3 percent of Jordanian exports to Turkey in 2010. Turkey is also a large potential market for Jordanian pharmaceuticals, which are already successfully exported to Lebanon.¹⁴ Likewise, animal products (i.e., frozen meat) are a successful and growing export industry in Syria and to some degree also Egypt. Both countries are relatively well placed to satisfy higher regional demand due to rising income levels.15 Wood products are a significant and rising export sector primarily in Turkey and Lebanon given both countries' climatic and topographic characteristics while the export share of the related paper industry has been rising in all six countries. Similarly, exports of electrical appliances have risen strongly in all six countries partly reflecting higher intra-regional demand (i.e., from Iraq) with rising income levels or higher demand from EU countries (in the case of Turkey and to some extent also Tunisia). Furthermore, Turkey already exports several more sophisticated intermediate goods in transport equipment or industrial machinery to the region, such as railroad material of iron and steel, metal tanks, or agricultural machinery. In turn, all countries significantly increased their exports of electric insulated wire and cable to Iraq due to a high and increasing demand by the oil sector. A detailed determination of potential complementarities in specific products requires, however, a more detailed analysis of product level export performances. Therefore, Table 8 presents the export performances of all of these six countries for selected 4-digit products in the following industries with high potential for intra-regional economic complementarities: (processed) food, chemicals, electrical appliances, and industrial machinery. Moreover, product level complementarities are further analyzed in this report.

Product level export performances in the food sector show that Egypt's and to a lesser degree also Syria's (regional) competitiveness in many products increased between 2005 and 2009 while Jordan's declined; nevertheless, the country performances depend substantially on the individual product reflecting country specific product specializations. Table 9 highlights products in the selected industries with significant positive or negative relative export growth (RCA) performances in at least one country in the region between 2005 and 2009. The disaggregated results conceal substantial variations in export performances of products across countries. For instance, Egypt, Syria, and Jordan increased their export share of poultry meat in world markets by averages of 79, 201, and 42 percent (respectively) annually between 2005 and 2009 while relative export shares declined by an average 20 percent annually in Lebanon in the same period. Similarly, Egypt increased its average annual relative growth in exporting macaroni and spaghetti by over 400 percent potentially at the expense of Lebanese and Jordanian producers in the regions whose export shares in world markets declined substantially in the same period. Likewise, Egypt's export share in world markets in margarine doubled (albeit from a low level) while Turkish exports of margarine declined by 18 percent annually and Lebanese and Syrian exports collapsed almost entirely. Moreover, the exports of wheat flour appear to have shifted from Syria to Jordan while regional citrus fruit exports have shifted from Jordan to Syria and possibly to Tunisia.

However, there exists a domestic Turkish pharmaceutical industry that primarily targets the domestic market and appears to be de facto protected by non-tariff barriers from Jordanian products.

Consumers typically substitute calorie intakes of crops with meat when per capita income levels rise.

4-digit Products
wth for Selected
RCA Gro
Table 9

	Turkey			Syria				Lebanon			Jordan	_			Egypt			Tunisia		
SITC	Products	2009 gr	SITC	Products	2009	gr	SITC	Products	2009 gr	SITC	Products	2009	gr	SITC	Products	2009 gr	SITC	Products	2009	gr
										Food										
114	Poultry dead	0.96 27%	114	Poultry dead	0.57 20	201% 1-	114 P	Poultry dead	0.07 -20%	114	Poultry dead	3.60	42%	114	Poultry dead	0.30 79%	114	Poultry dead	0.04 11	114%
224	Milk, cream pr.	0.079%	224	Milk, cream pr	3.56 8	83% 22	224 N	Milk, cream pr	0.21 -2%	6 224	Milk, cream pr	5.19	-20%	224	Milk, cream pr	0.19 20%	224	Milk, cream pr		
251	Eggs in shell	4.54 29%	251	Eggs in shell	120 2	217% 28	251 E	Eggs in shell	3.70 -5%	6 251	Eggs in shell	9.55	10%	251	Eggs in shell	0.02 -74%	251	Eggs in shell		
411	Durum wheat	1.06 -25%	411	Durum wheat	0.14	-75% 4	411 D	Durum wheat	2.61 122%	% 411	Durum wheat	0.87		411	Durum wheat	0.28 117%	411	Durum wheat	00.00	
564	Flours of veg.	5.68 -14%	, 564	Flours of veg.	0.76	-21% 5	564 F	Flours of veg.	18.3 142%	% 264	Flours of veg.	1.64	%8	264	Flours of veg.	9.37 121%	264	Flours of veg.	0.69 95%	%
460	Wheat flour	17.08%	460	Wheat flour	0.01	-78% 40	460 W	Wheat flour	2.08 -16%	460	Wheat flour	1.35	156%	460	Wheat flour	2.96 3%	460	Wheat flour	2.31 -2	-28%
470	Cereal flours	1.81 21%	470	Cereal flours	1.17 3	3% 4	470 0	Cereal flours	0.85 5%	470	Cereal flours	0.08	-46%	470	Cereal flours	0.79 -29%	0.470	Cereal flours	0.21 -5	-53%
483	Macaroni, spag.	4.23 5%	483	Macaroni, spag.	0.18	6% 48	483 N	Macaroni, spag.	4.14 -23%	483	Macaroni, spag.	. 0.15	-20%	483	Macaroni, spag.	4.18 462%	483	Macaroni, spag.	13.4 1%	
572	Other citrus	17.0 1%	572	Other citrus	22.4 9	99% 5.	572 0	Other citrus	5.29 -8%	6 572	Other citrus	2.20	-26%	572	Other citrus	5.79 17%	572	Other citrus	0.60 72%	%
	fruit			fruit			<u>_</u>	fruit			fruit				fruit			fruit		
929	Figs, fr o dried	68.8 -3%	9/9	Figs, fr o dried	28.3 4	4% 5	576 F	Figs, fr o dried	0.86 –9%	929 9	Figs, fr o dried	0.02	~69~	9/9	Figs, fr o dried	0.30 26%	9/9	Figs, fr o dried	0.03 11	117%
615	Molasses	0.00 51%	615	Molasses	3.75 143%		615 N	Molasses	0.12 -8%	6 615	Molasses	0.00		615	Molasses	12.0 -39%	615	Molasses		
914	Margarine	2.31 -18%	914	Margarine	0.02	-32% 9	914 N	Margarine	0.19 63%	914	Margarine	0.01	%98 –	914	Margarine	0.28 120%	914	Margarine	9.65 7%	
									S	Chemicals										
5221	Chemical ele.	0.05 11%	5221	Chemical ele.	0.04 0	0.04 5	5221 0	Chemical ele.	0.06 -24%	5221	Chemical ele.	1.39	%8-	5221	Chemical ele.	6.63 144%	5221	Chemical ele.	%2- 90.0	%
5312	Bleaching ag.	0.91 28%	5312	Bleaching ag.	0.81 0	0.81 5	5312 B	Bleaching ag.	0.39 5%	5312	Bleaching ag.	0.00	-72%	5312	Bleaching ag.	0.46 121%	5312	Bleaching ag.	60.0	
5417	Medicaments	0.154%	5417	Medicaments	0.96 0	0.96 5	5417 N	Medicaments	0.17 -5%	6 5417	' Medicaments	3.12	-1%	5417	Medicaments	0.35 6%	5417	Medicaments	0.07 14%	%
5543	Polishes, cream	3.93 1%	5543	Polishes, cream	7.53	7.53 5	5543 P	Polishes, cream	8.04 36%	6 5543	Polishes, cream	1.86	10%	5543	Polishes, cream	0.07 -46%	5543	Polishes, cream	0.02	-16%
5541	Soap	6.76 -1%	5541	Soap	1.64	1.64 5	5541 S	Soap	3.26 -26%	% 5541	Soap	7.16	-17%	5541	Soap	5.21 12%	5541	Soap	0.18 -3	-33%
5622	Fertilizer phos.	0.01 38%	5622	Fertilizer phos.	0.31	0.31 56	5622 F	Fertilizer phos.	197 -11%	% 5622	Fertilizer phos.	143	235	5622	Fertilizer phos.	14.5 -16%	5622	Fertilizer phos.	187 –2%	%
5821	Phenoplasts	1.42 14%	5821	Phenoplasts	1.00 1	1.00 58	5821 P	Phenoplasts	1.64 24%	6 5821	Phenoplasts	0.23	2%	5821	Phenoplasts	1.12 57%	5821	Phenoplasts	0.70 6%	. 0
5914	Disinfection pr.	0.21 -21%	5914	Disinfection pr.	0.31	0.31	5914 D	Disinfection pr.	0.77 -35%	% 5914	Disinfection pr.	4.46	13%	5914	Disinfection pr.	0.40 84%	5914	Disinfection pr.	0.15 10	100%
								Machinery, Tra	insport, Ele	ctrical A	Machinery, Transport, Electrical Appliances & Equipment	ipment								
7131	Aircraft engine	0.03 31%	7131	Aircraft engine	90.0	7	7131 A	Aircraft engine	39.9 265%	12131	Aircraft engine	13.1	20%	7131	Aircraft engine		7131	Aircraft engine	00.00	
7219	Agric. mach.	0.93 11%	7219	Agric. mach.	1.17 104%	_	7219 A	Agric, mach.	0.01 -49%	% 7219	Agric. mach.	0.26	-23%	7219	Agric, mach.	0.16 65%	7219	Agric. mach.	0.18 -2	-25%
7415	Air condition	1.12 14%	7415	Air condition	0.08	48% 7	7415 A	Air condition	0.95 12%	6 7415	Air condition	3.49	2%	7415	Air condition	1.57 130%	7415	Air condition	0.89 38%	%
7711	Transformers	3.86 10%	7711	Transformers	1.49 3	342% 7	7711 T	Transformers	0.40 -44%	7711	Transformers	0.48	38%	7711	Transformers	0.22 152%	7711	Transformers	0.95 -3	-34%
7731	Electric wire	2.52 9%	7731	Electric wire	4.52 1	102% 7	7731 E	Electric wire	2.18 -5%	6 7731	Electric wire	4.40	30%	7731	Electric wire	3.40 203%	7731	Electric wire	13.1 9%	. 0
7752	Refrigerator hh	7.81 -1%	7752	Refrigerator hh	2.65	7 %/-	7752 R	Refrigerator hh	10.5 14%	6 7752	. Refrigerator hh	1.04	%/-	7752	Refrigerator hh	1.29 53%	7752	Refrigerator hh	0.23 -1	-16%
7758	Elec-thermic ap	2.34 8%	7758	Elec-thermic ap	0.02	20% 7	7758 E	Elec-thermic ap	0.27 10%	6 7758	Blec-thermic ap	0.30	-21%	7758	Elec-thermic ap	0.97 165%	7758	Elec-thermic ap	0.21	-3%
7831	Busses	10.1 -1%	7831	Busses		-61% 7	7831 B	Busses	0.09 22%	6 7831	Busses	1.34	-32%	7831	Busses	2.94 41%	7831	Busses	0.084	~46%
7928	Aircraft, equip	0.37 304%	6 7928	Aircraft, equip	0.00	7	7928 A	Aircraft, equip	0.00	7928	Aircraft, equip	0.00	~62 %	7928	Aircraft, equip	90.0	7928	Aircraft, equip		

Source: UN COMTRADE Database.

Note: "blue": rising product (RCA-growth>40% annually 2005–2009 and RCA>0.1 in 2009), "red": declining (RCA-growth>40% annually 2005–2009).

Jordan maintained a strong export performance in several chemical products including medicaments while Egypt and to a lesser degree also Syria gained export shares in several lower technology chemical products between 2005 and 2009. Table 9 reports eight chemical products that are produced and exported in the region. Jordan has RCAs in six of these eight chemicals. In particular, Jordan is successfully exporting medicaments; these are mostly generic drugs with relatively lower profit margins but recently the pharmaceutical firms in Jordan are attempting to move up the value chain by developing patents (the pharmaceutical sector in Jordan is discussed subsequently). Between 2005 and 2009, Jordanian firms faced increasing regional competition from low cost generic drugs (medicaments) produced in Syria. Exports of medicaments are minor in Turkey, Lebanon, and Egypt. Soap as well as polishes and cream are traditional regional (low technology) chemical products; all Mashreq countries and Turkey had an RCA in 2009 in both products (apart from Egypt for polishes and cream). However, relative export shares declined by about 20 percent annually for soap in Jordan and Lebanon (as well as 33 percent in Tunisia) and by 46 percent for polishes and cream in Egypt suggesting a loss in regional competitiveness in these cost competitive chemicals. In contrast, the other countries managed to maintain their high shares in world markets.

Egypt and Syria experienced growing export shares, albeit from low levels, in several medium technology products in the industrial machinery, transport equipment, and electrical appliances industries while export performances were mixed in Jordan, Lebanon, and Tunisia in these industries. Table 9 shows that Turkey maintains high export shares in several products in these potentially higher productivity industries and increased its export shares in aircraft equipment albeit from relatively low levels. In contrast, exports of aircraft equipment collapsed in Jordan and are negligible in the other countries. Jordan gained shares in world markets in exporting electrical transformers, and insulated electrical wire and cable (due to a high demand from Iraq).

In addition to aircraft equipment Jordan also lost competitiveness in exporting public-service type passenger motor vehicles (buses), electro-thermic appliances, and machinery for agriculture. Lebanon and Tunisia lost export shares in electrical transformers and machinery for agriculture. In contrast, Egypt and to a lesser degree also Syria increased their export growth (from low levels) across the board in these medium or higher technology products.

About 20 percent of Syria's strong overall export growth performance can be explained by the strong rebound of exports to Iraq. Table 2 reports that the share of exports to Iraq in total Syrian exports increased from 0 in 2000/02 to 34 percent in 2008/10 (based on Iraq's import data). Part of this increase reflects the normalization of the (official) bilateral trade relations between both countries that had been distorted by the Iraq war and international sanctions. However, the Syrian export potential to Iraq might decline in the coming years once Iraq's own production capacity starts to pick up again. Thus, how important was the Iraqi market after all, or in other words, how sustainable was Syria's export performance? In a world excluding Iraq, Syria's export would have grown by an annual average of 22 instead of 27 percent between 2005 and 2008 (Table 10). In this regard, exports to Iraq explained approximately 20 percent of the export growth for this period. However, Iraq's imports from Syria were concentrated in three industries: 99 percent of Syria's exports of beverages and tobacco, 50 percent of medicaments, and 59 percent of machinery and transport equipment were destined for the Iraqi market in 2008. In particular, 78 percent of exported electric wire cables and 50 percent of exported household refrigerators, the two main Syrian exports in the machinery and transport equipment sector, were exported to Iraq. At the same time, however, several machinery and transport equipment recorded strong export growth to the rest of the world excluding Iraq from including motor and engine parts, air conditioning machines, or electrical transformers. Thus, the Iraq factor played a significant

Table 10 Syria Export Growth with and without Iraq by Sector (in percent) 2005–2008

Product	Export growth (including Iraq)	Export growth (excluding iraq)
Food and live animals	32.7	24.1
Beverages and tobacco	95.1	-14.0
Crude materials, inedible, except fuel	21.5	21.2
Mineral fuels, lubricants and related materials	7.9	8.3
Animal and vegetable oils and fats	13.8	13.8
Chemicals and related products	44.1	55.1
Manufactured goods classified chiefly by material	63.2	61.4
Machinery and transport equipment	72.8	58.8
Miscellaneous manufactured articles	48.3	47.6
Commodities and transactions not elsewhere classified	54.6	54.2
Total	26.7	21.7

Source: UN COMTRADE Database.

role but only explains a limited part of Syria's export performance from 2005 to 2009.¹⁶

Overall, the product level export performances suggest a pattern whereby regional manufacturing for several products in these industries between 2005 and 2009 shifted from Lebanon and Jordan to Egypt and (to a lesser degree) Syria, respectively. In contrast, Turkey predominantly maintained strong export performances in these products and industries and even expanded its share in world markets in some cases. Taken as a whole, the results in Table 8 and Table 9 suggest several products and industries in Turkey and Mashreq countries with a high potential to benefit from regional trade integration or more exposure to regional cross-border competition. Moreover, the disaggregated product level data show that to some degree different countries are specializing into different products within traditional as well as modern manufacturing industries. This chapter illustrates export growth performances in world markets for all existing 775 four-digit SITC products through the lens of a product space analysis for all countries.

Given these product specializations, which countries managed to increase the

sophistication of their export baskets towards higher value added goods in terms of knowledge or technology content?

The overall degree of export sophistication has not changed significantly among Mashreq countries since 1980, apart from some recent progress over the last decade. Several recent contributions (Hausmann, Hwang, and Rodrik (2007); Krishna and Maloney (2011) and others) provide empirical evidence that countries exporting higher productivity goods grow faster. This analysis follows the methodology of Hausmann et al. (2007) who derive indexes ranking traded goods as well as countries' export baskets in terms of their implied productivity content (EXPY). The productivity content of exports stagnated in all Mashreq countries until the late 1990s. In particular, Iraq's exports sophistication over the last decades reflects the productivity content of oil exports, which constantly accounted for over 90 percent of Iraqi exports over the last 30 years (hence the EXPY for Libya and Iran resemble Iraq's). Over the last decade, however, the export baskets of Jordan, Lebanon, Syria, Tunisia, and Egypt slowly started to become somewhat

¹⁶ It might also indicate that Syrian goods became more competitive given the stark competition for Iraq's market.

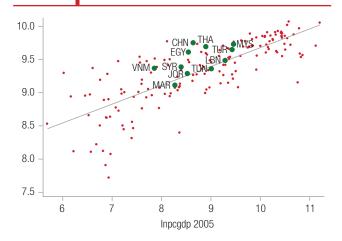
18000 18000 Malaysia 17000 Thailand 16000 16000 Egypt 15000 Iraq Lebanon 14000 14000 Turkey 13000 12000 12000 11000 Jordan 10000 10000 9000 Syria Tunisia 8000 8000 Jordan 7000 Vietnam 6000 6000 1980 1984 1988 1992 1996 2000 2004 2008 1980 1984 1988 1992 1996 2000 2004 2008

Figure 6 EXPY for Selected MENA (left) and East Asian Countries (right) (in US\$, PPP)å

Source: UN COMTRADE Database.

more sophisticated.¹⁷ In particular, the EXPY for Egypt jumped up in 2005 due to the sharp increase in exports of natural gas in this year. That is, the export share of natural gas in Egypt in 2004 accounted for only two percent but jumped to 25 percent in 2005 due to the opening of the Arab gas pipeline which allowed the country to export natural gas to Jordan, Syria, Lebanon, and Israel. As natural gas has a very high EXPY (it is mostly exported by rich countries) the sophistication of Egypt's export basket (measured in this way) increased eight-fold in 2005.

Figure 7 | EXPY versus GDP per capita



Source: UN COMTRADE Database.

Compared to exporters in Turkey and fast-growing East Asian countries, firms in Mashreq countries show only weak export diversification towards higher productivity products. Figure 6 illustrates the evolution of the EXPY for Jordan, Turkey, and the fast-growing East Asian comparator countries. The stagnation of Middle Eastern and North African countries' export sophistication is particularly striking compared to the evolution of the index in Malaysia, Thailand, Vietnam, or Turkey. For instance, Malaysia had a comparable EXPY to Jordan in the early 1980s but its export sophistication index exceeded Jordan's (as well as the index for Lebanon, Syria, and Iraq) by almost 50 percent in 2004. Thailand or Vietnam's export sophistication index started well below Jordan's but exceeded the EXPY of the Jordanian export basket in 1985 and 2005, respectively. Moreover, Figure 7 graphs the scatter plot of (the log of) the EXPY and GDP per capita (constant 2005 US\$) in 2008 of most countries of the world. Figure 6 highlights the position of Mashreq countries, Turkey, and the selected East Asian comparators between these two dimensions. It shows that the degree of export sophistication of the export

¹⁷ It is possible that the EXPY is lagging for MENA countries simply because many of these countries are concentrating in services, which are not captured in the EXPY calculation.

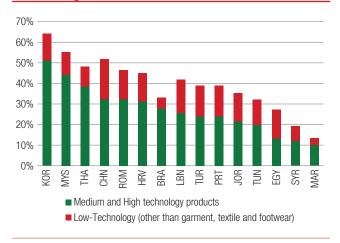
baskets of the Mashreq countries, Tunisia, or Turkey is consistent with their GDP per capita levels (stage of development). Again, this contrasts with the fast-growing East Asian countries that show higher levels of export sophistication in 2008 than the levels predicted by their GDP per capita.

Another way of examining the export sophistication of countries in the region is to classify their exported products into different technology categories as suggested by Lall (2000). Looking at exports where a country has an RCA in 2007/09, primary and agricultural products (classified as PP and RB1) account for about 40 percent of these exports in Egypt, Jordan, Lebanon, Tunisia, and Syria. This compares to less than 30 percent for Thailand, Turkey, and Croatia. Textiles and garments, which are classified as lower technology products (LT1), account for more than 30 percent of the export basket for Syria whereas Thailand's share stands at 12 percent and Malaysia's at four percent.

What are new, potentially higher value added industries or products that firms in the individual countries are well positioned to diversify into in coming years? How do these country-specific diversification trends complement each other? Which firm characteristics explain recent export successes?

Regional trade complementarities analysis through the lens of the product space suggests a particular grouping of countries with related production specializations in the region. The product space analysis provides an understanding of current and potential future economic complementarities in more detail at the industry and product level. The methodology of the product space analysis is presented in Annex 4. The product space is computed for the following periods: 1992–1994, 2000–2002, and 2007–2009. The analysis suggests a particular grouping of countries with related production specializations in the region. First, Turkey is the most diversified country in the region providing a regional

Figure 8 Share of High, Medium, and Low Technology Manufacturing Products with an RCA in 2007/09 (percent of total)

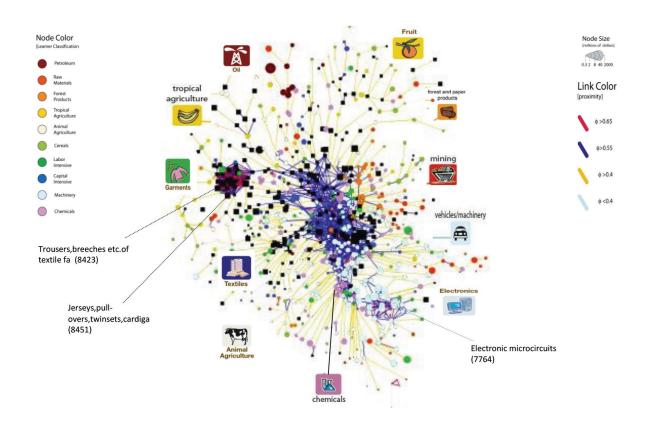


benchmark as well as a potentially large source of demand, foreign investment, or productivity (technology) spillovers. Second, products manufactured in Egypt and Syria experienced a strong increase in competitiveness in similar industries potentially challenging more established exporters in the Arab region. Third, Jordanian and Lebanese exports were already fairly diversified in the 1990s, in particular in core manufacturing industry clusters, but stagnated since. Fourth, Iraq, Iran, and Libya have the least diversified export baskets: both countries' exports are highly concentrated in petroleum products. Fifth, Tunisia export structure does not seem to fit the Mashreq country groups given its focus on the European market and its more diversified export basket relative to Syria and Egypt. In this section, we present a detailed product space analysis for each group of countries. The

The categories are: PP Primary Products; RB1: Resource-Based Products (agriculture); RB2: Resource Based Products (other); LT1: Low-Technology (textile, garment, footwear); LT2: Low-Technology (other); MT1: Medium-Technology (automotive products); MT2: Medium-Technology (chemicals & basic metals); MT3: Medium-Technology (engineering products); HT1: High-Technology (electronics); HT2: High-Technology (other).

Average export data over three years is used in order to minimize the impact of yearly outliers, i.e., due to re-exports.

Figure 9 Turkey Product Space 2007/09



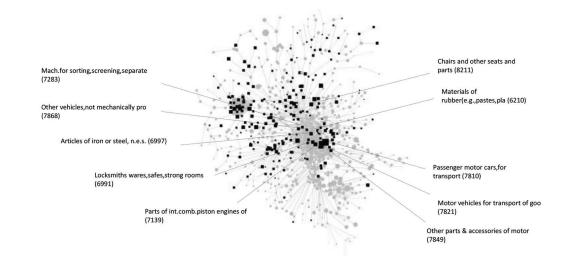
analysis is supplemented with firm and industry specific information for each country. Throughout the analysis production, complementarities between the countries in the region are highlighted. In addition, several comparator countries from other regions are incorporated to provide insightful benchmarks.

The product space reveals the existence of a densely connected industrial core of products and several peripheral clusters, i.e., garments, textiles, or electronics with higher technology content. Figure 9 illustrates the product space for Turkey based on average export data from 2007/09. Each of the 775 nodes represents a single 4-digit product class. The size of each node represents the export share of that

product in total world exports. Products in which a country has a revealed comparative advantage (RCA) are depicted as "black squares."²⁰ Distances between each of the 775 products (nodes or squares) represent the relatedness between these goods' production processes or technologies. For instance, with higher technology content, Figure 9 shows that Turkey has a revealed comparative advantage manufacturing jerseys, pullovers, twinsets, and cardigans (8451). Turkey also

²⁰ Apart from the country specific RCAs (black squares), the basic representation of the product space is identical for all countries as the measure of distance between products is computed based on the relative exports shares (and GDP) of all countries.

Figure 10 Turkey Product Space RCAs 2007/09



has an RCA for manufacturing trousers, and breeches. (8423). The distance between these two garment products is very small (see Figure 9) suggesting that it is relatively straightforward for firms in Turkey to specialize in either product (or other products in the garment cluster). However, the distance between jerseys (8451) and electronic microcircuits (7764) is large (Figure 9) since the latter requires an entirely different set of technologies, human capital, and processes. In fact, Turkey does not have an RCA in electronic microcircuits (or other electronic products) implying that Turkish firms have not acquired the necessary adequate production technology or processes. At the country level, it suggests that being specialized in garments will not facilitate the development of an electronics cluster.

The variety of manufacturing products in the densely connected core of the product space reflects Turkey's recent economic progress and successful integration into European production chains.

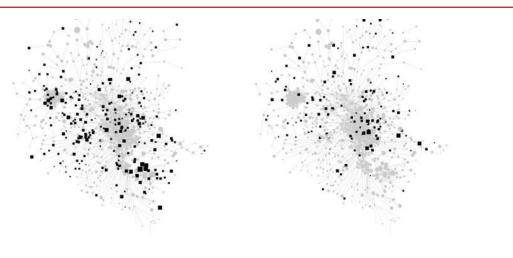
Turkey is climbing up the ladder of its dynamic comparative advantage. Figure 10 illustrates the product space for Turkey for 2007–2009 exclusively highlighting

the products where Turkey has a revealed comparative advantage. Turkey is specialized in exporting several manufacturing products in the core of the product space; these include vehicles, machinery, electrical appliances (white goods), and some plastic products: i.e., motor parts, internal combustion engines, textile and weaving machinery, or acrylic polymers. It also has RCA in articles or iron and steel, base metals (springs and pipes), aluminum alloys, squares and packing containers, office supplies, or processed food products (i.e., sugar confectionery) which are all close to the core of the product space. In particular, 38 percent of Turkey's exports to Europe in 2010 were machinery and transport equipment.²¹

Nevertheless, traditional lower value added products such as garments and textiles or food products still account for a large share of Turkey's revealed comparative advantages. For instance, six garments and textiles products are in the top 20 products exported where undergarments made of cotton account for 2.4 percent of total exports.

Machinery and transport equipment is the largest import category for Europe (29.5 percent of total imports from the world).

Figure 11 China (left) and Brazil (right) Product Spaces 2007/09



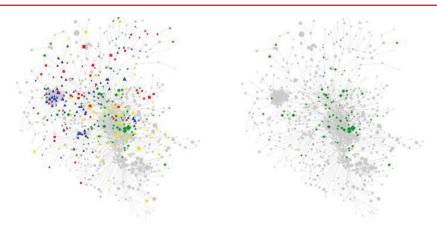
The comparison with China shows that despite impressive structural transformation over the past 20 years, Turkey still has room, given its stage of development, to further specialize in manufacturing products in the industrial core in addition to electrical appliances or car parts. Figure 11 illustrates the product space for China and Brazil in 2007/09. All three countries developed several export successes in the industrial core of the product space. However, only China managed to also specialize in the electronics cluster.

Turkey gained revealed comparative advantage in numerous products in the densely connected core of the product space over the last 20 years; these also include to some extent higher value added product classes. Figure 12 shows the dynamic representation of Turkey's product space between 1992/94 and 2007/09. We distinguish between four different categories of products. First, "classics" refer to products that have RCA in 1992/94 as well as 2007/09 and are represented by a "blue triangle." Second, "disappearances" reflect an RCA in 1992/94 but not in 2007/09 and are represented by a red square. Third, "emerging" shows RCA in 2007/09 but not 1992/94 are represented by a green diamond. Finally, "marginals" reflect products where Turkey has not yet acquired an RCA (0.5<RCA<1) but experienced positive export growth

(of 10 percent or higher) since 1992/94 and are represented by a yellow pentagon. Figure 12 (right side) only depicts the emerging product category, highlighting the increased specialization in more capital-intensive manufacturing products after Turkey's Customs Union with the EU, which became effective in 1996.

Success stories of Turkish manufacturers in electrical appliances or car parts exemplify Turkey's successful integration into European and world production chains over the last decade. For instance, Beko, a Turkish manufacturer of domestic appliances (e.g., refrigerators, dishwashers, washing machines) and consumer electronics (e.g., television sets), has become a well-established brand in EU countries. In 2004, Beko purchased the German television set manufacturer Grundig and renamed the company in Grundig Elektronik A.Ş. in 2008. In 2005, Beko and its Turkish rival brand Vestel accounted for more than half of all TV sets manufactured in Europe. These firms also managed to develop higher value added brands. Innovations of Turkish producers include, for example, a Turkish coffee machine and a washing machine removing pet hair. Moreover, Turkey benefitted from FDI in passenger motorcars. Most multinational enterprises (MNEs) produce in Turkey to export to the region including, among others: Ford, Fiat, and Peugeot

Figure 12 Turkey Product Space: Dynamic Representation Changes 1992/94–2007/09



Note: Colors/shapes show different dynamics: "Classics" (blue triangles): RCA>1 in both periods; "Disappearances" (red squares): RCA>1 in 1992/04 and RCA<1 in 2007/09; "Emerging" (green diamonds): RCA<1 in 1992/04 and RCA>1 in 2007/09; "Marginals" (yellow pentagons): 0.5

commercial vehicles; Hyundai, Toyota, Renault, and Honda transport vehicles; or MAN, Mercedes, and Isuzu buses. Most importantly, Turkey managed to develop a domestic car parts industry supplying intermediate goods ranging from tires to motor parts to MNEs.

The government actively supported the development of car parts clusters by promoting joint ventures between foreign and domestic producers helping Turkish firms to bridge initial technology gaps. Once domestic producers managed to satisfy MNEs' quality standards in Turkey, they also started to successfully export since obtaining a quality accreditation from MNEs in Turkey (e.g., Ford) automatically guarantees the accreditation to sell to all other production facilities of that MNE around the world.

While several traditional lower value added products in the periphery of the product space disappeared over the last 20 years, Turkey maintained its RCA in garments and textiles as well as selected base metal and food products. Most of the disappearing products are in base metals and food industries: i.e., wheat, sponge iron and steel granules, tea, fixed vegetable oils, or frozen vegetables have all lost RCA over the period. Despite increased international cost competition in garments after

the expiration of the Multi-Fiber Agreement in 2005, Turkey remains a major exporter in the industry.

Looking forward, one would expect that the current trend of manufacturing products closer to the densely connected core at the expense of peripheral products would continue. Hence, Turkey may lose its RCA in some garments, food, and base metal products possibly to neighboring Mashreq countries or South and East Asian countries as domestic wages rise. At the same time, the analysis suggests that Turkey is well positioned to strengthen its exports in industrial machinery. For instance, machinery tools, filtering and purifying machinery, electric switches are selected products where Turkey experienced strong export growth over the last decade and is close to achieving an RCA. At the same time, the product space analysis would not suggest that Turkey diversifies into electronics or substantially expands its chemical sector in the coming years.

Egypt and Syria are gaining regional competitiveness

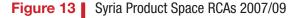
Both countries gained regional competitiveness until 2010 and appeared to be well positioned to further increase regional market shares in manufacturing

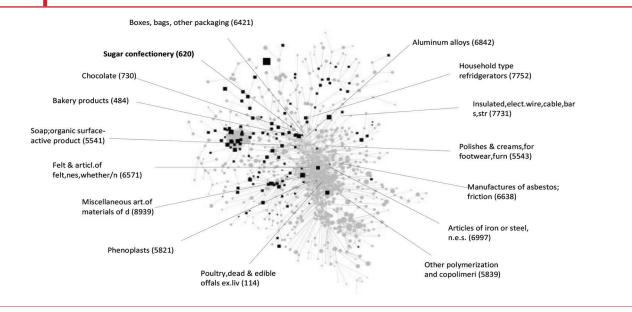
exports despite remaining challenges in both countries' business environment. The analysis revealed that Egypt and Syria experienced strong export growth between 2005 and 2009 in several, often lower, technology-manufacturing industries (Table 8 and Table 9). That is, both countries were in similar positions, albeit Syria at an earlier stage, to further benefit from regional trade and investments. This section analyzes the structure and evolution of product level export performances in more detail in order to assess the opportunities of a post-revolution Egypt and a potentially post-crisis (i.e., civil war) Syria to further benefit from regional trade and foreign investments. Notably, the analysis shows that Egypt and Syria's export specialization in 2007/09 strongly resembled Turkey's specialization 15 years ago.

The product space for Syria shows that by 2007/09, its economy was reasonably well diversified, primarily specialized in weakly connected peripheral products, and started exporting a few new manufacturing products in the core of the product space (Figure 13). Despite its dependence on oil exports, Syria had RCA in 131 four-digit products in 2007/09 accounting for 67 percent of overall exports, compared to 140 products in Tunisia,

110 products in Egypt, and 106 products in Jordan. Figure 15 illustrates that Syria's export successes span several peripheral product classes including petroleum, fruit and vegetable products, or garments and textiles. The cluster of successful exporters in textile and garments implies further diversification potential within these industries. In contrast, it appears more difficult for Syrian firms to diversify into core industries (i.e., industrial machinery or chemicals) given that the economy is specialized only in a few related products. Nevertheless, Syria gained RCA in a few more sophisticated products in the core of the product space at the end of the past decade including electric wire cables, household refrigerators, articles of iron and steel, or plastics products (polymerization). For instance, the significant export growth in electric wire cables and electrical transformers primarily originated from the creation of an industrial facility by the Egyptian firm El Sewedy Electric. It started producing electrical wire cables in Syria in 2005. In 2007, the installation of an additional facility for transformers was inaugurated. El Sewedy Electric exports from Syria mainly to the Levant and the Gulf.

It appears that the reform initiatives in the 2000s contributed to higher export growth driven by private





investments in non-traditional manufacturing industries. The last decade has been a transition period based on more market-oriented policies resulting in structural change in the Syrian economy. The process of economic transition has been achieved through gradual market-oriented reforms since the early 2000s, which gained further momentum since 2005. Significant reform initiatives towards liberalizing the economy had been introduced, most importantly, the removal of barriers to trade and financial development. The non-oil sector had become the engine of growth. Its share in total output accounted for nearly 90 percent in 2009. Likewise, private sector exports accounted to 93 percent of total exports in 2008.

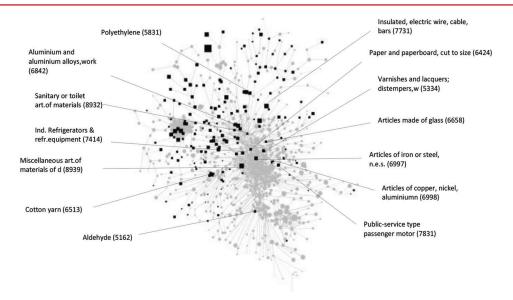
Egypt has RCAs mostly in weakly connected peripheral clusters (oil and gas, garments, food products, and base metals) but also exports a few products in the densely connected core (Figure 14). Mining is Egypt's largest export sector. Petroleum gases and other gases accounted for 18 percent of Egyptian exports in 2007/09 while crude oil account for an additional 9.2 percent. In particular, the export of petroleum gases surged in 2005 after the opening of the Arab gas pipeline in 2003. Egypt also has RCA in exporting several garments and textile

products. Likewise it successfully exports fruits, vegetables, processed food, and several base metal products such as structures and parts of iron, sheets and plates of different mineral materials, or articles of iron and steel, glass, or nickel, copper and aluminum. The successful exports close to the industrial core of the product space contain goods from different industries including a few higher technology goods such as public-service type passenger motor vehicles or industrial refrigerators.

Egyptian garment exports have faced strong competition from Asian producers, but the creation of QIZs under an agreement with the U.S. and Israel since 2005 has provided the country with duty-free access to the U.S. market. About 12,000 firms of 10 or more employees operate in Egypt's garment and textile sector, employing about one million workers, supplying the domestic and foreign markets. Egyptian, Turkish, European, and Chinese firms dominate the industry. Most firms are of medium to large size with a strong public sector presence in spinning and weaving.

The dynamic representation of the product space illustrates Syria's remarkable export performance over the last decade. Figure 15 provides a comparison





between the developments from 2000/02 to 2007/09 (left graph) and from 1992/94 to 2007/09 (right graph). It reveals that Syria had experienced a decade of stagnation in export diversification in the 1990s: almost all new export successes over the last 20 years emerged over the last decade. Syria even lost RCA in a few garments and textile products since 1992/94. In fact, there existed only a few Syrian export successes close to the core of the product space in 2000/02, namely sugar confectionery, writing block and envelopes, and polishes for footwear. Syria gained an RCA in 78 new products²² between 2000/02 and 2007/09. In contrast, Figure 15 reveals that Syrian firms generated a number of export successes in products located more connected to the core over the last decade. In particular, Figure 15 reports the number of classics, disappearing, emerging, and marginals products as well as the corresponding product's technology classification, productivity content, and product distance (PATH).²³ Syria maintained its RCA in the 48 products (classics) between 2000/02 and 2007/09. The average productivity content (PRODY) of classic products corresponded to the GDP of a lower middle-income country (US\$8,416 per capita in PPP). Syria had 15 disappearing products between 2000/02 and 2007/09 (four resource based products, seven primary, and two low tech). In contrast, 78 products emerged during the same period (11 primary, 20 resource based, 34 low tech, and 13 medium tech products). The average PATH (134) is higher than the PATH for classics or disappearing implying that Syria's opportunities to diversify into new products increased. Moreover, the average PRODY of emerging products exceeds the one of classics or disappearing confirming the trend towards diversification into higher value added products.

A few selected examples illustrate Syria's progress over the last decade. For instance, Syria had RCAs in sugar confectionary and jams and marmalades in 2000/02. Figures 13 show that Syria developed RCAs in several related products bringing its export specialization closer to the core of the product space: the country gained RCAs in preserved bakery products, chocolate,

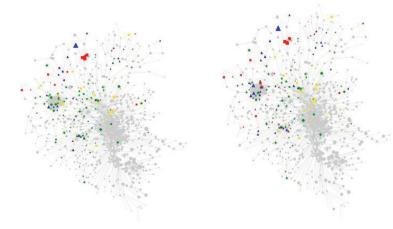
boxes, and bags and other packing containers since. This development suggests that Syrian firms diversified from producing sugar confectionary to related upstream products like bakery products and chocolates on the one hand, as well as to related downstream products like boxes and bags and other packing containers (i.e., packaging the chocolates and sugar confectionary) on the other hand. Similarly, Syria systematically increased its export volumes in industrial refrigerators and finally gained an RCA in 2009. This trend suggests that exporters diversified from household refrigerators, in which Syria already had an RCA in 2005, to higher value added industrial refrigerators over time. Reportedly, a major Syrian producer of household refrigerators left the country in the 1980s but re-located back to Damascus in early 2000s due to a more business friendly climate.

Another rising sector in Syria was chemicals, in particular, medicaments and washing and cleaning preparations. The export of chemicals and related products grew by an average of 50 percent between 2005 and 2008. The export growth was mainly driven by exports of medicaments and washing and cleaning preparations (other than soap). Moreover, Syria's pharmaceutical industry is predominantly private and has the largest number of pharmaceutical companies in the Arab world: there are 63 firms in the industry including ten large exporting firms. Exports of pharmaceuticals recorded an average annual growth rate of 32 percent between 2000 and 2010 whereby most exports of medicaments were destined for the Iraq, Lebanon, and African countries. While Syria imported over 82 percent of its pharmaceutical requirements 20 years ago, it ranked second among Arab countries after Egypt in covering domestic

²² Number of emerging products.

PATH or product distance is a measure of the distance between any two products within the product space matrix. Calculating PATH gives an indication as to whether any given product is located in a particularly dense or sparsely part of the product space: if the PATH is short, factors of production, skills or technologies can be more easily deployed from one product to another. See Appendix for a formal definition of PATH.

Figure 15 Syria Product Space Dynamic Representation Changes 2000/02–2007/09 (left) and 1992/94–2007/09 (right)

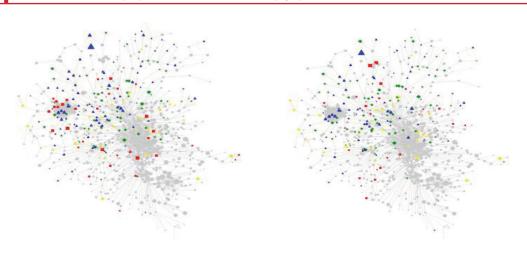


demand in 2009; it also ranked second in exports among Arab countries (after Jordan).²⁴

In Egypt, the number of emerging products increased strongly between 2000/02 and 20007/09. Egypt acquired an RCA in 74 new products over the period and diversified into a few new products in the industrial core of the product space. Figure 16 reveals that Egypt gained competitiveness in ten chemical or base metal products (MT2), in four engineering products

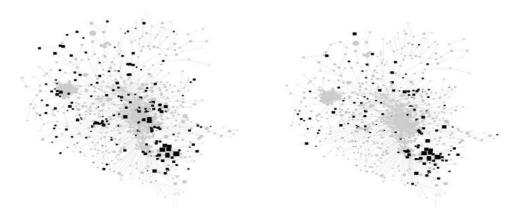
(MT3), and in one in automotive parts. The positive structural change has been counteracted, however, by a

Figure 16 Egypt Product Space Dynamic Representation Changes 2000/02–2007/09 (left) and 1992/94–2007/09 (right)



Syria's pharmaceutical exports amounted to US\$245 million in 2009, slightly higher than Egypt's. Jordan exported US\$500 million worth of pharmaceuticals, which is equivalent to Turkey's export sales in 2009. As a comparison, Germany's export sales of medicinal and pharmaceutical products amounted to US\$64 billion in 2009 covering 15 percent of total world medicinal and pharmaceuticals exports.

Figure 17 Thailand (left) and Malaysia (right) Product Space RCAs 2007/09



decline in Egypt's relative export share in world markets in a few higher productivity products in the core of the product space: pharmaceutical goods other than medicaments and motors and generators. Similarly, Egypt lost RCAs in seven out of 15 4-digit products in the garment cluster since 2000/02 (gaining RCAs in three garment products over the same period). Egypt also lost its RCA in the sizable four-digit product class of synthetic woven fabrics since over the last decade. Overall, Figure 16 highlights that the majority of products exported by Egypt remained primary products (PP), resource based (RB1, RB2), or textile and garments (LT1).

Looking forward, there were a few products in core manufacturing clusters, primarily chemicals, in which Egypt experienced strong export growth over the last decade and are close to achieving an RCA. These include other polymerization, polyvinyl acetate, perfumery, cosmetics and toilet preparations, or aminoplasts. Egyptian firms might continue to increase their market shares in world exports in chemical products in the future.

Despite the progress in Egypt and Syria, a comparison with East Asian countries exemplifies that the process of structural transformation was been moving significantly slower. Thailand has specialized in several (higher value added) products in the core of the products

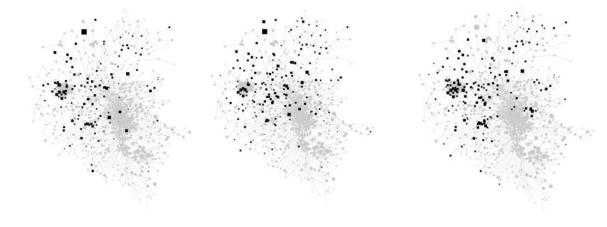
space building up, for instance, domestic electronics or car parts (from tires to motors) clusters (Figure 17, left graph). Likewise, Malaysia (Figure 17, right graph), which is also an oil exporter successfully developed manufacturing clusters in the industrial core.

To a large extent, Syria and Egypt's export struc-

tures in 2007/09 resembled Turkey's 15-20 years ago. Figure 18 compares the product space for Syria and Egypt in 2007/09 with Turkey in 1992/94. It reveals that apart from a few more exports successes in Egypt in base metal and food products and differences in the few core manufacturing products, Syria's and Egypt's production specialization in 2007/09 was very similar. Moreover, apart from oil and a few different products in the core (mainly tires, motor vehicles, and television receivers), Syria and Egypt developed an RCA in many of the same products and industries as Turkey 15 years ago. These include garments and textiles, base metals, vegetables and fruits, food processing, and paper products. Even within industries, these are often exactly the same 4-digit product classes, i.e., trousers and breeches, under garments, fruit juices, sugar confectionery, chocolate, (yarn of) synthetic fibers, insulated electrical wire and cable, household refrigerators, and domestic-type electric

heating. Turkey has maintained its RCA in many of these

Figure 18 Product Space Syria (left) and Egypt (center) 2007/09, Turkey 1992/94 (right)



products until the present, suggesting that it potentially faces significant competition from producers in a lower wage costs Egypt and potentially post-crisis Syria.

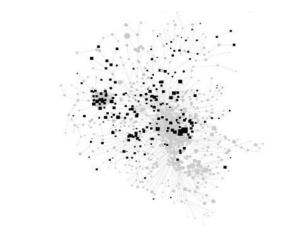
Egypt and Syria's resemblance with Turkey's production (export) structure 15-20 years ago suggests that both countries can benefit significantly from deeper integration with Turkey. The resemblance of these economies implies a large potential for technology transfers from (typically more advanced) Turkish to Egyptian or Syrian firms. Moreover, given the potential wage cost advantage, firms in Egypt or post-crisis Syria should be able to increase their export share in labor-intensive products relative to Turkey if they manage to catch up in terms of technologies and efficiency. Once the quasi civil war is overcome and Syria enters a phase of political transition, the revival of the bilateral FTA with Turkey would allow Syrian firms to indirectly increase their exports to the EU via Turkey (if Syria signs the EU association agreement). Moreover, Turkish firms can benefit from lower wage costs in Egypt and Syria through FDI, which further increases the potential for technology spillovers. The resemblance with Turkey 15 years ago provides information externalities, as firms in Egypt or Syria might consider entering or expanding into new product categories for which Turkey had generated export successes close to the core of the product space over the past 15 years. These might include, among others, perfumery, cosmetics, and toilet articles; coloring preparations (used in ceramic and glass) and acrylic polymers; chairs, other seats, and parts; locksmiths' wares, safes, and strong rooms; agricultural machinery; textile and weaving machinery; machinery for sorting, screening, and separating, road tractors and semi-trailer; motor parts, internal combustion engines, and passenger motor cars for transport. Turkey's product space for 2007–2009 is shown in Figure 19.

Jordan and Lebanon: pressure to specialize in higher technology niches

The exports of both countries were already fairly diversified in the 1990s but have stagnated since; both countries must specialize in higher value added manufacturing niches to escape regional and international cost competition in traditional export sectors. While Jordan's manufacturing structure hardly changed over the last 15 years, Lebanon lost competitiveness in manufacturing exports across various industries. Both countries might face higher competition for regional markets from Egyptian or post-crisis Syrian manufacturers.

The Jordanian economy is reasonably well diversified with a strong export performance in chemicals,

Figure 19 | Product Space Turkey 2007/09



garments, (processed) food, and a few other manufacturing products. Jordan's share of exports in GDP averaged about 50 percent over the last decade, which is high for a developing country; it compares to 51 percent in Bulgaria, 42 percent in Croatia, and 39 percent in Chile between 2000 and 2009.25 Jordan's major RCAs include garments, food products, base metals (iron or aluminum products), and selected products in the densely connected core, mainly chemicals (medicaments, varnishes, and soap) and some machinery and electrical appliances products (Figure 20). As in Syria, the Arab market is Jordan's major export market. It accounted for over 40 percent of Jordanian exports in 2010 (17 percent to Iraq alone), followed by the U.S. (19 percent, mostly garments) and India (18 percent, i.e., fertilizers). While Jordan is a member of the WTO, it is nevertheless allowed to exempt firms from taxes on profits from exports until 2015. This tax exemption has been granted to several key industries (e.g., pharmaceuticals, ICT services, or air-conditioning machines) but not all sectors.

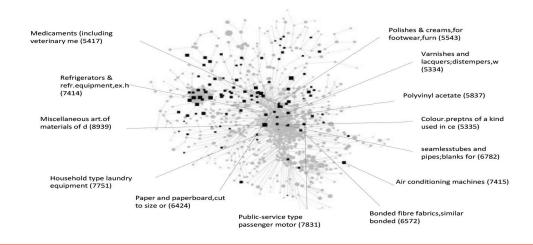
The chemical sector appears to be the most promising manufacturing sector to develop new (higher value added) products. The pharmaceuticals industry is the most promising sub-sector; it includes 17 registered typically big companies, which provided about 6,000 direct

jobs (and estimated additional 6,000 indirect jobs) in 2012. The export base includes a diversified range of medicines and dosage forms such as solids, semi-solids, liquids, or aerosols. Most of the pharmaceutical exports are, however, lower value added generic products reflecting that about 80 percent of these exports are destined for other Arab countries (mostly Saudi Arabia and Algeria). In particular, about 90 percent of total revenues in the Jordanian pharmaceutical sector were generated by branded generics in 2007 implying that competition from lower cost producers will intensify. At the same time, there have been a few recent successes in developing patents for new products by larger Jordanian firms. Thus, investment in research and development will play a key role for the future success of these firms to move up the global value chain into branded and patented biopharmaceuticals or "biosimilars" which would generate new jobs for skilled labor. However, the pharmaceutical sector appears to be only weakly linked to domestic suppliers: 90 percent of all chemicals used as inputs in the sector are imported. Only HIKMA Pharmaceuticals has a small spin-off producing chemicals (not active pharmaceutical materials though). Reportedly, the main reasons are the high requested quality standards, small economies of scale relative to East Asian suppliers (i.e., India), as well as relatively low transportation costs for chemicals. Similarly, other less sophisticated inputs such as glass containers or packaging material are also often imported instead of being supplied domestically.

Most exports of machinery and appliances originate from a very few large and old internationally competitive companies. The following products accounted for the majority (60 percent) of exports in machinery and appliances industries in 2010: air conditioning machines (17 percent), refrigerators (household and industrial, 14 percent), internal combustion engines (11 percent), automatic data processing machines (six percent), machinery parts (five percent), household

²⁵ See Jordan Development Policy Review (DPR), 2012, World Bank.

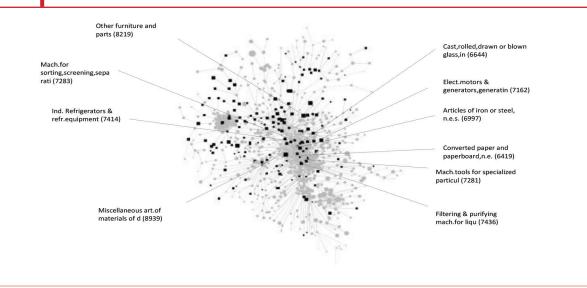
Figure 20 | Jordan Product Space 2007/09



washing machines (four percent), and machinery for sorting, screening, and separating (four percent). Most exports of machinery and appliances originate from a few large companies. For instance, Jordan has an RCA in air conditioning machines and industrial refrigerators (cooling rooms) primarily due to Petra Engineering Industries, which started to manufacture lower value-added household air conditioning machines for regional markets in the 1970s. The initial success in the industry generated internal funds that the company reinvested to move up the value chain, escaping competition from Chinese, Turkish, and recently Syrian low cost producers. In the meantime, the company has over 2,000 employees (about 800 engineers) and specialized in high value added industrial cooling systems (i.e., equipping research laboratories in the U.S. or EU). Likewise, Jordan's RCA in public-service passenger motor vehicles originates primarily from Elba House which manufacturers buses (since 1992) and ambulance vehicles (since 1999) in Jordan in accordance with the required specifications of different types of chassis (i.e., Mercedes, MAN, Toyota). The company initially obtained the necessary expertise from the German manufacturer Auwaerter. Elba House also produces prefabricated buildings, steel structures, transport vehicles (trailers, low-beds, tippers, and tankers), petrochemical complexes, or oil storage tanks. Moreover, the Mohammad Abu Haltam Group and the Alhafez Group started as trading companies but switched towards manufacturing washing machines, household refrigerators, or colored and LCD television sets in the 1980s and 1990s in cooperation with foreign manufacturers or developing independent barns (i.e., General Deluxe). Both firms obtain substantial shares of their sales and profits from exports to other Arab countries.²⁶ In the machinery parts industry, PALCO Control started its operation in 1995 and specialized in the field of automation including products such a patented lift controller system, firearms shooting fields, or scoreboards for basketball. In printing and packaging, the German manufacturer German firm Saueressig started producing specialized printing forms and printing plates in Jordan including a joint venture

However, a major producer entered the industry in 2008 as National Integrated Industries Complex (NIIC), which was established by three major investors and operates factories producing air conditioners, washing machines, refrigerators, plastic and polystyrene plants, or warehouses. NIIC is further entitled to produce and import electric home appliances of Daewoo.



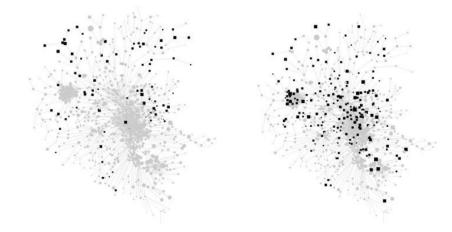


with a major traditional Jordanian printing and packaging producer. Finally, Steel Fabrication Co. and Ashour Industrial and Trading Co. export machinery for sorting, screening, and separating including machinery for mixing sand, iron and steel plates rolls, hangars, iron bridges, steel structures, flammable liquid tanks, and prefabricated buildings.

Lebanon has an RCA in exporting several products in the industrial core of the product space but does not appear to be specialized in a particular industrial cluster. Apart from food products, Lebanon had RCAs in a few products in the garments and textile clusters, a few base metal, paper, wood, (i.e., furniture), and chemical products as well as a few higher value added industrial machinery (i.e., industrial refrigerators, electric motors and generators, or internal combustion piston engines). At 43 products, Lebanon had the highest share of medium and high technology exported goods (26 percent of total products with an RCA) in the region including Turkey. Lebanon's main export product remains gold, which accounted for 15 percent of total exports. Accordingly, gold and diamonds are imported, processed, and re-exported partly as jewelry (Figure 21). Lebanese exporters benefit from close connections with the Lebanese Diaspora abroad (i.e., in the EU, U.S., Brazil, or Australia) though external demand, know-how, or marketing and distribution systems. In particular, the food industry benefits from the external demand of Lebanese living abroad for domestic products. Moreover, exporters often have wide-ranging marketing and distribution in foreign countries through ties with the Lebanese Diaspora and traders. In this regard, Lebanon is also regarded as a pilot market for consumer tastes. For instance, a Turkish glass manufacturer recently acquired a Lebanese producer to benefit from its worldwide marketing and distribution system.

A comparison of Jordan or Lebanon with Croatia or Chile exemplifies two different paths for the countries' manufacturing sectors, both of which might lead to higher income level. Figure 22 illustrates the product spaces of Chile and Croatia; both are chosen as comparator countries for Jordan based on their size and openness. Both countries serve as a benchmark for Lebanon and Jordan given that their average GDP per capita (in US\$) was two to three times higher than Jordan's in the last decade. Both countries show very different

Figure 22 Chile (left) and Croatia (right) Product Spaces 2007/09



development paths. Chile specialized in products that are typically not in the core of the product space (food processing and mining) while Croatia specialized in densely connected manufacturing clusters (chemicals, base metals, industrial machinery, or garments). Chile is a good example that countries can advance from low to (higher) middle income countries without a strong manufacturing base in the core of the product space. However, Chile's growth benefitted from efficient redistribution and trickle-down effects from high mining revenues, partly fueled by a commodity boom. Moreover, the analysis does not account for (export successes) in services, which became important in Chile. A comparison between Lebanon, Jordan, and Croatia shows that the Mashreq countries' manufacturing sectors were lagging substantially despite similar access EU markets. Top EXPY contributors²⁷ for Croatia have an average PRODY of US\$26,662, reflecting primarily engineering products (MT3) and electronics (HT1) as well as other high tech goods (HT2). Whereas Jordan's average at US\$20,000 and are mostly products in the chemicals and base metals categories (MT2) or low technology products other than textiles and garments. In particular, Croatia specialized in higher value added products in industrial machinery, chemicals, and recently also electronics. The latter can potentially also provide positive spillovers for ICT service exports.

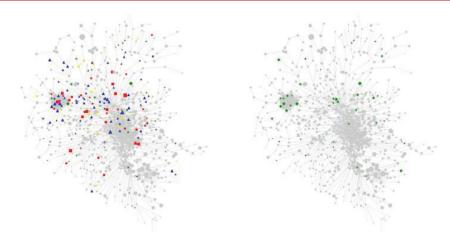
Jordan's export performance in (higher value added) manufacturing products in the core of the product space stagnated over the last 15–20 years. Figure 23 (left graph) shows that Jordan had already developed an RCA in 2000/02 for most export successes in the core of the product space (classics). Even over the last 15–20 years (right graph), only a few new products emerged in the core (i.e., polyvinyl acetate, newspapers and journals, other office supply, or chemical fertilizers). What is more, Jordan appears to have lost RCAs in between 2000/02 and 2007/09 in several industries: it lost RCAs in about 11 products²⁸ that were closely connected to the dense part of the product space.²⁹ In addition, Figure 23 (left graph) highlights that there are only a few

²⁷ Where PRODY>1.5*EXPY.

Alkyds and other polyesters, other pumps for liquids & liquid, bodies for the motor vehicles, manufactures of mineral materials, structures & parts of iron, converters, ladles, ingot molds and cellulose acetates, slag wool, rock wool and similar min, sanitary ware for indoor use, bars & rods, of iron/steel; hollow, wire rod of iron or steel.

These results are consistent with the findings of the Jordan DPR (2012) that the contribution of the exports of new products to aggregate export growth has been low (10 percent from 2000–2010).

Figure 23 Jordan Product Space Dynamic Representation Changes 2000/02–2007/09 (left) and 1992/94–2007/09 (right)



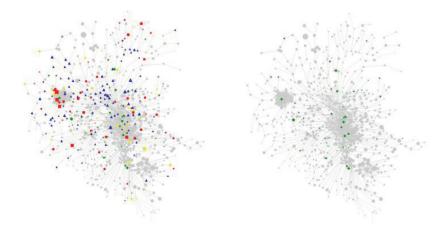
products close to the core in which Jordan experienced strong export growth over the last decade and is close to achieving an RCA: machinery parts, gauze and cloth of iron and steel, quicklime, or steam boilers. These trends show that Jordanian firms and potential entrepreneurs are struggling to develop new manufacturing products.³⁰

Jordan's performance in exporting garment products was mixed reflecting to some extent pressure from increased international cost competition in the sector. The garments and textiles sector provides about 55,000 direct jobs in Jordan, however, the majority (about 69 percent) are foreign laborers. Moreover, most firms (about 50 firms out of 90) in the sector are foreign and benefit from the Jordanian special economic zones that allow exporting to the U.S. free of duties and quotas under certain conditions (i.e., 14 percent value added content from Israel / WBG). It is becoming increasingly difficult for firms in the garments sector to face the full rigors of increased competition from lower labor cost countries. For instance, the Jordan Diversified Payments Rights (DPR) (2012) reveals that Jordan struggles to compete on price with low cost producers like Egypt in the garment sector, but it is not yet able to reach the quality levels of Tunisian and Moroccan exporters. Hence, firms are required to add value by moving up the value chain, for instance, from "cut and make" to developing their own brands through sharper focus on design.

The dynamic illustration of the product space reveals that Lebanon diversified into a few new products in the industrial core of the product space over the last ten years; at the same time, however, it lost RCAs in several products in the core and the garments cluster. Figure 24 (right graph) only depicts the emerging products, highlighting that Lebanon developed RCAs in several industrial machinery products including industrial refrigerators and equipment, electric motors and generators, machinery tools, or filtering machinery for liquids. Lebanon primarily lost RCAs in garments and several agricultural products, which would be consistent with a structural transformation towards industrial manufacturing. In contrast, Lebanon has gained competitiveness in a few ICT related products but has not maintained its

These findings are consistent with the Jordan DPR (2012). In between 2000 and 2005, The DPR documents a general shift in intensive margins (exports of existing products) from low and medium-low technology industries (apparels or edible vegetables) to medium-high technology industries (fertilizers or pharmaceutical products). However, it finds that the only significant new exports from 2005–2010 were iron and aluminum products, which are medium-low technology products shipped to regional markets.

Figure 24 Lebanon Product Space Dynamic Representation Changes 2000/02–2007/09



RCA in electrical transformers. Export growth for electrical transformers has been contracting by an average of 20 percent per year suggesting that Lebanon is not able to compete with countries like China or Turkey. While Tunisia maintained its RCA over the period, export growth has also been contracting at about the same pace as Lebanon. Only Morocco and Syria recorded significant export growth for that product suggesting the relocation of production lines to these countries by multinationals.³¹

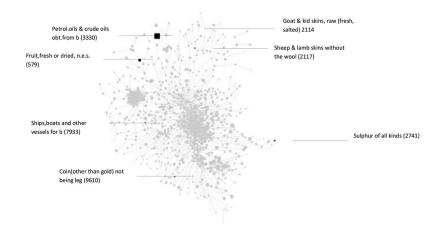
Lebanese manufacturers have been facing high utility and labor costs challenging their competitiveness and pushing producers to diversify into (potentially higher value) manufacturing niches or to relocate their production facilities. The manufacturing sector in Lebanon faces several severe constraints such as inefficient bureaucracies and red tape, limited access to long-term finance, or high costs of utilities such as water and electricity. To be specific, the number of and costs resultant from power outages are among the highest in the region. This undermines the competitiveness of manufacturers located in Lebanon relative to competitors in the region. Moreover, the relatively high cost of (well educated) domestic labor impedes export success in labor-intensive light manufacturing sectors (such as footwear, garments, and iron and metal products). As a

result, firms have been pushed to diversify into potentially higher value manufacturing niches or to relocate their production. Niches for lower value-added industries can include products with high transport costs (i.e., glass bottles, water tanks) or products that are specific to the Arab market or consumer taste. For instance, electrical motors and generators or internal combustion engines are often produced or assembled by several small producers, i.e., by recycling and repairing older generators, and then exported to Iraq or Africa. Moreover, Arabic content printing (i.e., textbooks, newspapers) provides a niche for many SMEs in the printing and paper industry, which has a longstanding tradition in Lebanon.³²

Ountries with a classic RCA in electrical transformers (SITC 7711) are China, Croatia, Indonesia, South Korea, Portugal, Vietnam, Turkey and Tunisia. It is a disappearing export for countries such as Lebanon, Malaysia, and Thailand. Countries that have seen a high export growth over the past decade but have not yet gained a RCA are Morocco and Syria.

Furniture is another industry with a long tradition in Lebanon benefitting from a niche by specializing into products customized for Arab market. The industry consists of several small SMEs that are often second or third generation family businesses based in Tripoli. Specialization in traditional furniture customized for Arab market limits the business size and exporting opportunities. Despite some potential most firms have not diversified into higher value added products.

Figure 25 | Iraq Product Space 2007/09



However, several paper and printing manufacturers also started to specialize in higher value added activities such as security printing, recycling, or specialized packaging and design.

A few selected examples demonstrate the trend in Lebanese manufacturing to diversify into higher value manufacturing niches or to relocate production facilities. The Lebanese company, Inkript, which was founded in 1973 as a family business, has recently been transformed from traditional printing to higher value added security printing products such as smart-cards, identification and payments solutions (i.e., credit cards, checks, and drafts), security documents, lottery tickets, or elections turnkey projects. Inkript exports to governmental agencies as well as telecom and financial sectors in the Middle East, Africa, and West Asia, securing about 100 direct employees and about 300 indirect employees. Moreover, Lebanon lost an RCA (disappearing product) in exporting high value added electrical transformers, apparently because production facilities have been progressively relocated to countries with lower wages or lower costs of electricity. That is, Matelec is a major Lebanese manufacturer of high value added electrical transformers employing about 250 persons and successfully exporting to EU markets. It started manufacturing in Lebanon in 1977 and also developed engineering and contracting services. The ISO 9001 quality standard certificate has been granted to Matelec in 1996. Over the last decades, new production facilities have been added for the manufacturing branch in lower wage or energy cost countries such as Saudi Arabia, Jordan, Egypt (1999), or Algeria (2007). Similarly, the Lebanese manufacturer Concord, which is one of the largest producers of white goods (refrigerators, freezers, washing machines, and microwaves) in MENA employing over 2,500 persons, opened production facilities in Syria and Saudi Arabia.

Despite the high domestic cost of utilities, red tape, or protected domestic markets, many exporters in Lebanon successfully compete in international markets.

It is estimated that most exporters in Lebanon obtain a significant portion of their sales and profits from exports given the small size of the domestic market. For instance, the various SMEs in the paper and printing industry are estimated to obtain more than half of their sales from exports. According to the World Bank Enterprise Survey, on average, 44 percent of firms in Lebanon export (Figure 2). The share of sales obtained from exports accounts, on average, for 18 percent. Likewise, 63 percent of inputs and supplies for Lebanese firm covered in the survey are of foreign origin. The relatively high share of

Figure 26

Iraq Product Space Dynamic Representation Changes 1992/94–2007/09

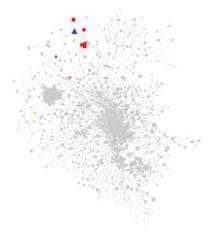
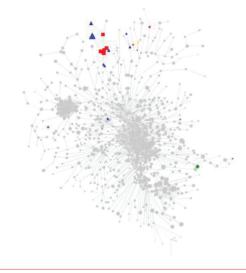


Figure 27 | Iran Product

Iran Product Space 1992/94-2007/09



sales that are profits obtained from exports suggests that these manufacturing firms are successfully competing in international markets despite the high domestic cost of utilities or labor.

Iraq and Iran are concentrated in petroleum products

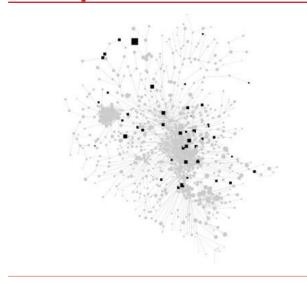
The predominance of oil in Iraq largely explains the country's lagging export performance. Figure 25 illustrates the product space for Iraq for 2007–2009 exclusively highlighting the products where Iraq has a revealed comparative advantage: seven RCAs compared to 12 in 1992/94 (Figure 26). The product space for 1992/94 reveals that Iraq mainly exported crude oil and refined oil products which the country has lost over the years with degrading oil infrastructure and increased domestic demand. Due to sanctions and conflict, Iraq's industrial base has scarcely developed over the past 20 years, revealing the complete absence of manufacturing products in the densely connected core. Crude oil accounted for 98.8 percent of total exports over the 2007/09 timeframe.

Iranian export structure is highly concentrated; crude oil accounted for 83.6 percent of Iran's exports in 2007/09. Apart from crude oil Iran has an RCA in a

few products in peripheral clusters. These include other mineral products (i.e., petroleum jelly and mineral waxes, copper and copper alloys), food products (i.e., animal and vegetable oils), and a few chemical products (polycarboxylic acids or polyethylene) See Figure 27.

The product space of Norway or Malaysia exemplify that it is possible to develop a strong manufacturing export base in the core of the product space despite a dependence on natural resources. The product space for Norway, which is also a major oil intensive exporter, shows a small but high value added manufacturing base apart from its oil and gas, shipping, and fishing industries (Figure 28). Many of the products in the core are machinery and transport equipment, chemicals as well as professional, scientific and controlling instruments and apparatus. Thus, Norway has mainly developed RCAs in sophisticated products that are used in upstream industries related to its main natural resources (i.e., oil, wood, or fishery). In particular, most of the goods in machinery and transport equipment are goods related to the oil extraction industry and shipping industry. For instance, Norway exports construction and mining machinery (7234), earth moving machinery parts (7239), hoists for raising vehicles, and winches and capstans

Figure 28 Norway Product Space 2007/09



(7442), metered liquid pumps (7421). Norway also exports paper articles as well as a number of worked iron and steel products such as structures (6911) and worked aluminum. In addition, it has RCAs in professional, scientific and controlling instruments and apparatus such as fluid gauges and instruments (8743), navigation/survey instruments (i.e., compasses; other navigational instruments and appliances; surveying (including photogrammetric surveying), hydrographic, oceanographic, hydrological, meteorological, or geophysical instruments and appliances; rangefinders, (8741) as well as measuring, controlling, and scientific instruments (8745). Norway also developed RCAs in two chemical product classes but has not developed RCAs in plastics.

The Norway product space suggests that Iraq may be able to develop into higher value added products related to upstream sectors (i.e., industrial machinery, apparatus and equipment used in the oil sector) rather than downstream sectors (i.e., plastics or chemicals). The product space shows that Norway has taken full advantage of its initial endowment by developing in higher value added manufacturing products related to it. Given Iraq's current human capital endowment and income level, light manufacturing or less sophisticated industrial

machinery used in the oil industry (i.e., hand tools or machinery tools for working metal) might be promising industries for Iraqi producers. Moreover, the development path for Norway might also indicate that diversifying from crude oil into plastic is rather difficult despite their relatedness along the supply chain. In contrast, plastic products are often manufactured in countries with a strong industrial manufacturing base, such as Germany. This might suggest that the demand for plastics is driving the comparative advantage of its production location since plastic products are used as an input in many industries. Market access and low transport costs to other manufacturing industries using plastic products appears to be much more important than geographical distance to the producers of the major input, crude oil.

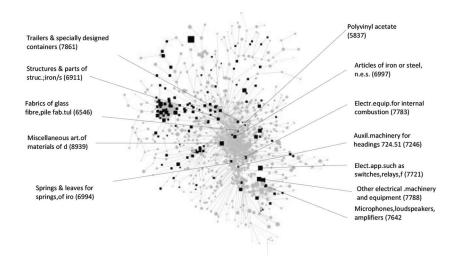
Tunisia managed to significantly improve its export performance over the past 20 years

Tunisia successfully exports several products (about 20 products at the 4 digit level) close to the densely connected core of the product space and in the electronics cluster.³³ Figure 29 illustrates the product space for 2007/09 exclusively highlighting the products where Tunisia had an RCA: 140 products; this compares to 116 products in 1992/94 and 132 in 2000/02.

Yet, Tunisia remains a major exporter of garments, textiles, processed food as well as oil and inorganic chemicals in primary forms. Eight products accounting for 21.3 percent of total exports in the top 20 exports are in the garments industry; petroleum remains the number one export with 13.35 percent of total exports (price effect) (Table 3). Despite the expiration of the Multi Fiber Agreement in 2005 and increased international cost competition in the sector, Tunisia did

These include non-metallic mineral manufactures, articles of plastics, plastics in non-primary form, telecommunications and sound recording equipment, office machines and automatic data-processing machines, office and stationary supplies, textile and leather machinery, iron and steel manufacturing and other metal manufacturing as well as electrical machinery, apparatus and appliances and electrical parts.

Figure 29 Tunisia Product Space 2007–09



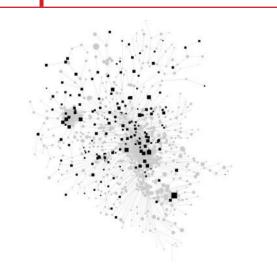
not lose comparative advantage in garment and textile products over the past ten years. This suggests that the Free Trade Zones (FTZs), where most garment and textile firms operate, offer sufficient incentives for firms to remain competitive. However, increased competition in term of quality or costs from countries like Romania, Turkey and Asian countries like Bangladesh may change the outlook for those sectors in the medium term. In fact, many firms in the garments sector operating in the FTZs are foreign and hence might relocate quickly once costs structures change. In particular, 83 percent out of the 2,100 firms in the Tunisian textiles and garments sector are exporting; 46 percent of the exporting firms are partially or fully foreign owned including 365 French firms, 206 Italian, 121 Belgian, and 106 German. The industry employs about 200,000 workers.

While the product space might suggest that Tunisia is on its way to further transform its economy from garments and textiles to new manufacturing products, a comparison with Portugal or Turkey shows a significant lag. Figure 30 shows the product space for Portugal; a comparator country for Tunisia based on its size and access to EU markets. Portugal constitutes a benchmark given that the average GDP per capita (in US\$) has been

three times higher than Tunisia's over the last decade. Moreover, Tunisia's manufacturing structure is similar to that of Portugal (i.e., garments and textiles, base metals, food products, machinery). The comparison shows that Tunisia's manufacturing sector is significantly less developed in the densely connected core. Likewise, comparisons with Turkey, Thailand, or Croatia reveal that the process of structural transformation in Tunisia is slow moving. As compared to these peers, Tunisia is struggling to gain significant export shares in world markets in the industrial core, which includes higher productivity products within electronics, chemicals, or industrial machinery clusters.

Although Tunisia has not developed many new export successes in the industrial core, several new products emerged in the industrial machinery or electronics clusters. The dynamic illustration of the product space shows that it gained RCAs in eleven product categories close to the densely connected core or the electronics cluster over the last decade (Figure 31); emerging products between 2000/02 and 2007/09 highlighted as green diamonds. These are mainly in manufactures of metals as well as iron and steel manufacturing (i.e., articles of iron or steel, other sheets and plates, of iron or steel, structures

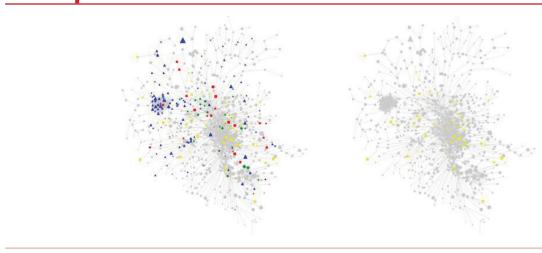
Figure 30 | Portugal Product Space RCAs 2007/09



and parts of structures; irons), or construction materials. In addition, Tunisian firms gained revealed comparative advantage in exporting fabrics of glass fiber. Likewise,

Tunisia had an RCA in four classic products (blue triangles) in the electronics cluster and in electrical components close to the core in 2000/02 and gained five additional RCAs connected to that by 2007/09 (i.e., calculating machines and cash registers, electrical lines for telephonic, other electrical machinery and equipment, television receivers, tin alloys, as well as off-line data processing equipment). Moreover, Tunisia has gained competitiveness in four high tech goods prior to 2000/02 and managed to acquire RCAs in six additional goods over the decade. For example, it is now successfully exporting two types of television receivers. However, some of these successes appear to be driven by the country offshore sector where foreign firms often benefit from provided incentives (i.e., tax breaks) and linkage to the domestic onshore economy is often very weak. For instance, of the 92 firms operating in the electronic sector, 82 are exclusively exporting. Furthermore, Tunisia is the second largest manufacturer of car parts in Africa after South Africa whereby it has become a major supplier for European car manufacturers.

Figure 31 Tunisia Product Space Dynamic Representation Changes, 2000/02–2007/09



EXPANDING ECONOMIC TIES IN THE LEVANT: WHO BENEFITS AND BY HOW MUCH

Building on an analysis of economic complementarities and trade and investment potentials in the sub-region, this chapter analyzes the economic implications of a deeper regional integration. A CGE model is developed for the purposes of this study and consideration is given to four scenarios emphasizing different aspects of trade relations among possible members of an economic integration zone, including Egypt, Iraq, Jordan, Lebanon, Syria and Turkey:³⁴ (i) the removal of tariffs on agricultural goods and processed food; (ii) reducing the restrictiveness of non-tariff measures; (iii) liberalizing transport services in the zone, resulting in reduced import and export transport costs; and (iv) services trade liberalization within the zone.

As it transcends, the benefits of establishing a zone between Turkey, Egypt, Jordan, Lebanon, Iraq, and Syria will increase with the deepening of the commitments. The effects of services liberalization are estimated to be sizable, but the impact of other trade-related reforms on aggregate incomes and exports will be small. With a cumulative welfare increase of US\$12 billion (11 percent increase in welfare), Egypt is expected to benefit the most in absolute terms, while Iraq will likely gain the most in relative terms as its welfare rises by almost 17 percent or

US\$2.5 billion, followed by Syria (11.6 percent increase), Jordan (6.5 percent increase), and Lebanon (3.3 percent increase). Turkey will garner close to US\$10 billion, which due to its large size translates into just a 1.7 percent increase in per capita income. Nearly all of these gains are a result of deeper integration through services as reforms boost the supply response, real wages, and

³⁴ The Palestinian Territories are not included in the CGE model because of lack of data.

encourage domestic demand, investment, and exports of services. The impact on exports varies by country, sector, and reform instrument, and is sizable for some sectors. In Turkey, reforms will either have no effect, or in the case of services liberalization, will have a small negative impact on aggregate exports. In the other Levant countries, the impact on aggregate exports will be positive under all scenarios, but the magnitude of the effect will be sizable only in the case of services liberalization. Agricultural liberalization and improved transport logistics will boost bilateral exports of farm and food products among the New Levant countries. Reducing the restrictiveness of NTMs will likely have a particularly pronounced effect on exports of petroleum, resource-based, and other manufactures from Turkey, food and chemicals from Egypt, metals and resource-based manufactures from Jordan, chemicals, resource-based manufactures, and other manufactures from Lebanon, and farm, oil, petroleum, and chemical goods from Syria. The effect on Iraq's exports will be negligible.

Methodology, Data, and Simulation Design

For the purposes of this study, a standard Global Trade Analysis Project (GTAP) model and a modified version of the GTAP database was used to analyze the potential economic effects of a deeper economic integration in the region. The model, documented comprehensively in Hertel (1997), is a multi-country, multi-sector CGE framework, well suited for a quantitative investigation of the ex-ante, medium-term impacts of trade agreements. The model depicts firms that produce for domestic and export markets, using constant-returns-to-scale technology, and factor and intermediate inputs. Intermediate products are either produced domestically or imported from foreign markets, and substitute imperfectly, following the Armington structure. Land, physical capital, skilled and unskilled labor, and in some sectors a natural resource factor are used as factor inputs in production. The results obtained with the model are indicative of medium term outcomes as factor inputs are perfectly mobile across sectors and returns adjust to changes in economic conditions.

The model takes into account the role of intersectoral factor mobility and overall resource constraints in determining sectoral output supply. Product differentiation between imported and domestic goods and among imports from different regions allow for two-way trade in each product category, depending on the ease of substitution between products from different regions. The model includes the explicit treatment of international trade and transport margins, a "global" bank mediating between world savings and investment, and a consumer demand system designed to capture differential price and income responsiveness across countries. The accounting relationships and behavioral linkages constrain outcomes in ways not possible with partial equilibrium models.

This study makes a contribution by extending the GTAP 8 database beyond the 129 regions. Data for Turkey and all developing MENA countries were retained individually in the GTAP 8 Database, including Egypt, Morocco, Tunisia, and Iran. Regional and industry aggregations are presented in Annex 9. Kuwait, Qatar, Bahrain, Saudi Arabia, UAE, and Oman were aggregated into a GCC composite group. Lebanon, Jordan, Syria, Iraq, and the Palestinian Territories were separated from rest of Western Asia, and Algeria and Libya from rest of North Africa. Based on their importance for the MENA region, 57 sectors were aggregated into 22 sectors. The resulting MENA specific database contains 26 countries; among which are the twelve MENA low and middle-income economies—Algeria, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, Yemen, and Palestinian Territories, as well as an oil-rich and high-income GCC aggregate.35

The separation of the MENA economies was based on (i) data on the following six components of GDP—agriculture, hunting, forestry, fishing (ISIC A-B), mining, manufacturing, utilities (ISIC C-E), construction (ISIC-F), transport, storage and communication (ISIC I), wholesale, retail trade, restaurants and hotels (ISIC

Modifications were done on the database to get the right country and product groups for the purposes of this study. Using data sources presented in Annex 10-12, all entries were split in the rest of Western Asia and the rest of North Africa, the split values were assigned to the newly created economies, and all entries were removed for the two composite regions from the GTAP database. In this step, each entry was split using the most thematically relevant external source. For example, all consumption and production values were split using sectoral GDP shares, values of exports and imports using trade data, and duties using tariff information. Export shares were used to split further the production and consumption information into the final set of industries, shown in Annex 9. In order to retain the internal consistency of the GTAP database, the required accounting relationships were imposed on the split database using iterative proportional fitting. The zero profit conditions and all accounting relationships were enforced at each iteration. The procedure was repeated until the database was balanced and consistent with all external targets.

Another important modification was the implementation of Euro-Med, PAFTA, and bilateral preferences in the GTAP data. The information was obtained on bilateral preferences at the most disaggregate product level from a variety of sources, including MFN and non-MFN rates from WTO data, country tariff data, and in the case of the European Union, from Eurostat (Annex 10-12). Bilateral rates among PAFTA members were set at zero to reflect free trade in agricultural goods and manufactures. Whenever bilateral country tariff information and non-MFN rates from WTO sources were not available, reciprocity was assumed and the rates extended by the bilateral partner were applied. In the absence of such rates, the MFN WTO rates were applied. Duties on imports from countries outside the MENA region were left unchanged whenever the importing country was part of the GTAP database. In the cases when the country information had to be created from a composite region, WTO MFN rates were applied or country information was used.

The detailed data on bilateral tariff lines were aggregated into weighted average rates for the twenty-two sectors using bilateral import data from WITS for 2007.36 Whenever such data were not available, imports were inferred from exports for 2007 or from World Integrated Trade Solution (WITS) data for 2008. The updated tariffs reflect the PAFTA agreement, the bilateral Association Agreements with the EU, and the bilateral FTAs with Turkey. The updated tariff rates, presented by country, product, and source in Annex 13 through 18, differ substantially from the ones available in GTAP 8 database, especially those of Jordan, Iraq, Lebanon, and Syria (Annex 19). Since GTAP tariffs for the newly created regions do not correspond to the actual trade profile of individual countries in the composite, the new tariff rates differ from the GTAP ones both because of differences in the tariff lines and trade composition. In the cases of Egypt and Turkey, with a few exceptions, the tariff information in GTAP 8 Database represents accurately existing preferences.

Data on food and energy subsidies were incorporated into the database. The subsidies are prevalent in many of the MENA countries. Data on subsidies were incorporated as a consumption subsidy, benefiting consumers, and an input subsidy, benefiting firms in all sectors in a uniform manner.

Scenarios and Simulation Results

The newly constructed database is used to test four scenarios. The economic impacts of a possible economic integration zone are analyzed for six countries: Egypt, Iraq, Jordan, Lebanon, Syria and Turkey. Consideration is given to four scenarios: (i) removal of tariffs on trade in

G-H), and other activities (ISIC J-P), obtained from the UN Statistics Division data on sectoral GDP composition for 2007; (ii) bilateral trade value data from WITS; and (iii) bilateral tariff data from a medley of sources, presented in Annex 8–10.

This year was chosen in order to match the benchmark year of the GTAP 8 Database.

agricultural goods and processed foods among six countries;³⁷ (ii) reducing the restrictiveness of NTMs among these countries;³⁸ (iii) liberalization of the transport sector in this zone, resulting in reduced import and export transport costs to and from six countries;³⁹ and (iv) services liberalization within the zone.⁴⁰ Results of the simulations for four scenarios follow.

Scenario 1: Liberalizing Agricultural and Food Trade in the New Levant

The removal of tariffs on agricultural goods and processed food will stimulate trade in these products within the New Levant Zone. The major effect will come from the removal of tariffs on bilateral trade between Turkey and other Levant countries in these product categories. The volume of Turkey's exports of primary agricultural goods to other countries is expected to increase to various degrees, depending on the size of tariffs in the destination markets. Tariffs are lowest in Egypt, where the volume of Turkey's exports is expected to increase by just six percent. Turkish agricultural exports to Lebanon, where agricultural tariffs average four percent, are expected to increase by 20 percent, and around 40 percent in the cases of Jordan, Syria, and Iraq. Exports of agricultural goods from Jordan to Turkey are expected to increase by a factor of 14, because of the removal of extremely high tariffs on a few agricultural products such as watermelons. The increase of exports from Iraq, Syria, and Egypt is estimated to be sizable, but more modest than Jordan's due to lower tariffs on agricultural exports from these countries to Turkey. Lebanese agricultural exports face very low tariffs in Turkey so the boost to their exports will be marginal.

The volume increase of food trade between Turkey and the other Levant countries is expected to be dramatic. The post-reform volume of food exports to Turkey from Egypt, Syria, Lebanon, and Iraq will be several times the pre-reform levels, while exports from Turkey to

these countries will jump by a factor of 6.3 in Jordan and 2 in the other Levant countries (Table 11). The smaller increase in the cases of Iraq, Syria, Lebanon, and Egypt can be explained with the fact that these countries have much lower tariffs on imported food from Turkey than Jordan (Annexes 13 through 18).

Bilateral trade patterns in the New Levant are expected to change, with Egypt, Jordan, and Syria exporting more agricultural and food products to Turkey, and less of these products to other Levant countries. As Turkey gains access to agricultural and food markets within the Levant, competition will intensify and Turkey might displace Egypt, Jordan, Lebanon, and Syria in the long term. Turkey's exports of agricultural and food products to other Levant countries will increase, without a significant effect on Turkey's exports to other destinations in and outside the Levant zone.

Overall, the integration of agricultural and food markets through tariff removal is estimated to have a

³⁷ In the model, for the scenario of tariff removal on trade in agricultural goods and processed foods, lost tariff revenue was replaced by increasing consumption taxes so as to keep the tax revenue constant as a share of income.

Since NTMs add friction to trade relations, the reduction in the trade restrictive power of NTMs is modeled as an efficiency improvement. In the cases of Egypt, Lebanon, Jordan, Iraq, and Syria, the productivity shocks are equivalent to cuts in ad-valorem equivalents (AVEs) of NTMs by product to not more than 10 percent. Since the AVEs for many products are less than 10 percent, there will be gains in market access for only some categories of products. This is particularly the case for Iraq. In the absence of information on Turkey, a uniform three percent reduction in AVEs of NTMs was assumed for all products.

³⁹ In this study, we assume transport cost reductions to be a result of productivity improvements in the process of shipping goods within the New Levant zone.

World Bank's Services Trade Restrictions (STR) database is used to estimate the size of the productivity shocks. Trade liberalization is assumed to bring down the service trade restrictiveness index in the Levant countries to the minimum of the corresponding index in the Euro-Med area. Sectoral index is available only for financial services and insurance, communications, trade, transportation, and other business services. In the case of construction and tourism, the overall service restrictiveness index is used, and in the case of Syria, data were not available so the average STRI for the MENA region was assigned.

Table 11 Change in Bilateral Export Volumes Due to Removal of Tariffs on Agricultural Goods and Processed Food (percent)

(/* * * * *	,					
		Agricult	tural Goods			
	Turkey	Egypt	Jordan	Lebanon	Syria	Iraq
Turkey		6	42	20	35	39
Egypt	26		-2	-2	-2	-5
Jordan	1,283	2		-2	-2	-5
Lebanon	1	2	-1		0	-5
Syria	51	2	-1	0		-3
Iraq	77	10	0	2	3	
		Proces	ssed Food			
	Turkey	Egypt	Jordan	Lebanon	Syria	Iraq
Turkey		67	530	73	88	104
Egypt	505		-11	-3	-4	-18
Jordan	12	2		-1	-1	-17
Lebanon	108	1	-11		-2	-19
Syria	182	1	-10	-2		-17
Iraq	92	5	-10	0	0	

Levant zone. The volume of Turkey's exports will expand by US\$233 million, which is the largest absolute expansion in the group in dollar terms, but represents a negligible increase in Turkey's total exports (Annex 20). Iraq and Jordan's exports are expected to grow by about half a percent or US\$57 million and US\$61 million, respectively (Annex 25 and Annex 22). The percentage changes in volumes in all other cases are negligible, while the dollar amounts vary, with Egypt's exports increasing by US\$51 million (Annex 21), Lebanon's by US\$11 million (Annex 23), and Syria's by US\$12 million (Annex 24).

Agricultural output is expected to increase in all Levant countries other than Iraq, but food production will expand only in Turkey and Egypt (Table 12) as these two countries benefit from relatively large tariff cuts in each other's food markets. Competition from Turkey results in contraction of processed food production in the other Levant countries. Consequently, demand for labor will fall in Jordan, Lebanon, Syria, and

Iraq with negative implications for wages, which in turn will lower slightly production costs and prices of most products. In Turkey and Egypt, the expansion of agriculture and food processing is expected to increase demand for land, capital, and labor, and therefore production costs and export prices. The rise in production costs translates into higher export prices and stronger terms of trade.

With changes in per capita income of about 0.1 percent or less (Table 13), the welfare effects of the agricultural and food liberalization reform will be negligible. For Turkey, the greatest welfare gain of the reform will come from terms-of-trade improvements (US\$36.5 million), linked to strengthened export prices. Egypt is also expected to gain mainly from improving its terms of trade (US\$67 million). Unlike Turkey and Egypt, which will gain US\$79 million and US\$113 million, Lebanon and Syria will incur small welfare losses, driven by terms-of-trade declines as export prices decline. Despite terms-of-trade losses, Jordan and Iraq will have positive welfare gains because of the beneficial allocative

Table 12 Change in Output by Sector Due to Removal of Tariffs on Agricultural Goods and Processed Food (percent)

	Turkey	Egypt	Jordan	Lebanon	Syria	Iraq
Primary Agriculture	0.0	0.2	1.0	0.0	0.1	-0.4
Processed food	0.3	1.6	-1.7	-0.3	-0.8	-6.1
Gas extraction & distribution	-0.3	-0.3	0.3	0.1	0.0	0.2
Oil extraction	0.0	-0.1	0.1	0.0	0.0	0.1
Other manual resources	0.0	-0.1	0.1	0.0	0.0	0.0
Petroleum and coal	0.0	-0.1	0.1	0.0	0.0	0.1
Electricity	0.0	0.0	0.1	0.0	0.0	0.1
Chemicals and metallurgy	-0.1	-0.3	0.3	0.1	0.1	0.3
Textiles and apparel	-0.1	-0.3	0.6	0.2	0.3	0.7
Resource based manufacturers	0.0	-0.1	0.4	0.2	0.1	0.6
Equipment and vehicles	-0.1	-0.1	0.4	0.2	0.0	0.5
Metal products	-0.1	-0.2	0.5	0.1	0.1	0.6
Other manufactures	0.0	-0.2	0.3	0.1	0.0	0.3
Construction	0.0	0.1	-01	0.0	-0.1	-0.6
Transport	0.0	-0.4	0.2	0.1	0.1	0.4
Trade	0.0	0.0	-0.1	0.0	0.0	-0.1
Communications	0.0	-0.2	0.4	0.0	0.1	0.7
FIRE	0.0	0.0	0.1	0.0	0.0	0.2
Government services	0.0	0.0	0.1	0.0	0.0	0.2
Business services	0.0	-0.3	0.6	0.1	0.2	1.1
Tourism and other services	0.0	-0.1	0.2	0.0	0.0	0.2
GDP	0.0	0.0	0.1	0.0	0.0	0.1

Note: "FIRE" stands for finance, insurance, and real estate sectors.

efficiency effects associated with the removal of import tariffs on agricultural and farm products.

The possible Levant economic zone will have negligible trade diversion effects. Turkey, Jordan, Lebanon, and Syria incur welfare losses of less than US\$1 million from changes in import prices, while Iraq and Egypt register welfare gains of less than US\$.5 million.

Scenario 2: Reducing NTMs' Restrictiveness

Turkey will not be in a position to negotiate tariff cuts on manufactured products because of its Customs Union with the EU, but there will be no restrictions on its ability to open up its markets to manufactured goods from the Levant countries by reducing non-tariff barriers. In turn, Turkey's Levant partners might be willing to reciprocate by reducing non-tariff barriers on trade with Turkey and other Levant countries. Such a form of trade liberalization is envisioned in a scenario that reduces AVEs of NTMs by three percent for all products imported by Turkey from the Levant and lowers them to no more than 10 percent in Egypt, Jordan, Lebanon, Syria, and Iraq for bilateral trade flows within the New Levant zone.

By reducing the restrictiveness of NTMs in the Levant, Egypt will have an opportunity to increase exports of a broad range of products to Turkey, and resource-based, chemical, and other manufactures to Syria (Table 14). Jordan will likely scale up

 Table 13
 Welfare Effects of Reforms Associated with Deeper Integration in the Levant (US\$ million)

7	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative welfare
Turkey	79	179	389	9154	9802
	0.01%	0.03%	0.07%	1.61%	1.72%
Egypt	113	119	103	11665	11999
	0.10%	0.11%	0.09%	10.59%	10.89%
Jordan	3	15	11	1035	1064
	0.02%	0.09%	0.07%	6.33%	6.51%
Lebanon	-5%	140	64	543	743
	-0.02%	0.61%	0.28%	2.38%	3.25%
Syria	-4%	237	99	2992	3323
	-0.02%	0.82%	0.34%	10.40%	11.55%
Iraq	2	14	177	2354	2546
	0.01%	0.9%	1.15%	15.37%	16.63%

its agricultural, food, and manufactured exports to Turkey, agricultural, resource-based, and equipment exports to Egypt, petroleum exports to Lebanon, and manufactured exports to Syria. Lebanon's exports to Turkey and Syria will expand in a wide range of products, and so will its exports of agricultural products to Egypt, resource-based goods to Egypt and Jordan, metal products to Jordan, and other manufactures to Iraq. Syria and Iraq will likely increase exports of a broad range of goods to Turkey, exports of agricultural commodities, resource-based manufactures, and equipment and vehicles to Egypt, exports of petroleum products to Lebanon, and resource-based manufactures to each other's markets. Iraq will also scale up its exports of agricultural and resource-based products and manufactures to Jordan.

This reform will bring a big boost to Turkey's exports as well. Exports of petroleum and coal products to Lebanon and Syria, exports of other manufactures to Egypt, and exports of agricultural commodities, resource-based manufactures, equipment, vehicles, and machinery, and metal products to Syria will increase (Table 14). The results suggest that increases will range from 45 percent in the case of equipment, vehicles, and machinery to Syria to above 1092 percent in the case of

other manufactures to Egypt. Exports of metal products from Turkey to Syria are expected to increase by 51 percent and those of resource-based manufactures are expected to more than double.

Despite the significant effects on the exports of some products, overall exports from the New Levant group will grow little in volume terms. Turkey's exports are expected to expand by US\$406 million or 0.3 percent (Annex 20), largely reflecting a boost to exports of petroleum, resource-based and other manufactures, and agricultural products. Egypt's exports will grow by 0.1 percent or US\$40 million, boosted by growth in exports of chemicals and processed food (Annex 21). Syria's exports will increase by US\$54 million or 0.3 percent (Annex 24), reflecting a boost in exports of crude oil, petroleum and chemicals, but also a broad based increase of exports of agricultural and manufactured goods. Exports from Lebanon will increase by US\$29 million or 0.5 percent, mainly driven by an increase in exports of chemicals, resource-based and other manufactures (Annex 23). Jordan's exports will likely advance by US\$14 million or 0.2 percent, helped by export expansion in metals and resource-based industries (Annex 22). Iraq's export gains in this scenario are negligible (Annex 25).

 Table 14
 Change in Bilateral Export Volumes Due to Reductions in the Restrictiveness of NTMs in the Levant (percent)

:															
		Expo	Exports from Turkey to:	cey to:			Export	Exports from Egypt to:	ot to:			Exports	Exports from Jordan to:	ın to:	
	Egypt	ıt Jordan	Lebanon	Syria	Irad	Turkey	Jordan	Lebanon	Syria	Iraq	Turkey	Egypt	Lebanon	Syria	Iraq
Primary Agriculture	0.1	20.4	2.3	238.5	1.3	11.8	-0.4	1.5	9.0-	0.1	6.03	26.8	1.8	9.3	0.0
Processed food	5.7	0.4	1.9	-1.2	0.3	31.6	0.0	1.1	25.7	-0.1	12.8	-0.2	1.1	4.1	-0.2
Gas extraction & distribution	0.0	0.0	0.0	0.0	0.0	110.4	-3.6	1.4	-2.8	-10.7	0.0	0.0	0.0	0.0	0.0
Oil extraction	0.0	0.0	0:0	0.0	0.0	23.6	-0.2	-7.3	8:0-	-2.1	0:0	0.0	0.0	0.0	0.0
Other manual resources	ces 0.2	0.0	2.0	2.0	0.5	5.5	-0.3	1.6	0.2	0.1	0.0	0.3	2.5	8.0	0.7
Petroleum and coal	0.0	6.0	222.7	222.1	6.0	9.4	-0.2	-12.8	33.1	-0.4	0.0	-0.2	155.6	9.8	-0.3
Electricity	0.0	0.8	-5.1	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chemicals and metallurgy	lurgy 0.2	0.1	0.5	-2.5	-16.4	18.6	7.0-	-0.3	58.4	9.1-	22.9	1.0-	0.1	-6.4	4.3
Textiles and apparel	0.3	-0.2	0.7	7.0-	0.0	19.5	- -	4.0-	-1.7	1.1	28.6	0.1	9.0	37.3	-0.3
Resource based manufacturers	21.4	-2.2	0.7	119.1	4. 1-	18.9	<u></u>	0.4	127.3	-8.7	19.5	13.4	2.0	61.2	-7.0
Equipment and vehicles	les -0.4	-0.1	0.5	44.5	20.2	22.7	-0.3	0.3	8.1	-0.2	21.8	17.0	0.2	20.1	-0.5
Metal products	18.1	1.0-	0.4	51.0	4.1-	22.1	<u>L</u>	9.0-	-18.6	-2.3	21.0	1.0	0.0	120.9	8.3
Other manufactures	1092.1	1 -0.1	1.0-	-14.0	20.2	21.3	-0.5	-0.5	89.1	-4.3	21.3	-14.5	-0.3	219.7	2.4
Construction	0.1	0.1	2.0	2.1	0.2	9.0-	-0.5	1.9	2.0	-0.5	-0.2	-0.1	2.0	2.2	0.0
Transport	0.0	0.1	0.0	0.8	0.0	9.0-	7.0-	6.0-	0.2	-0.7	-0.3	-0.4	-0.5	0.5	4.0-
Trade	0.2	0.1	2.1	1.3	0.0	8.0-	8.0-	1.6	0.8	-0.8	-0.5	-0.4	2.1	1.2	4.0-
Communications	0.0	0.0	1.7	1.4	-0.1	<u>L</u> 6.	9.1-	1.5	1.0	-1.5	9.0-	-0.5	2.0	1.6	9.0-
FIRE	0.2	0.0	2.3	1.4	-0.1	<u>L</u> &:	6:1-	2.1	0.8	1.8	-0.5	-0.2	2.5	1.4	9.0-
Public services	1.0-	0.0	1.6	1.3	0.0	-0.5	-0.4	1.0	0.7	-0.5	4.0-	-0.3	1.2	6.0	-0.3
Other Business services	ces 0.1	-0.2	0.9	0.5	-0.1	5.	<u></u>	0.4	-0.1	-1.2	9.0-	-0.2	8.0	0.3	9.0-
Tourism and other services	-0.1	-0.2	0.0	0.4	-0.2	-0.8	-0.9	0.3	-0.3	6:0-	4.0-	-0.4	0.8	0.2	-0.4
														poriumaco)	osca prod do porialtaco

(continued on next page)

Change in Bilateral Export Volumes Due to Reductions in the Restrictiveness of NTMs in the Levant (continued) (percent) Table 14

Syria -12.5247.9 606.4 11.8 -10.735.5 93.8 25.5 4.7 0.0 3.0 2.3 1.0 6.1 5. 0.1 3.4 0.8 2.1 0.7 0.5 Lebanon 164.4 8.3 2.2 5.3 0.0 0.2 0.5 4. -0.4 3.5 4.0 5. 3.7 1.7 0.2 0.0 1.2 1.3 Exports from Iraq to: Jordan 593.8 91.9 -0.3 -0.2 23.5 -0.5 -0.4 -0.5 -0.2 0.1 -0.4 9 0.3 -0.4 -0.4 0.0 0.3 -0.2 0.0 0.0 0.1 Egypt -18.5 9.69 -0.2 18.5 0.1 -0.2 -0.2 -0.2 34.1 -0.4 -0.70.0 1.5 -0.3 0.1 0.1 0.3 0.0 0.0 2.1 0.1 Turkey 0.5 20.1 33.7 34.6 22.3 38.5 23.6 26.2 -0.4 9.0 -0.2 16.1 25.1 28.1 -0.3-0.4 -0.2 0.0 9.6 0.0 5.7 -2.5 -1.9 13.8 -0.7 Irad -1.4 7.0--0.2 -2.3 -3.9 -0.5 -1.7 0.0 -0.4 0.3 0.3 0.0 3.1 3.9 -0.4 4.4 -2.7 Lebanon 159.8 9.0 6.0 0.5 6.3 - 2.6 9.0-0.0 -6.7 1.7 0.0 -0.7 5. 5.8 -1.79.0 0.1 0.7 Exports from Syria to: Jordan -2.8 <u>1.8</u> -2.5 -1.5 -0.3-2.8 -4.6 -4.2 0.5 0.0 1.0 0.2 -0.7 -0.4 -1.7 0.4 0.0 1.9 5.9 2.3 0.2 Egypt 19.8 -2.2 -0.2 -9.5 -2.3 13.7 16.2 -0.5 -4.8 -3.7 <u>1</u> 89 -0.5 0.0 0.0 0.4 0.0 2.6 - -0.4 -4.1 1.0 Turkey 22.6 29.6 -2.3 -3.0 16.8 47.2 41.4 29.1 19.0 19.6 28.0 -0.5-0.4 -3.5 -2.7 -1.7 -0.5 9.1 5.2 9.9 0.0 -1.9 -2.2-2.3 1.9 118.7 -3.5 raq -3.1 -2.1 0.0 -0.54.2 0.0 2.6 -2.4-4.3 -3.8 0.0 2.5 5.1 -3.1 -2.1 Syria 267.6 115.2 -1.6 1.5 17.8 -2.5 -0.2 -6.3 -2.9 40.0 <u>L</u> -2.6 0.0 60.0 -0.2-2.1 0.0 3.3 Exports from Lebanon to: 1.4 0.0 Jordan -1.9 11.8 6.1 9.9 -2.2 <u>~</u> -2.9 -4.5 -4.2 33.9 -2.8 3.1 -3.1 0.0 0.0 3.9 0.0 3.2 9.9 -2.1 3.0 Egypt 22.7 -2.6 <u>L</u> 12.6 -1.5 -9.8 -3.1 -2.4 9.0-14.7 -2.5 -4.2 -3.8 -3.0 0.0 0.0 0.0 -4.7 4.1 3.5 2.6 Turkey 21.6 20.6 19.9 20.7 32.9 7 -2.3 -3.4 -3.9 -1.6 7.8 13.7 0.0 17.2 0.0 18.4 -2.6 0.0 6. 5.1 Chemicals and metallurgy Other manual resources **Equipment and vehicles** Other Business services Textiles and apparel Other manufactures Primary Agriculture Petroleum and coal Tourism and other Communications Gas extraction & Resource based Processed food Metal products manufacturers Public services Oil extraction Construction distribution Electricity Transport services Trade

Since NTMs are most restrictive in Syria, its welfare gain of US\$237 million or about 0.8 percent in per capita terms is the largest among the Levant countries. Lebanon follows closely with gains in per capita terms of 0.6 percent (Table 13). These gains will stem mostly from cost reductions associated with the removal of some NTMs on petroleum products. Jordan, Iraq, and Egypt will also benefit in this reform scenario, but their gains are relatively small in per capita terms. The gains are expected to be small because in nearly all cases the initial AVEs of NTMs are below 10 percent so these countries make significant new concessions in just a few sectors. Turkey makes minor improvements in access in a sector-neutral way and benefits mostly from improved market access in other Levant countries. Its welfare gain under this reform scenario is therefore small.

Scenario 3: Liberalizing Transport Services

Efficiency improvements in the transport sectors of the Levant countries are expected to lower trade-related transport costs within the sub-region and result in an economic expansion. All six countries will benefit from transport services liberalization due to efficiency gains associated with lower transport costs, and in the case of net oil importers, due to positive terms-of-trade effects. The gain to Turkey will be largest in absolute terms (US\$389 million), but small in per capita terms (0.07 percent) (Table 15). Iraq and Syria will gain about US\$177 and US\$99 million, respectively. For Iraq this gain is considerable in per capita terms and represents a welfare improvement of slightly more than one percent of GDP. Lebanon will gain US\$64 million (0.3 percent), while Egypt and Jordan will gain US\$103 and US\$11 million, respectively.

Transport services liberalization is especially favorable to trade in products with high transport margins, such as agricultural commodities, chemicals and resource-based products, and equipment and vehicles. Exports from Turkey to its Levant partners will grow by about US\$722 million, sixty percent of this increase will come from increases of exports to Iraq (US\$455 million) (Table 15), and will stem mainly from an expansion of petroleum, chemicals, and manufactured exports. Egypt's exports to the Levant will likely increase by US\$335 million, with half of the increase coming from an expansion of exports to Turkey and another third to Syria, and a boost to exports of chemicals, natural gas, and processed foods. Jordan's exports to other Levant countries will rise by only about US\$0.8 million, as Jordan's exports shift away from Iraq and towards Turkey and Syria. Lebanon's exports are expected to increase by US\$39 million, with the majority of the increase coming from increased agricultural commodities and manufactured exports to Syria. Syria's exports to other Levant countries will rise by about US\$121 million. Most of the increase is associated with increased exports of crude oil and chemicals to Turkey. Finally, Iraq's exports to the Levant expand by US\$398 billion, largely due to an expansion of crude oil exports to Syria, and to some extent, to an increase of exports of agricultural and manufactured products to Egypt and Turkey. In all countries except Syria, the increase in aggregate exports will be negligible (Annexes 20 through 25).

The spillover effect to the rest of the world will be small and occur mainly through its impact on global energy prices, which will decline as the Levant countries consume less energy. Net energy importing countries will gain while net energy exporting countries will lose as demand for energy products moderates (Figure 32). The biggest beneficiary in absolute terms is the EU, which gains about US\$450 million, followed by Turkey and the U.S.

The MENA countries have higher bilateral trade costs than their EU neighbors (Shepherd and Dennis 2011). A closer look at the different dimensions of transport costs suggests that MENA countries score relatively high in terms of connectivity, but relatively low in terms of facilitation and logistics. The high connectivity score

 Table 15 |
 Impact of Reform in Transport on Bilateral Export Volumes

 (2007 US\$ million)

-		Export	Exports from Turkey to:	ev to:			Export	Exports from Eavot to:	ot to:			Exports	Exports from Jordan to:	an to:	
	Egypt	Jordan	Lebanon	Syria	Iraq	Turkey	Jordan	Lebanon	Syria	Iraq	Turkey	Egypt	Lebanon	Syria	Iraq
Primary Agriculture	2.3	0.4	1.6	0.2	25.5	2.1	-0.1	5.6	9.2	0.3	3.5	0.0	2.4	9.6	-1.0
Processed food	1.4	0.4	1.8	1.1	103.6	28.2	0.3	4.3	17.2	-0.1	0.2	0.0	6.0	2.3	-10.3
Gas extraction & distribution	0.0	0.0	0.0	0.0	0.0	80.3	4.2	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0
Oil extraction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other manual resources	6.0	0.2	0.4	4.8	0.7	1.8	0.0	0.2	-0.2	0.8	0.3	0.0	0.1	0.2	0.5
Petroleum and coal	1.2	2.8	54.6	92.1	4.6	6.3	0.0	3.1	0.1	0.0	9.0	0.0	-0.1	0.0	0.0
Electricity	0.0	0.0	0.0	1.0-	0.7	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Chemicals and metallurgy	27.6	1.9	9.3	15.1	128.6	45.1	0.1	41.7	9.99	-0.4	2.0	7.0-	0.5	4.7	-18.1
Textiles and apparel	7.5	1.6	3.2	4.1	18.0	4.6	0.0	0.3	1.3	0.1	2.4	-0.2	9.0	8.0	0.7
Resource based manufacturers	2.4	1.3	0.4	1.2	30.4	£.	0.1	£.	1.9	0.0	0.1	0.0	0.4	3.0	-5.7
Equipment and vehicles	10.3	0.8	0.8	8.9	105.0	1.4	0.4	9.0	3.8	0.2	0.2	0.0	0.7	3.8	-0.2
Metal products	6.2	1.0	0.2	0.1	36.3	0.4	0.0	0.3	9.0	0.2	0.0	0.0	0.1	8.0	7.7
Other manufactures	1.2	0.1	0.1	0.0	4.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.1
Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transport	0.0	0.0	0.1	0.0	0.2	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Trade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FIRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public services	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Business services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tourism and other services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	6.09	10.3	72.5	122.7	455.2	171.3	4.4	57.4	100.6	1.7	12.3	6.0-	5.6	25.3	-41.5

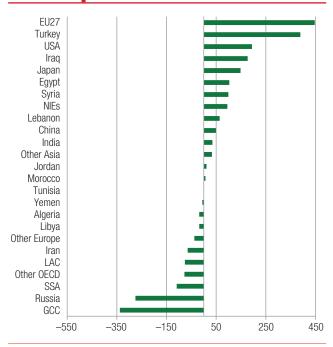
(continued on next page)

 Table 15 | Impact of Reform in Transport on Bilateral Export Volumes (continued)

 (2007 US\$ million)

Particle																
Auxiliary Egypt Jordan Egypt Jordan Egypt Jordan Lukey Egypt Jordan Jordan Jordan			Exports	from Lebar	on to:			Export	s from Syri	a to:			Expor	ts from Ira	q to:	
rey Agriculture 0.2 0.2 1.8 4.0 4.9 -1.9 1.4 1.8 -2.4 3.0 20.2 1.8 0.6 1.9 1.9 1.2 1.7 -4.9 1.3 6.4 1.9 1.5 1.9 1.7 -4.9 1.3 6.4 0.4 1.5 1.0 1.7 -4.9 1.3 6.4 0.4 1.5 1.0 1.7 -4.9 1.3 6.4 0.4 1.5 1.0 1.0 0.0		Turkey	Egypt	Jordan	Syria	Iraq	Turkey	Egypt	Jordan	Lebanon	Irad	Turkey	Egypt	Jordan	Lebanon	Syria
sseed food by 3 of 7 of 8 of 8 of 4 of 5 of 10 of 12 of 7 of 17 of 9 of 10 of	Primary Agriculture	0.2	2.0	1.8	4.0	4.9	0.5	-1.9	1.4	1.8	-2.4	3.0	20.2	1.8	9.0	5.8
buttout the function of the control	Processed food	0.3	0.7	0.8		-0.5	1.0	1.2	0.7	1.7	-9.5	1.3	6.4	0.4	1.5	2.3
transult resources 0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Gas extraction & distribution	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
rmanual resources	Oil extraction	0.0	0.0	0:0		0.0	6.06	0.0	0.2	0.2	0.1	31.3	0.0	0.1	0.0	200.5
rickly 0.0<	Other manual resources	9.0	0.0	0.0	0.2	0.4	1.2	0.1	0.1	0.3	0.4	1.6	0.0	0.0	0.0	1.0
rickly 00 0.0 </th <th>Petroleum and coal</th> <td>1.4</td> <td>0.0</td> <td>0.0</td> <td>0.1</td> <td>0.2</td> <td>5.1</td> <td>0.0</td> <td>0.1</td> <td>0.1</td> <td>0.5</td> <td>1.2</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>4.0</td>	Petroleum and coal	1.4	0.0	0.0	0.1	0.2	5.1	0.0	0.1	0.1	0.5	1.2	0.0	0.0	0.0	4.0
tes and apparell 12 3.3 1.4 6.3 -3.7 15.8 8.6 3.0 4.4 -8.4 10.8 35.1 1.2 0.7 tes and apparel 1.2 3.3 0.2 1.0 0.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.3 1.0 6.0 7.1 29.2 6.5 0.0 6.0 6.0 6.0 7.1 29.2 6.5 0.0 6.0 6.0 7.1 29.2 6.5 6.0 6.0 7.1 7.2 <t< th=""><th>Electricity</th><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></t<>	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
res and apparel 1.2 3.3 0.2 -3.3 1.0 0.6 0.0 7.1 29.2 0.5 0.0 urce based 1.2 -0.1 0.2 -1.3 -1.3 1.0 0.8 1.0 -3.9 1.3 1.5 0.5 0.0 </th <th>Chemicals and metallurgy</th> <td>0.5</td> <td>0.1</td> <td>1.4</td> <td>6.3</td> <td>-3.7</td> <td>15.8</td> <td>9.8</td> <td>3.0</td> <td>4.4</td> <td>-8.4</td> <td>10.8</td> <td>35.1</td> <td>1.2</td> <td>0.7</td> <td>9.1</td>	Chemicals and metallurgy	0.5	0.1	1.4	6.3	-3.7	15.8	9.8	3.0	4.4	-8.4	10.8	35.1	1.2	0.7	9.1
urce based 0.2 -0.1 0.2 -1.3 0.9 0.4 0.8 1.0 -3.9 1.5 1.5 1.5 1.5 1.5 1.0 -3.9 1.0 -3.9 1.0 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9 1.0 -3.9	Textiles and apparel	1.2	3.3	0.2	1.0	0.3	2.2	-3.3	1.0	9.0	0:0	7.1	29.2	0.5	0.0	0.2
productise 0.2 0.1 0.5 4.1 -0.6 1.3 1.0 1.0 0.8 0.3 0.9 4.2 1.3 1.2 Iproductis 0.0 0.1 0.1 0.2 0.2 0.3 0.4 -2.5 0.5 0.5 0.7 0.7 0.0	Resource based manufacturers	0.2	1.0	0.2	8.3	<u>-1</u>	6.0	0.4	0.8	1.0	-3.9	1.3	1.5	2.6	1.0	2.6
l products 0.0 0.1 0.3 -0.8 0.2 0.3 0.4 -2.5 0.2 0.5 0.3 0.4 -2.5 0.2 0.3 0.4 -2.5 0.2 0.3 0.4 0.5 0.4 0.5 0.6 0.0	Equipment and vehicles	0.2	0.1	0.5	4.1	9.0-	6.3	1.0	1.0	8.0	0.3	0.0	4.2	6.7	1.2	0.2
rmanufactures 0.1 0.1 0.2 <	Metal products	0.0	0.1	0.1	0.3	8.0-	0.2	0.3	0.3	0.4	-2.5	0.2	0.5	9.0	0.3	3.6
truction	Other manufactures	0.1	0.1	0.0	0.3	0.4	0.2	0.2	0.0	0.0	0.3	0.2	0.3	0.0	0.0	0.2
sport 0.0 0.0 0.0 0.1 0.1 0.0 </th <th>Construction</th> <td>0.0</td>	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hunications 0.0 <th< th=""><th>Transport</th><td>0.0</td><td>0.0</td><td>0.0</td><td></td><td>0.0</td><td>0.1</td><td>0.1</td><td>0.0</td><td>0.0</td><td>0.1</td><td>-0.1</td><td>-0.1</td><td>0.0</td><td>0.0</td><td>0.0</td></th<>	Transport	0.0	0.0	0.0		0.0	0.1	0.1	0.0	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0
munications 0.0 <th< th=""><th>Trade</th><td>0.0</td><td>0.0</td><td>0.0</td><td></td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></th<>	Trade	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c services -0.1	Communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c services -0.1 0.0 <th< th=""><th>FIRE</th><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></th<>	FIRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rusiness services 0.0 -0.1 0.0 0.0 0.0 -0.1 0.0	Public services	-0.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
sm and other services 0.0	Other Business services	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.2	0.0	0.0	0.0
4.7 6.2 5 23 -0.7 119.2 6.5 8.8 11.3 -24.9 58.7 96.9 8.4 5.4	Tourism and other services	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	4.7	6.2	2	23	-0.7	119.2	6.5	8.8	11.3	-24.9	58.7	6.96	8.4	5.4	228.5

Figure 32 Welfare Effects from Transport Reform (2007 US\$ millions)



can be attributed to the fact that port and shipping density is high in the Mediterranean and around the Arabic Peninsula. Among MENA countries, Egypt and Morocco stand out with their major and successful transshipment activities, while Tunisia lags behind because of delayed decisions on new port investments.⁴¹ Still, the connectivity ranking overstates the de facto intraregional connectivity because of the lack of hub port development in the southern Mediterranean.

Scenario 4: Services Trade Liberalization

The opening up of the service sectors to competition within the New Levant zone will result in sizable welfare gains in all countries. This reform is expected to improve the efficiency of service companies engaged in cross-border trade and is modeled as a productivity shock that lowers the effective prices of imported services. Competition is expected to boost productivity

and lower production costs as well as the costs of importing services from countries within the Levant. The results, however, differ by country because of the differential impact of the productivity improvements. Turkey is already a productivity leader in most services sectors so any further productivity gains will affect relatively few sectors (Table 16). Thus, its welfare gain is expected to be relatively small in per capita terms (1.7 percent) (Table 16). Iraq will gain US\$2.3 billion and its welfare gain will be largest in per capita terms (15.4 percent) due to the fact that Iraq's service sectors are among the most inefficient in the zone, meaning that reforms will bring about considerable savings. Syria and Egypt are expected to accumulate welfare gains of US\$3.0 billion and US\$11.7 billion respectively (each equivalent to a 10.5 percent increase in per capita welfare), while Jordan and Lebanon will gain US\$1 billion (6.3 percent) and US\$543 million (2.4 percent), respectively.

The largest productivity gains for Turkey are expected to occur in construction, where Lebanon is considered the regional leader, and in trade in business services, where Jordan is the regional leader. As productivity improves in construction, and to a much lesser extent, in other service sectors (see Table 16), construction activity will expand and the price of construction services will decline. To the extent that construction services are used as intermediate inputs into other sectors, there will be a broad-based expansion of economic activity and investment in Turkey. Since real returns to labor and capital will rise, domestic demand and demand for exports in the Levant zone will be lifted, driving up prices of goods made in Turkey and export prices, but lowering demand for Turkish exports in the rest of the world (Annex 20).

The opening up of the services sectors of Egypt, Jordan, Lebanon, Syria, and Iraq to greater competition

According to the World Bank Doing Business database, in the case of exporting a container, the lowest cost country in MENA is Morocco, while in the case of importing a container, Egypt is the lowest cost country, while Jordan is the lowest cost land-locked country.

Table 16 Productivity Growth Associated with Services Liberalization in the Levant *(percent)*

	Turkey Import- augmenting	Value- added	Jordan Import- augmenting	Value- added	Lebanon Import- augmenting	Value- added	Egypt Import- augmenting	Value- added	Iraq Import- augmenting	Value- added	Syria Import- augmenting	Value- added
Construction	0.0	12.9	9.3	29.7	9.3	0.0	27.3	55.5	9.3	75.7	9.3	68.5
Trasnport	0.0	0.0	26.8	25.8	26.3	20.1	16.1	35.7	17.8	71.6	17.8	37.1
Trade	0.0	4.4	25.0	21.8	25.0	0.0	50.0	21.6	17.9	62.5	17.9	19.6
Communication	0.0	0.0	25.0	25.8	25.0	20.1	25.0	35.7	26.8	71.6	26.8	37.1
FIRE	0.0	0.0	39.0	19.3	39.0	8.1	39.05	31.5	31.3	53.2	31.3	38.3
Business Services	15.9	0.0	0.0	19.3	7.9	8.1	10.7	31.5	1.9	53.2	1.9	38.3
Tourism & Other Services	0.0	4.4	9.3	21.8	9.3	0.0	27.3	21.6	9.3	62.5	9.3	19.6

and investment within the Levant zone will improve the productivity of services, and lift real wages and returns to land and capital in these countries.⁴² This reform is expected to boost investment and economic activity in the services sectors and induce a shift of resources into services. In Egypt, Iraq, and Syria, there will be a broad-based boost to economic activity, affecting agriculture, food processing, chemical, and manufacturing industries, while reliance on crude oil exports and production is expected to decline slightly.

⁴² It is assumed that as a result of the reforms, services sectors' value added per employee in the Levant zone would start converging to the highest value added per worker in the group. The convergence would be gradual and complete convergence is not expected within a 20-year period (all government-related services are excluded from the analysis). Since the simulation results are representative of what is likely to happen in a three to five year timeframe, the productivity shocks required for complete convergence over a 20-year period are first computed and annualized, and then cumulated to represent the productivity growth expected in the span of three years.

3

TRADE AND INVESTMENT REGIMES

rade and investment are the two primary channels that countries in the region could use to aid further integration and take advantage of their complementarities. This chapter reviews and compares the trade and investment regimes of Turkey, Jordan, Lebanon, Iraq, Syria, Egypt, and the Palestinian Territories with a view to identify the areas of reforms needed to harmonize their policies in order to improve competitiveness collectively and increase trade and investment flows among them. These countries demonstrate high potential to integrate faster as a sub-group. Because the trade and investment regimes and the degree of competitiveness vary widely among the countries, a free trade arrangement in the region would benefit relatively more the competitive ones unless the others undertake the reforms identified in this chapter and enhance their competitiveness. It is essential therefore to stress the point that these reforms are preconditions for a mutually beneficial regional economic integration. The chapter provides detailed recommendations for improvement of the trade and investment regimes.

It is also important to note that improving and harmonizing trade and investment regimes are necessary but not sufficient for improving competitiveness on a sustained basis. Complementary behind-the-border reforms must be implemented. In particular, the investment/business environment must be strengthened to promote private investment by both local and foreign investors. The policy package to achieve this objective would include the provision of adequate infrastructure services, finance, and training, a supportive exchange rate policy, and elimination of administrative barriers, as well as sector-specific policies directly affecting the sub-sectors with latent comparative advantage.

Overview of Policy Recommendations

The level of development, structure of the economy, institutional capacity, policy stance, and competitiveness vary widely among the countries in the Levant. Turkey is prominent in the sub-region in almost all categories of economic indicators. It also has a broad production structure and a diverse export base in terms of both products and trading partners. Turkey is better integrated into the global and regional economies. It became a member of the WTO in 1951 and joined the EU Customs Union in 1996. It also has 16 bilateral FTAs and is in the process negotiation of scores of new

ones. The Customs Union with the EU, in particular, helped substantially by facilitating the alignment of Turkey's legal and institutional system and the policy environment to the EU's.

Being in transition from an efficiency-driven to an innovation-driven stage of development, Turkey will need to continue implementing efficiency enhancing policies for productivity and quality improvement through supporting investment in new technology particularly in the small and medium enterprise (SME) sector and enhancing standards management, while focusing increasingly more on innovation and product diversification by promoting research and development both at the company and academic level and attracting FDI. A more competitive exchange rate policy is also a key factor in maintaining the export momentum.

Given its size, level of development, and institutional capacity Turkey could serve as one of the growth poles for the sub-region through opening its large market to the goods and services produced by the group, investing in the region, and providing technical assistance in a range of areas including institutional capacity building. In return, deeper and wider integration with its neighbors benefits Turkey in terms of diversifying its trade and securing economic and political stability in the region.

Among the Levant countries, only one economy—Turkey—ranks among the world's 50 most competitive economies. A measure of the Levant region's economic heterogeneity can be gleaned from the contrasting performance of the country sample with regard to overall competitiveness levels as measured by the Global Competitiveness Index (GCI). The latest GCI results (Table 17) depict a region where Turkey's performance over the 2011–13 period shows a significant improvement, notching up a remarkable gain of 16 places in world rankings. Lebanon ranks 91st out of the 144 countries surveyed. Egypt and Jordan lost competitiveness suggesting the influence of some of the negative economic consequences and deteriorating investment climates arising

from the recent political turmoil that has engulfed much of the region.

Jordan and Lebanon cannot rely on their small domestic markets for sustained growth. They need to pursue export-oriented strategies and take advantage of the regional opportunities. Liberalization of trade in services is particularly important for both countries in regional integration agreements. However, they will need to focus on different reform agenda to advance their competitiveness.

Jordan has well-developed trade and investment regimes thanks to the substantial technical assistance it received in the context of WTO accession, the Association Agreement (AA) with the EU, and the FTA with the U.S. Improvement in competitiveness will therefore depend largely on (i) effective implementation of the trade regime, and (ii) the improvement of its behind-the-border policies—high tax incidence, high cost of transport and utilities, administrative hurdles, chronic water shortage, energy deficiency, low domestic savings, and a complex incentive system.

The trade regime in Lebanon, in contrast, leaves much to be desired. As detailed later in this chapter, Lebanon does not have a clear trade policy and institutional capacity to diversify its export base beyond a few services sectors. Its doing business ranking (104) is also lower compared to Jordan (96). This is explained largely by political fragmentation in policy-making in the country. Lebanon should therefore focus on improving both its trade regime and capacity and behind-the-border policies.

Table 17 ■ Global Competitiveness Index 2011–2013^a

	Ranking 2011–2012	Ranking 2012–2013	Δ
Egypt	94	107	-13
Jordan	71	64	- 7
Lebanon	89	91	+2
Turkey	59	43	+16
Syria	98		

Source: World Economic Forum.

^a Sample size: 144 countries.

In Syria and Iraq, the oil sector plays a key role.

Syria has taken important steps since the mid-1990s to diversify its production and export base, and enhance private sector orientation of its economy. However, there is still a long way to establish a sustainable business-friendly policy environment to enable private-sector driven export-oriented growth. This calls for substantial improvement both in the trade regime and behind-the-border policies. Once the situation normalizes the recommendations made in this report would be useful to restore and strengthen the regional trade and investment ties in order to take advantage of opportunities exist in the neighboring countries. Iraq's economy is heavily dependent on (i) oil production and exports, (ii) public sector for employment creation, and (iii) imports of products for which Iraq has latent comparative advantage. The main objective should be to reduce these dependencies by stimulating private investment in non-oil activities where Iraq has comparative advantage. Initially, emphasis would be on replacing imports with domestic production to establish a diverse production base. This would follow an export promotion strategy to diversify exports away from oil. The present policy environment including trade policies is not adequate to achieve these objectives. Therefore, significant efforts should be made to improve the behind-the-border policies and trade regime in parallel.

Policy recommendations should be complemented with behind-the-border reforms. Table 18 summarizes the main recommendations for improving only the trade and investment regimes of Syria, Jordan, Lebanon, and Iraq. The analysis and recommendations do not cover trade in services because it is taken up in another chapter. The importance of complementarity between trade and behind-the-border policies in determining competitiveness is well illustrated by a comparison of Jordan and Turkey. In doing business indicators, Jordan ranks higher than Turkey in the Trading Across Borders sub-indicator—58 versus 80. This is more than offset by ranking in other indicators, which reflect the impact of behind-the-border policies. As a result, Turkey's overall doing business ranking is 71 compared to Jordan's 96.

Turkey: Trade and Investment Regimes

In the past 30 years, Turkey has substantially strengthened export orientation of its economy by improving its trade regime and complementary behind-the-border policies including macroeconomic and sectoral policies and broader business environment. The customs union with the EU, which entered into force on January 1, 1996, accelerated the transition from import substitution to export promotion. It facilitated the alignment of Turkey's legal and institutional system and the policy environment to the EU's and the locking in of its reforms. As a result, Turkey has now a more diverse and competitive export base in many subsectors compared to other countries in the region.

Exports have responded well to policy improvements with an annual average growth rate of about 10 percent in current dollars in the past 30 years. The composition of exports—both products and trading partners has also changed significantly. The government intends to maintain this momentum. It set a target of total exports of US\$500 billion in 202343 (from US\$143 billion in 2011) together with improving the quality and sophistication of the exported products and reducing the import content of exports. Given the less favorable global environment in the future, this aggressive growth target can be achieved only by a substantial increase in Turkey's share in world trade. This, in turn requires (i) significant enhancement of both the price and non-price competitiveness of Turkish products through improvement in the quality and sophistication of exportables, and (ii) further diversification of exports by products and trading partners. It also requires new investment and a marked increase in national savings from its current level of 15 percent. One should also consider the potential conflict among the objectives. For example, improving quality and sophistication of exports may require an initially high level of imports.

⁴³ The 100th year of the foundation of the Republic of Turkey.

Table 18 Summary of Policy Recommendations

Syria	Jordan	Lebanon	Iraq
	Tariffs and (Other Charges	
Reduce the number of tariff bands to 3 or 4 and eliminate the nuisance taxes. Replace numerous other taxes and charges with VAT, excise, and a small number of services rendered by customs		Reduce the number of bands to 3–4 and the maximum rate to a more moderate level. Consolidate the remaining fees and charges and bring them conformity into WTO rules.	Implement the new tariff schedule as soon as possible to support domestic production after reducing the non-zero bands to 3–4 and after improving the customs administration.
	Non-Tarif	f Measures	
Review the remaining NTMs, identify the ones with largest impact, and prepare a program for gradual elimination or selective tariffs.		Enact the Law on International Trade and Licensing to eliminate ministerial discretion in non-automatic licensing to avoid its use of vested interest and exclusive agency licensing. Ensure conformity with the WTO rules.	Rescind the new Ministry of Trade Directive on resumption of import and export licensing.
	Customs A	dministration	
Continue reforms with emphasis on implementation of modern risk management, automation of business processes, introduction of one-stop shops at the borders operationalization of the anti-corruption unit, and training of staff.	Speed up the custom clearances by increasing the share of goods going through the green channel significantly from the current 20 percent. One way to achieve this objective is to increase the number of mutual recognition agreements.	Implement the EU Twinning Program as soon as possible to modernize the customs administration in order to improve efficiency, reduce delays, and ensure good governance.	Prepare and implement a comprehensive reform and modernization program focused on adoption of international standards and investment in infrastructure with particular attention to the selection of an automated customs system and capacity building in all aspects of a modern customs administration. Technical assistance will be needed to prepare and implement this program.
	Standards and Conformity	Assessment Infrastructure	
Accelerate implementation of the Quality Management Program financed under EU technical assistance.	Amend the Standards and Metrology Law to incorporate provisions for market surveillance. Significantly improve the institutional and skill capacity for market surveillance. Enact the Accreditation Law and establish an independent Accreditation Agency.	Seek further technical assistance to continue reforming the standards infrastructure. In particular, adopt the National Quality Policy, operationalize Qualeb ^a and COLIBAC. ^b	Prepare and implement a comprehensive modernization program, which would include: separation of standards setting, conformity assessment and certification, and measurement and calibration functions; investment in infrastructure and capacity building; encouragement of private laboratories; and arrangement of mutual recognition programs. Technical assistance will be needed to prepare and implement this program.
	Export I	ncentives	
Amend the Customs Law to extend drawback to all imports used in production of exports. Also, include tariff and tax exemption option and bonded warehousing in the Law. Put in place an effective implementation mechanism and ensure that refunds are paid in a timely manner.	Improve the institutional and skill capacity of the Enterprise Development Corporation.	Prepare an Export Growth and Diversification Strategy as a policy guide, set up an Export Promotion Agency, establish an effective duty and tax drawback system permitted by the Customs Law.	Prepare an Export Development Strategy, develop an export assistance and incentive system, and set up an Export Promotion Agency to implement the strategy. Incentives would include a duty/tax drawback and credit guarantee schemes. Institutional assistance program would include collection and

(continued on next page)

dissemination of information, organization of buyer-seller meetings and trade fairs, preparation of manuals, and provision of services such as business incubation, market research, and consultation.

Table 18 Summary of Policy Recommendations (continued)

Syria	Jordan	Lebanon	Iraq
	Free	Zones	
Amend the free zone legislation to do the following: Apply tax exemptions to a limited period rather than for the life of the investment, lift restriction on purchases from local market to strengthen backward linkages, transfer management of free zones to private sector under management contracts. Include EPZ and single-factory EPZ concept in the Customs Law to encourage export activities in the Industrial Cities.	Separate the operational and regulatory roles of the Free Zones Corporation. This could be done by transferring the management of public free zones to the private sector and designating the Free Zones Corporation as a regulatory authority. Introduce the single-factory EPZ scheme.	Transfer the management of the free zones to the private sector. Establish industrial parks and clusters, and introduce single-factory EPZ scheme to expand the industrial base and exports.	Transfer the management of the free zones to private sector to separate the regulatory and operational role of the Free Zones Authority, set up industrial parks with good infrastructure facilities to encourage formation of clusters, and introduce single-factory export processing zones scheme.
	Trade	Finance	
Improve book-keeping and accounting practices in the private sector for transparent financial statements to facilitate accurate risk assessment by the banks, enhance credit information system and risk assessment skills in the banking sector, introduce credit guarantee and loan registry systems.		Increase the size of Kafalat's financial resources and capacity to provide technical assistance to SMEs in areas such as loan application, project preparation, financial management.	In the context of broader financial sector reforms introduce dedicated credit for exporters or loan guarantee schemes and trade insurance system to ease access to credit and reduce risks.
	Institutional Capacity	and Policy Coordination	
Set up a secretariat for the Higher Export Council housed in EDPA to ensure that the Council has adequate data and information to carry out its responsibilities. Conduct a needs assessment to identify the skill and institutional needs and develop a program to improve implementation and analytical capacity of the MoET, EDPA and other concerned agencies. Seek technical assistance to implement the program.		Set up a high level Export Council chaired by the Prime Minister and composed of concerned ministries and representatives of the private sector to effectively coordinate and guide export policies.	Set up an Export Sub-Committee in the Economic Committee of the Council of Ministers to guide the trade policies, monitor implementation, and better coordinate policy formulation and implementation. Ensure participation of the representatives of the private sector in the Export Sub-Committee. Encourage exporters to form an Exporters Associatio as an advocacy body.
	Trade Ag	reements	
Ratify the Association Agreement with the EU. Accelerate negotiations with the WTO for accession.		Meet the remaining requirements (mainly enactment of various laws and regulations) to conclude WTO accession process, and ratify the FTA with Turkey as soon as possible.	Finalize Iraq's Goods Offer and Services Offer and submit to the WTO in order to accelerate accession negotiations.
	Investme	nt Regime	
Eliminate the remaining restrictions on FDI particularly on ownership. Seek technical assistance to improve capacity of Syrian Investment Agency. Operationalize the one-stop shop facility.	Consolidate different investment incentive schemes under one single scheme for simplicity and clarity.	Improve the capacity of Investment and Development Agency of Lebanon to provide a wider set of services to the investors, and operationalize its one-stop shop arrangements.	Continue implementation of the reforms recommended by the "Iraq Investment Climate Assessment."

Note

^a Lebanese Accreditation Body.

b QUALEB is a EU funded project formally established in 2004 at the Ministry of Economy and Trade of Lebanon. QUALEB's overall mission is to provide extensive support and advice to strengthen quality management, capabilities and infrastructure in Lebanon.

Turkey's Trade Regime⁴⁴

Policies Directly Affecting Imports

Import duties and other charges. Turkey uses the 2007 HS coding system with 16,448 tariff lines at the 12-digit level. The average applied MFN tariff on industrial goods, which is common with the EU, is 4.1 percent. However, the average applied MFN tariff for all products amounts to 12.2 percent, because of a high average tariff of 47.9 percent for agricultural products. The tariff peaks are also higher in the agricultural sector—over 100 percent for meat and dairy products. Duty-free items represent 23.2 percent of all tariff lines, and 98.3 percent of tariff lines carry ad valorem rates. Other charges include a Mass Housing Fund levy on imported fish and fish products and various fees for the customs-related services.

A value-added tax (VAT) on goods and many services applied at the general rate of 18 percent (and the reduced rates of eight and one percent on some products) and a special consumption tax (SCT) on oil products, motor vehicles, alcoholic beverages, tobacco products, and various luxury goods (that vary from one to 84 percent), are levied equally on domestically produced and imported products.

Non-tariff measures. Turkey prohibits importation of 10 items by broad product category for health, safety, public moral, and environmental reasons consistent with the international rules. Licensing is not required for imports except for various products for national security and safety reasons as well as securing after-sale services and maintaining adequate stock of spare parts and accessories. The certificates for most of these products are issued by the Ministry of Science, Industry and Technology.

Standards and conformity assessment infrastructure. The Customs Union with the EU necessitated the adoption of EU's technical barriers to trade (TBT) and sanitary and pytosanitary (SPS) regulations and conformity assessment procedures to eliminate all technical barriers to trade with the EU. The TBT and SPS regulations

impose product requirements and specifications on imported and domestically produced goods, including requirements related to health and safety, environmental aspects, and labeling. Turkey has made significant progress in this regard. The regime Turkey has set up since 1996 for Technical Regulations and Standardization for Foreign Trade is revised annually in the light of progress in the transposition of EU legislation into Turkey's legal system. Turkey has so far transposed around 82 percent of the EU directives into Turkey's technical regulations. They cover about 70 percent of manufactured goods imported into Turkey.

Turkey has set up two national TBT Enquiry Points; the Directorate General of Product Safety and Inspection (under the Ministry of Economy) for technical regulations and conformity assessment procedures, and the Turkish Standards Institution (TSE) for standards. The General Directorate maintains a website to facilitate access to TBT notifications. The TSE develops and implements standards for products produced in and imported to Turkey. It is a full member of ISO and other international and European standards institutions. At present, Turkey has 33,097 standards, all of which are voluntary. For the SPS measures, the national Enquiry Point and Notification Authority is the General Directorate of Food and Control of the Ministry of Food, Agriculture and Livestock.

Turkey introduced a new Product Safety System in 2010 to facilitate electronic risk-based import and export control of goods. Turkey's conformity assessment procedures vary according to whether the product is covered by transposed EU Directives, and the risk level of the product. All products covered by the EU

This section draws partly on "Turkey Trade Policy Review (2012)," World Trade Organization, WT/TPR/259.

⁴⁵ Narcotics, ozone depleting substances, chemical weapons, measurement instruments not conforming to Turkish norms, arms and ammunitions, gambling instruments, spawn of silk-worm, soil, leaf, and natural manure.

⁴⁶ Telecom equipment, some home appliances, motor vehicles, fertilizer, oil, and gas.

Directives must carry the Conformite Europeene (CE) mark obtained from accredited institutions in the origin country or in Turkey. Other products must meet the requirements of the relevant Turkish TBT and SPS regulations for market access depending on the risk level of the product. Suppliers' declaration of conformity assessment is sufficient in most cases. In others (particularly foodstuff, agricultural products, pharmaceutical products, drugs, cosmetics, detergents, forestry materials), "control certificates" must be obtained from authorized Turkish Ministries.

The Turkish Accreditation Agency (TURKAK) is responsible for accrediting domestic and foreign conformity assessment bodies and ensuring that they carry out laboratory, certification, and inspection services in accordance with international standards. Turkey has about 5,000 accredited public and private laboratories and 120 accredited certification bodies.

All imported or domestically produced products are subject to market surveillance activities carried out by 10 public authorities.⁴⁷ The Market Surveillance Board in the Ministry of Economy coordinates these activities and prepares annual reports on the outcome.

In the WTO TBT Committee, four cases of concern have been raised against Turkey related to the lack of transparency in development and implementation of measures, incomplete and untimely notification to the WTO, and insufficient time provided to adapt to relevant requirements.⁴⁸ Notwithstanding the significant progress made, further improvement is necessary for full alignment with the EU and international norms.

Policies Directly Affecting Exports

Export restrictions. Turkey applies export taxes on raw skins, and both shelled and unshelled hazelnuts. The revenue is earmarked for the Support and Price Stabilization Fund. Turkey prohibits exports of 12 items, mostly agricultural products, for environment, health and cultural reasons. Export of some 150 agricultural products (at HS 12-digit level) including citrus fruit, apples, groundnuts, certain edible oils, dried apricots,

dried figs, and some hazelnuts, are subject to compulsory quality control. "Control certificates" for these products indicate conformity with established standards. The regional branches of the Ministry of Economy issue the certificates.

Export incentives and promotion. Exports of 16 agricultural products are eligible for export subsidies. 50 This program is financed from the Support and Price Stabilization Fund. Also, exporters benefit from duty and tax concessions under the inward processing and bonded warehousing schemes. Duty and tax reimbursements are made generally in a timely manner. Exports are exempted from VAT and SCT. Exporters are allowed to deduct duty and tax drawback from their tax obligations.

Turkey has 11 government assistance programs for promoting exports, some of which target SMEs, ranging from technical assistance and advisory services to exporting companies to market research and promotion of Turkish trademarks. The Ministry of Economy, Turkish Exporters Union, Small and Medium Enterprises Organization (KOSGEB), and Turkish Technology Development Foundation administer these programs. Additional support is provided through a wide range of SME assistance program including small industry estates, organized industrial zones, technology development zones and other financial assistance and technical assistance programs implemented by KOSGEB. Since 1962, Turkey has established over 100 small industry

⁴⁷ The Ministries of Science, Industry and Technology; Customs and Trade; Labor and Social Security; Health; Food, Agriculture and Livestock; and Environment and Urban Planning; Maritime Affairs; and the Regulatory Authorities for Energy, Tobacco and Alcohol, and for Information and Communication Technology.

⁴⁸ Turkey Trade Policy Review (2012)

⁴⁹ Including wild animals; tobacco seeds and seedlings; plants of olive, fig, seedless sultanas, and hazelnuts; and wood.

Out flowers, frozen vegetables, dried vegetables, frozen fruit, pastes and preserves, honey, homogenized fruit preparation, fruit juice, prepared fish, poultry, meat, eggs, chocolate, biscuits, olive oil, and macaroni.

⁵¹ Turkey Trade Policy Review (2012)

estates, 93 organized industrial zones, and 43 technology development zones. Companies operating in these zones benefit a variety of financial incentives including subsidized rent and concessional tax rates.

Free zones. Turkey has 19 free zones operating under the Free Zones Law (1985) and Free Zones Regulation (1993). A free zone may be developed and operated by the public or private sector, or by the two sectors in partnership. Investors in the zones may construct their own premises within the free zones, but office space, workshops and warehouses are also available for rent. The operating licenses for the companies in the zones vary from 15 to 45 years depending on the type of operation.

Financial benefits available to free-zone companies include exemption from payment of customs duties and fees, exemption from corporate and income tax, and VAT. These benefits apply to the exported part of the products produced or processed in the free zones. Sales into the domestic market are subject to Turkey's MFN import regime including the payment of import duties and taxes.

Companies operating in the free zones are active in a wide range of areas including high-tech products—manufacturing or assembling. The free zones in Turkey have not been successful in attracting FDI. Only 20 percent of the 2,500 companies operating in the free zones are foreign companies. This is explained partly by the selection of the location of the zones, which is determined mainly on the basis of political or regional development objectives. Export orientation of the zones is also weak. More than half of the products produced or processed in the zones are sold in the domestic market. The government is planning to re-organize the free zone system in a way to be more effective and consistent with the EU regulations.

Export finance. The Turk Eximbank, a state-owned bank established in 1987, operates a number of export credit, guarantee, and insurance schemes to support Turkish exporters, outward investors, and foreign contractors to help increase and diversify exports of goods

and services from Turkey. Its financial support amounts to seven to eight percent of total Turkish exports.

The Bank can extend credit for short-term operational support (including pre-shipment activities) or longer-term investment activities, allocated through the commercial banks in Turkey or directly by the Eximbank. Importers in the client countries purchasing Turkish goods and services are also financed under a sovereign guarantee or a reputable bank guarantee in favor of the Turk Eximbank.

Issues

Turkey has faced substantial adjustment pressures recently associated with increased international integration. First, more than half of its exports and imports are tied to the European Union market with which it has had a common external tariff through the customs union since 1995. Thus recent weak growth in Europe due to the economic recession and ongoing EU debt crisis has significantly impacted its exports, as has a recent wave of new FTAs that the EU has negotiated with third countries (i.e., Mexico, South Africa, South Korea) that are competitors in the EU market and to which Turkish producers are losing tariff preference margins. Second, Turkey's relatively low MFN tariffs (due to the EU customs union) imply it is relatively open to imports from third countries. Third, Turkey has also recently signed a number of FTAs with MENA countries, and for most of them Turkey has already implemented its part of the liberalization bargain thus giving the trading partner free trade access to the Turkish market. The combination of these factors have contributed to the fact that Turkey is now one of the heaviest users of temporary trade barriers (TTBs) globally.

In a number of instances, Turkish government policymakers' use of import-restricting TTBs has direct implications for partners in the MENA region. Table 19 provides information on three case studies.

The first example is a request that Turkey's domestic yarn producers made in 2012 for the Turkish government to initiate an antidumping investigation on

Table 19 Examples of Turkey's Trade Frictions Impacting MENA Partners

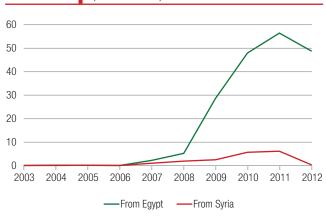
	Product: trade policy	Examples of MENA Trading Partner(s) Affected†	Year of TTB policy action	Affected bilateral trade (estimate)*
1.	Synthetic yarn: Antidumping on imports from Egypt, Malaysia, Pakistan, Thailand and Vietnam	Egypt (-) Syria (+) Iran (+) Tunisia (+)	2012	\$56m \$6m \$600k \$320k
2.	Cotton yarn: Safeguard on imports	Egypt (+) Syria (+) Lebanon (+)	2008 (extended in 2011)	\$66m \$58m \$170k
3.	Polyethylene terephthalate (PET): safeguard on imports	Iran (-)	2011	\$104m

Notes: Compiled by the author from the Temporary Trade Barriers Database matched to trade data available from UN COMTRADE Database via WITS. †Expected positive (+), negative (-) or uncertain (?) outcome for the listed exporter, given the likely way that the new TTB import restriction would be applied and whether the exporter would be excluded or exempted. *Estimates of bilateral imports of the affected products taken at the 6-digit HS level.

synthetic and man-made yarn from Egypt, Malaysia, Pakistan, Thailand and Vietnam. Total imports in those product categories had increased from US\$431 million in 2009 to US\$737 million in 2011. Figure 33 indicates that Egypt had become a major supplier of such products to the Turkish market, having doubled its exports during that same period from US\$28 million to US\$56 million. These are also important products for Egypt; in 2012 they formed roughly four percent of total bilateral goods exports to Turkey.

However, part of the reason that Egypt had grown into a such a major supplier of these yarns for the Turkish market is because of trade diversion related to the new "preference" it had received due to other major suppliers of these products—specifically China, India, and Indonesia—all being subject to an earlier Turkish antidumping case that resulted in import restrictions being imposed in 2009; these import restrictions were still in effect in 2012. By the time of the initiation of the earlier antidumping case on the same products in 2009, each of these countries had annual exports in these products to Turkey of US\$100-\$200 million. With their market access curtailed by Turkey's sudden use of antidumping in 2009, other exporters—in this case Egypt, Malaysia, Pakistan, Thailand and Vietnam—that were not subject to those import restrictions filled the gap and increased their exports to Turkey until they too became subject to Turkey's new import restrictions under antidumping.

Figure 33 Turkey's Imports of Synthetic Yarn from Selected Source Countries
(US\$ millions)



Source: UN COMTRADE Database.

Exporters in Syria, and to a lesser extent Iran and Tunisia, may be able to learn from this experience.⁵² As Figure 33 also indicates, Syria is similar to Egypt in that it has also experienced a period of increasing exports of these yarn products to Turkey, growing from US\$2.4 million in 2009 to US\$6.1 million in 2011. Syria's exporters enjoyed some preferential access beginning with the 2009 antidumping case and they now stand to have even

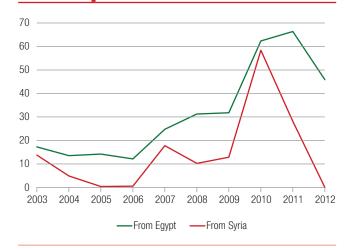
⁵² In recent years for these product categories, Iran had as much as US\$600,000 in annual exports to Turkey and Tunisia had as much as US\$320,000 in annual exports to Turkey.

greater preferred access to the Turkish market, ceteris paribus, if Turkey were to impose additional antidumping import restrictions on Egypt and the other four countries currently under investigation. On the other hand, if exports from Syria grow too fast to fill the gap left by these other exporting countries, Syria could be the next in line for any new Turkish antidumping import restrictions on synthetic yarn.

The second example for Turkey is its 2008 cotton yarn safeguard. Overall, Turkey's total imports of cotton yarn more than doubled from 2005 to 2007 from US\$266 million to US\$555 million. The major foreign sources of Turkey's cotton yarn imports were India and Uzbekistan, each with over US\$100m in exports in 2007, followed by Pakistan, Turkmenistan, and then Egypt and Syria. The rules of the WTO's Agreement on Safeguards indicate that when countries like Turkey apply a new safeguard import restriction, it is supposed to exempt from the application of the import restriction the de minimus producers in developing countries; these are defined as exporters that have less than three percent of the import market and collectively less than nine percent of the market. In this instance it appears that Turkey designated both Egypt's and Syria's exporters as de minimus developing country suppliers, thus exempting them from the applied import restrictions and giving them additional preferential access to the Turkish market beginning in 2009.53

As Figure 34 indicates, both Egypt and Syria increased their exports of cotton yarn to Turkey substantially during the years 2009–2012 during which the safeguard was imposed on competitors and during which the two countries enjoyed additional preferential access to the Turkish market.⁵⁴ Indeed, by 2010, cotton yarn had become one of the most important export goods for these countries to the Turkish market—cotton yarn exports made up 4.5 percent of Egypt's and 8.9 percent of Syria's total bilateral goods exports to Turkey. However, it is also important to note that this preference period for Syria and Egypt to the Turkish market has now ended. India brought a formal WTO

Figure 34 Turkey's Imports of Cotton Yarn from Selected Source Countries
(US\$ millions)



Source: UN COMTRADE Database.

dispute against the Turkish safeguard in 2012 that led Turkey to end the safeguard and restore more nondiscriminatory treatment (for Egypt and Syria in relation to other countries); this may lead to a new period of adjustment for Syria's and Egypt's cotton producers and exporters as they now face more competitive conditions in the Turkish market.

Turkey's third example is a 2012 safeguard investigation on imports of polyethylene terephthalate (PET). This is another product that Turkey has subjected to substantial TTB policy activity during the recent period of increased international integration. In particular, in January 2011, Turkey removed a set antidumping import restrictions on PET from seven countries (India, Thailand, South Korea, Malaysia, Indonesia, China, and Taiwan, China) that it had imposed and which had been in effect since 2006. As Figure 35 indicates, the antidumping

While Egypt was explicitly listed as a de minimus supplier in the report published on the case by the WTO Committee on Safeguards, Syria was left off the list. However, given Syria's export response this may have been a typographical omission and the safeguard was probably not enforced against imports from Syria.

While not shown on the figure, Lebanon also had up to US\$170,000 in annual exports to Turkey in these products.

case did little to slow Turkey's overall import growth in PET. By 2011, total PET imports were US\$413 million, more than double their 2006 levels. What had happened in the period after the antidumping import restrictions were imposed is that Turkish consumers simply switched to alternative foreign suppliers that were not subject to the antidumping measures.

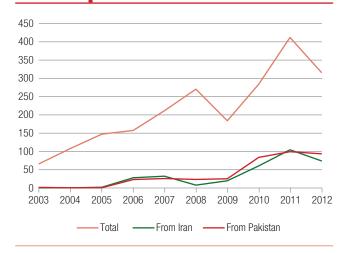
Figure 35 also indicates that by 2011, countries such as Iran and Pakistan—i.e., countries that the trade data records as having zero exports of PET to Turkey as recently as 2004—had expanded exports substantially, collectively providing 50 percent of the Turkish PET import market. This continued pressure from imports despite the imposed antidumping import restrictions led Turkey in March 2011 to initiate a new TTB investigation on the same, 12-digit tariff line product code for PET as were part of the original antidumping investigation in 2006, this time under its safeguards law. Turkey subsequently applied new safeguard import restrictions on these products from sources including Iran and Pakistan by September 2011. For Iran, PET exports are one of its important, nonoil exports—they constitute roughly one percent of total bilateral exports to Turkey in 2011 and were ranked by value as the fifth largest 6-digit Harmonized System product category.

Turkey's Investment Regime

The legal investment environment in Turkey is defined by the Investment Law (2001), the Foreign Direct Investment Law (2003), and the legislation passed in 2003 to ensure that the registration of investment is completed in one day and the number of required documents is reduced. In terms of the administrative structure the Investment Advisory Council of Turkey (IAC) is the highest body. It is an international platform established to receive recommendations of international institutions including the World Bank and the IMF, and executives of the main local and multinational companies. The Prime Minister chairs the IAC, which meets annually.

Figure 35

Turkey's Imports of Polyethylene Terephthalate (PET) from Selected Source Countries (US\$ millions)



Source: UN COMTRADE Database.

The Coordination Council for the Improvement of Investment Environment (YOIKK) identifies the remaining barriers to private investment and formulates policies to remove them. The YOIKK is composed of all concerned government agencies and business associations. It is chaired by the Minister of Economy and meets every three months. It works through 10 technical committees, which are composed of all public and private stakeholders. He General Directorate of Implementation of Incentives and Foreign Direct Investment of the Ministry of Economy serves as the Secretariat of the YOIKK and has the primary responsibility for

The Union of Chambers and Commodity Exchanges of Turkey (TOBB), Turkish Exporters Association (TIM), Turkish Industrialists and Businessmen' Association (TUSIAD), International Investors Association (YASED).

These committees are: Company Transactions and Corporate Governance; Employment; Input Supply Strategies (GITES) and Sectoral Licenses; Investment Location, Environment and Zoning Permits; Taxes and Incentives; Foreign Trade and Customs; Intellectual Property Rights and R&D; Legislation on Investment Climate and Legislative Procedures; Access to Finance; and Infrastructure.

implementing the investment policy in coordination with other concerned agencies and issuing licenses.⁵⁷

The Turkish investment regime does not discriminate against FDI. If established under the Turkish Commercial Code, all foreign companies have the same rights as Turkish companies. Their rights include: national treatment, transfer of proceeds, right to expatriate staff, and access to international arbitration. Foreign companies may operate in almost all sectors with 100 percent equity. Restrictions apply in real estate, media, transport, and business services. In some sectors (broadcasting, aviation, maritime transportation), the share of foreign companies cannot exceed 49/50 percent. Special permission is needed in some others (finance, accounting, fishing, petroleum, mining, electricity, and education). Permission from the Council of Ministers is needed for foreigners to purchase land areas between 2.5 and 30 hectares. Foreigners may not purchase land exceeding 30 hectares. According to the OECD FDI regulatory restrictiveness index Turkey's overall score (0.072) is below the OECD average (0.095),⁵⁸ Note that the index does not take account of the implementation results. In fact, licensing procedures are lengthy-e.g., 25 different procedures are needed to build a warehouse.⁵⁹

Turkey has Investment Agreements in place with 73 countries, and is a member of Multilateral Investment Guarantee Agency (MIGA) and International Center for Settlement of Investment Disputes (ICSID). Turkey also joined the Convention on the Recognition and Enforcement of Foreign Arbitral Awards and the European Convention on International Commercial Arbitration.

Investment incentives, which apply equally to local and foreign companies, include customs duty and VAT exemptions, concessional tax and interest rates, and land allocation. The type and the size of incentives depend on the location (six regions), size, and the strategic importance of the investment project.⁶⁰

FDI inflows. Turkey's FDI inflows have increased significantly in the past decade—from about US\$1 billion in 2000 to a peak of US\$22 billion in 2007, partly due to privatization of public enterprises. FDI inflows amounted to 17.1 percent of gross fixed investment and 3.8 percent

of GDP in 2007 (Table 20). After a steep decline in 2009 and 2010 due to the global financial crisis, the inflows are estimated at about US\$15 billion in 2011. About two-thirds of the FDI inflows are in the services sector, financial intermediation in particular. The share of manufacturing is about 20 percent. Over two-thirds of inward FDI originate from the EU, followed by the Gulf States. According to UNCTAD's inward FDI Potential Index and Performance Index, Turkey was ranked 80 and 102 among 141 countries (the 141st is the lowest in ranking), performing significantly below its potential (Table 20).

FDI outflows. Turkey has become an important regional capital exporter. Starting from US\$0.9 billion in 2000, the FDI outflows reached US\$2.5 billion in 2008 before falling to US\$1.6 and US\$1.7 billion in 2009 and 2010, respectively (Table 21). Sectoral composition has changed significantly. While the share of mining and manufacturing fell from an average of 39.5 and 34.8 percent in 2002–06 to 9.3 and 27.9 percent in 2007–11, respectively, the share of services increased from 25.4 to 59.0 percent in the same period (Table 21). The combined share of financial intermediation and telecommunication sectors amounted to over an average of 40 percent in the 2007–11 period.

Turkey's investment promotion website is selected by the IFC the best practice website in the Europe and Central Asia Region in terms of quality of design and navigation. See, "Global Investment Promotion Best Practices," IFC 2012.

The index captures equity restrictions, screening and prior approval, and measures regarding foreign key personnel). It varies from 0 to 1 (1 being the most restrictive). See Turkey Trade Policy Review (2012).

⁵⁹ Turkey Trade Policy Review (2012)

For details see www.invest.gov.tr. For the recent investment package announced in June 2012, see www.economy.gov.tr.

The Performance Index measures the extent to which host countries receive inward FDI, and ranks countries by the amount of FDI they receive relative to their economic size. It is calculated as the ratio of a country's share in global FDI inflows to its share in global GDP. A value greater than one indicates that the country receives more FDI than its relative economic size. The Potential Index measures the extent to which host countries receive inward FDI, and ranks countries by the amount of FDI they receive relative to their potential. It is calculated as a simple average of the values of 12 variables. It is normalized to yield a score between zero and one (for the highest).

Table 20 ■ Turkey Foreign Direct Investment

	2000	2005	2006	2007	2008	2009	2010
Flow, US\$ million							
Inflow	982	10,031	20,185	22,047	19,504	8.411	9,071
Outflow	870	1,064	924	2,106	2,549	1,553	1,780
Stock, US\$ million							
Inflow	19,209	71,305	95,077	154,022	80,231	143,663	181,590
Outflow	3,668	8,315	8,866	12,210	17,846	22,338	23,802
FDI/Gross Fixed Investment, percent	1.8	9.9	17.1	15.	13.4	8.1	6.6
FDI/GDP, percent	0.4	2.1	3.8	3.4	2.7	1.4	1.2
Inward FDI Ranking (out of 141)							
Performance Index	126	89	71	91	94	102	108
Potential Index	72	68	72	73	75	80	na

Source: UNCTAD WIR 2011.

 Table 21
 Sectoral Composition of Turkey's FDI Outflow US\$ millions

	20	2002–06		2007–11	
	Value	Percent	Value	Percent	
Agriculture	1	0.0	18	0.8	
Mining	1,694	39.5	1,056	9.3	
Electricity, Gas	14	0.3	354	3.1	
Manufacturing	1,495	34.8	3,175	27.9	
Food, beverages, tobacco products	326	7.6	1,015	8.9	
Textile, textile products	680	15.8	244	2.1	
Coal, oil refining	52	1.2	366	3.2	
Chemicals	22	0.5	239	2.1	
Non-metallic mineral products	120	2.8	143	1.3	
Metal and metal products	18	0.4	162	1.4	
Machinery and equipment	99	2.3	544	4.8	
Electrical equipment	79	1.8	236	2.1	
Services	1,090	25.4	6,728	59.0	
Construction	91	2.1	643	5.6	
Wholesale and retail commerce	183	3.8	115	1.0	
Transportation, telecommunications	272	6.3	1,846	16.2	
Financial intermediation	392	9.1	2,785	24.4	
Real estate, business services	10	0.2	1,072	9.4	
Community and personal services	122	2.8	145	1.3	
Total	4,294	100.0	11,399	100.0	

Source: The Central Bank, Turkey.

	200	2002–06		2007–11	
	Value	Percent	Value	Percent	
Europe	2,288	53.3	7,780	68.3	
Germany	762	17.8	426	3.7	
Austria	20	0.5	182	1.6	
Belgium	10	0.2	232	2.0	
Belarus	0	0.0	200	1.8	
Bosnia-Herzagovina	17	0.4	121	1.1	
France	23	0.5	557	4.9	
Holland	961	22.4	2,180	19.1	
GreatBritain	68	1.6	188	1.7	
Ireland	11	0.3	231	2.0	
Luxembourg	60	1.4	615	5.4	
Malta	5	0.1	1.079	9.5	
Russia	30	0.7	392	4.4	
Switzerland	53	1.2	556	4.9	
Caucasus and Central Asia	1,661	39.5	1,657	14.5	
Azarbeijan	1,584	36.9	1,361	11.9	
Georgia	26	0.6	51	0.5	
Kazakhistan	38	0.9	228	2.0	
Middle East and North Africa	72	0.9	915	8.0	
Bahrain	16	0.4	154	1.4	
Egypt	7	0.2	104	1.0	
ran	13	0.3	147	1.3	
raq	0	0.0	84	0.7	
Jordan	1	0.0	3	0.0	
Lebanon	4	0.1	17	0.2	
Syria	1	0.0	17	0.2	
Americas	220	5.1	800	7.0	
JSA .	218	5.1	763	6.7	
Asia	8	0.2	198	1.7	
China	6	0.1	44	0.4	
ndia	0	0.0	78	0.7	
Pakistan	0	0.0	52	0.5	
Africa	2	0.1	47	0.4	
Oceania	30	0.7	2	0.0	
Australia	30	0.7	2	0.0	

Source: The CentralBank, Turkey.

The country composition of the FDI outflows also changed in an important way. Table 22 summarizes these changes. The share of Azerbaijan fell from an average of 36.9 percent in 2002–06 to 11.9 percent in 2007–11. This is accompanied by an increase in the share of Europe and the Middle East and North Africa, from 53.3 to 68.3 percent and from 0.9 to 8.0 percent, respectively, in the same period. Within Europe, Turkish FDI was heavily concentrated in Germany (17.8 percent) and Holland (22.4 percent) in 2002–06. It became more diversified in 2007–11 as the share of Germany and Holland fell while the share of others increased, particularly Malta, France, Luxemburg, Switzerland, Ireland, and Belgium.

The importance of the Middle East and North Africa is increasing as a destination of Turkish FDI outflows. The larger beneficiaries are Bahrain (1.4 percent), Iran (1.3), Egypt (1.0), and Iraq (0.7). With 0.2 percent each, the share of Syria and Lebanon is small. The share of Jordan is negligible. These countries will need to more actively promote Turkish FDI in their economies.

Turkey: Policy Recommendations

Turkey has improved its trade regime and behind-the-border policies in a significant way, and now has a more competitive economic structure compared to the other countries in the region. And, it has been reaping the benefits of improved policies in terms of a dynamic export sector and a higher growth rate of its GDP. However, there is room for improvement. Improvement is necessary especially to meet its ambitious target of reaching an export level of US\$500 billion in 2023. The objective of the follow up reforms will need to be further diversifying its exports in terms of new markets (Asia, Africa, Latin America), new products (with higher skill and technology content), and new exporters (with emphasis on SMEs) in addition to improving the quality of the products currently exported. This report does not go into the details of concrete policy recommendations for Turkey because a parallel report is being prepared in the ECA region on Turkey's trade regime.

Syria: Trade and Investment Regimes

Syria has made progress, particularly since 1995, in gradually replacing its four-decade-old administratively controlled economy with a social market economy. The thrust of the reforms has been to clear up the political and institutional impediments in the transition to a market economy led by the private sector while avoiding social disruption. The reform efforts have focused mainly in the financial, fiscal and trade areas. The trade reforms included: reduction of tariffs and some NTMs, introduction of UNCTAD's Automated System for Customs Data (ASYCUDA) to streamline customs procedures, creation of an Export Promotion Agency, application for WTO membership, negotiation for an Association Agreement with the EU, and signing a FTA with Turkey.

The structure of production and exports has changed significantly in 2000s, displaying a greater degree of export diversification in terms of both product type as well as geographic destination.

Notwithstanding the progress made, the Syrian economy is facing a daunting challenge arising from declining oil production and exports. This would result in a major balance of payments and fiscal shock because of a large loss of foreign exchange receipts and government revenue from oil. The appropriate response to this challenge is expansion and diversification of production and exports away from oil to be able to offset the loss of foreign exchange and broaden the revenue base of the government. To realize this objective, Syria had started reforming the trade regime and taking complementary measures in other policy areas to create an environment conducive to diversifying production and exports away from the oil sector.

The reform efforts have been seriously disrupted by the ongoing political unrests. As the political situation stabilizes, Syria has to do much more to deepen the ongoing reforms to enhance the export orientation of the economy. This section reviews the current trade regime and makes recommendations for improvement.

Syria's Trade Regime⁶²

Policies Directly Affecting Imports

Import duties and other charges: Syria has significantly reduced import duties in the past few years. The current simple average MFN rate is 14 percent (19 percent for agriculture and 12 percent for non-agriculture), slightly higher than the average of developing countries overall, but broadly in line with the region. The MFN duty system still has 11 non-zero tariff bands (1, 3, 5, 7, 10, 15, 20, 30, 40, 50, 60) with high dispersion, and a large number of lines with "nuisance" rates.⁶³

The measures necessary to rationalize the import duty system would include reduction of the maximum rate and the number of bands and their dispersion, and elimination of the nuisance rates. These measures are necessary to reduce the anti-export bias that presently exists in the duty system.⁶⁴ The revenue implications of the proposed changes also need to be explored.

Syria currently has 54 different border taxes in addition to 11 tariff bands. Not all the 54 are applicable for a given product or shipment. This disaggregates into about four to five per product and five to six per declaration. These charges vary from one customs post to another introducing a significant degree of arbitrariness in implementation. The largest of these charges are municipal tax and pre-import tax. The municipal tax, which is calculated as a percentage of a number of other taxes and the value of the imports, is collected at the border by each municipal administration. The pre-import tax is levied on all imports (two to four percent) except those items that carry a one percent tariff rate. These nontariff charges amount to as much as 50 percent or more of all revenues collected at the border. Over 90 percent of non-tariff revenue comes from municipal and pre-import taxes.

Many of the remaining charges are inefficient, coming to as little as one SYP. In addition to complicating the import regime and increasing the administrative costs, these charges are also discriminatory (since they are levied on imports only) and increase nominal protection

significantly (from 14 percent to about 30 percent). They will need to be reviewed and recommendations made to eliminate their distortionary effects (either by conversion into tariffs or elimination). In considering their elimination, the revenue effect of these measures and compensatory revenue enhancing policies will also need to be considered.

Non-tariff measures. The range and number of NTMs have been reduced significantly in the second half of 2000s. In particular, quotas affecting non-preferential trade have been eliminated, and the number of products on the negative list has been significantly reduced (though still remaining very high). The remaining NTMs include: non-automatic licensing, the public monopoly in imports and exports in a number of products, and a negative list.

The Ministry of Economy and Trade (MoET) grants import licenses for each shipment. In order for the MoET to grant the licenses for some products pre-approval from the line ministries and other concerned agencies is required. For these products, customs inspections are also done by the line ministries, which involve, in some cases, inspection of the whole shipment. There is a proposal being prepared by the MoET for transferring the responsibility of pre-approval and inspections from the line ministries to a single national body to ensure consistency and eliminate delays.

The General Foreign Trade Organization (GFTO) is responsible for all public sector imports and some of

This section draws on two earlier World Bank reports: "Trade Reforms and Export Diversification in Syria: A Diagnostic Review" (2009), and "Improving Export Incentives and the Free Zones System in Syria" (2010).

[&]quot;Nuisance" rates are those rates of five percent or less. Generally, the cost of collecting these tariffs is higher than the revenue collected. Of the 3,330 tariff lines, fully 1,703 lines (51.1 percent) are either at or below the five percent ad valorem rate.

An import duty on a product increases its price in the domestic market compared to its price in the international markets, making production for domestic market more profitable compared to production for exports, and shifting resources from export-oriented sectors to import-substitution sectors. Therefore, an import duty is considered a tax on exports.

the products on the negative list. The private sector can import some of the products on the negative list through GFTO. The GFTO charges a two percent commission for these imports. There are plans to scale back the scope of products under the GFTO monopoly. Exports of cotton, sugar beet, wheat, and tobacco are under the monopoly of the public enterprises responsible for purchasing these products from the farmers.

The negative list acts as a strict quantitative restriction on imports. There is considerable uncertainty about the number of products on the negative list. ⁶⁵ In the case of four-digit level products on the list, it is not clear whether all six- and eight-digit level products under that category are included. While items on the negative list are gradually removed, the uncertainty creates a significant degree of discretion in interpretation of the negative list. In addition, the enforcement of the list is left to customs inspectors, who apply arbitrary procedures with respect to clearance of goods on the negative list, based on their knowledge and the receipt of informal payments.

Work needs to be undertaken to identify the NTMs with the highest impact, and a systematic program for their explicit tariffication, and/or eventual elimination needs to be prepared.

Customs administration. Under the EU, UNCTAD and United Nations Development Program (UNDP) assistance, some progress has been made to improve efficiency in customs administration. According to the Customs Authority the number of signatures required for import clearance was reduced from 15 to four to seven for most products. Presently, custom posts in the four major regions (out of 20) are computerized and electronically linked using ASYCUDA II. Complaints are common about delays in clearance of shipments (for example, clearance takes 28 days for cement) and corruption. This is partly because risk profiles are not prepared. There is also a significant degree of discretion in the screening process. An anti-corruption unit was set up in the Customs Authority, but it is not fully operational. A follow up program is needed to identify the remaining weaknesses and take remedial actions to improve customs administration. A time-release study that would identify the remaining bottlenecks from the arrival of a shipment to its clearance would be useful to develop the follow-up program.

Standards and conformity assessment infrastructure. Since 1974, the Syrian Arab Standards and Metrology Organization (SASMO) has dominated the standards infrastructure in Syria. It is the main government body responsible for standard setting, testing, conformity assessment, and certification.

Syria needs to meet the required quality and safety standards in the major markets, particularly in the EU and the Gulf States, to be a successful exporter. The market has been recently opened to private sector. There exist now a number of private laboratories. An important initiative is the EU's Quality Management Program, under which the government intends to restructure Syria's standards infrastructure and management. The program has three main components: (i) raising awareness of the importance of quality and safety standards and introducing the main issues and procedures, (ii) conducting need assessments for all laboratories to identify the equipment and skill needs, providing technical assistance to meet these needs, and (iii) improving the policy and regulatory framework along with institutional arrangements in order to clearly define the roles of the private and public sectors, and effectively manage the standards infrastructure. The implementation of the program, which has been slow, is now suspended because of the socio-political unrest in the country.

Policies Directly Affecting Exports

Export restrictions. Non-automatic licensing also applies to exports. Negative list exists for exports too, but there is not clarity about the number of products on the list as it changes frequently depending on the domestic market conditions. Some of the products are included in

⁶⁵ The current negative list includes blends of cotton and cotton yarn, and agricultural and agro-processed products such as citrus fruit and olive oil.

the negative list because of health, security, and environmental reasons, but others aim to ensure stable domestic prices.

Export incentives. Syria's Customs Law (2006) provides for a number of incentive schemes to promote exports. They include a duty and tax drawback scheme, bonded warehousing arrangements, and a free zones system.

Duty and tax drawback system. Syrian Customs Law provides for total or partial reimbursement of the duties and other taxes paid for importation of some raw materials and intermediate inputs if they are used in the production of exports; however, it does not provide for an exemption option. The Customs Law leaves the issuance of guidelines for implementation of the drawback policy to the Customs Administration in consultation with the MoET. These guidelines have not yet been issued and the drawback policy has not been implemented.

Bonded warehousing. The Customs Law distinguishes between four types of bonded warehouses based on the type of processing undertaken before the products are exported. These are: real warehouses (for re-packaging and distribution), special warehouses (for maintenance work), artificial warehouses (for duty-free sales), and industrial warehouses (for minor manufacturing). To date, no license has been issued for these warehouses. This is explained mainly by the fact that the specified activities in this scheme are undertaken in the free zones.

Free zones: The General Organization for Free Zones (GOFZ) was established in 1971 to set up and operate free zones under the MoET. The Investment Law of Free Zones, enacted in 1972 and revised in 2003, defines the operational rules of free zones.

This law allows nine categories of activities in the free zones.⁶⁶ To date, licenses have been issued by the GOFZ only for commercial and industrial activities.⁶⁷ The private sector is permitted to develop and manage free zones under the supervision of the GOFZ and the Customs Administration, but so far there has not been much interest from the private sector. Private companies operating in the free zones either lease the warehouses

and other installations from the GOFZ or construct their own buildings in the free zones under a land lease contract.

In terms of incentives, all activities in the free zones are exempt from all import duties and taxes as well as all domestic taxes and charges if the processed products are exported. Companies operating in the free zones also benefit from subsidized land and utilities. In case of commercial activities, imported products in the original or modified form could be sold in the domestic market. All duties, taxes, and charges must be paid for any portion of sales that are domestic. The industrial activities are expected to be export-oriented. Companies engaged in industrial operations in the free zones are allowed to sell a percentage of their production—a maximum of 25 percent of their export total—in the domestic market.

Syria has eight free zones developed and managed by the GOFZ: Adra Free Zone (developed in 1974), Tartous Free Zone (1974), Damascus Free Zone (1975), Damascus International Airport Free Zone (1975), Aleppo Free Zone (1975), Lattakia Free Zone (1978), Lattakia Free Port (2003), Al Yarobia Free Zone (2008). The free zone in Dar'a is a joint venture managed with Jordan.

Despite substantial fiscal and financial incentives, the performance of free zones is disappointing in terms of employment creation and foreign exchange earnings. The existing structure of the free zones is primarily focused on commercial/trading as opposed to manufacturing activity, with currently 99 percent of the value of all goods movement falling in the commercial category. A significant share of commercial transactions in the free zones involves importation of cars for either re-exporting or sale in the domestic market. Only seven percent of the companies in these zones are foreign companies, despite very attractive incentives. Less than a third of their production is exported. Employment in free zones has fallen

They are: commercial, industrial, banking, hotel and restaurant, information centers, informatics, cargo services, health services, other services.

Oamascus Free Zone has companies with licenses for transportation and catering activities.

significantly since 2006 with Syria's participation in the Greater Arab Free Trade Agreement (GAFTA).

A key weakness of the Free Zones System is that the value of raw material and semi-finished goods the Free Zone companies can purchase from the local market is limited to SYP 500,000. This policy seriously restrains backward linkages of the companies in the Free Zones and the integration of these companies with the local economy. The objective should be to encourage purchases from the local economy to increase indirect employment.

Export credit. Syria does not have an export-import bank and dedicated credit line for trade activities. All banks, public and private, are available to finance trade. The state-run Commercial Bank of Syria is the main institution financing trade. It is unclear to what extent firms face trade-financing constraints, and how access to trade credit may be affected by the global financial crisis. There are efforts to establish a loan guarantee scheme to support SMEs' investment programs, but no initiative exists to ensure timely credit at affordable prices to traders.

Institutional Support and Policy Coordination

Export promotion activities are very weak. An Export Development and Promotion Agency (EDPA) was established in 2008 under the MoET, but it is not yet fully operational. The Syria Enterprise and Business Center (SEBC), created by EU assistance to support the government's SME program, also performs some export promotional activities. These include providing export consultancy and diagnostic services to Syrian companies, identifying regional and European markets for exporters, preparing user-friendly manuals, and organizing buyer-seller meetings. Substantial technical assistance needs to be mobilized to build EDPA's technical capacity in order to turn it into an effective organization. The EU, under its Trade Enhancement Program, has allocated funds to support EDPA, and UNDP also has programs to support it.

Policy coordination among ministries and agencies is also very weak. The responsibility of trade policy making

and implementation is diffused among various ministries and departments. Each ministry or department's interest is different. The MoET focuses on expansion of trade. The interest of the Ministry of Finance is more on revenue generation. Other ministries take a more protective stance for the sectors for which they are responsible. For example, line ministries can introduce non-tariff barriers without consultation with the MoET (i.e., introduction of pre-approval and inspection of whole shipment).

The institutional responsibilities in formulating and implementing trade policy need to be reviewed and a high level coordination mechanism which includes all concerned ministries, agencies and the private sector be set up. There are plans to institute a ministerial-level Higher Export Council to set overall direction for exports in a coordinated way. It will comprise concerned ministries and the representatives of the private sector and placed in the Deputy Prime Minister's office. The Export Development and Promotion Agency (EDPA) and the Exporters' Union will assist the Higher Export Council. An apparent weakness of the planned structure is that it leaves out the import side of trade where the need for coordination is equally, if not more, important.

Capacity for policy analysis both inside and outside government is weak. To meet immediate needs, engaging short-term consultants and commissioning analytical work under donor programs usually fills the gap. A needs assessment should be conducted to identify the skill gaps and institutional needs to develop a capacity building program.

Industrial Cities in Syria

Syria has established four industrial cities since 1999 as part of its industrialization program. They are modern, integrated, industrial and residential estates equipped with all necessary infrastructure, business, social, and educational services. They can play an important role in diversification of exports if complemented with the right export incentive measures.

The industrial cities are constructed close to the major transportation networks in the main governorates; Aleppo

(Sheikh Najjar), Homs (Hasia), Damascus (Adra), and Deir Ezzor (Deir Ezzor). They operate under the Ministry of Local Administration. As of November 2009, the supporting infrastructure in all industrial cities, with the exception of Deir Ezzor, has been largely completed and almost half of the area allocated for industry has been sold to 6,946 companies (of which 221 are foreign companies). About 61 percent of these companies are constructing their factories, and 18 percent have started production.⁶⁸ A key advantage of setting up a factory in an industrial city is the subsidized land. Companies can buy or lease plots at very reasonable prices. One-stop facility is provided to the investors in the industrial cities to set up their businesses, construct their factories and get their utilities connected very quickly. Also, companies in the cities are allowed to clear their imports at their factories.

The land allocated to the industrial cities is divided into industrial, residential, management, and green areas, and service centers and main streets. The industrial areas are subdivided into zones according to the type and size of industries and whether these industries are polluting or not. Infrastructure services include: transportation (including railroads), power, telecommunication, wastewater and sewage system, and industrial and drinking water. The industrial cities also include residential buildings for employees, recreational facilities, medical centers, schools, banks and post offices, and shopping areas.

Industrial cities provide a good opportunity to attract export-oriented investment. To realize this opportunity the concept of single-factory export processing zones (EPZs) should be included in the Customs Law to attract local and foreign investment in export-oriented subsectors in industrial cities. Converting sections of industrial cities into EPZs should also be considered.

Syria's Investment Regime

The main legislation defining the Syrian investment regime includes the Investment Law (1991), Decree 8 (2007) for investment promotion and incentives, and

Decree 9 (2007) for creation of the Syrian Investment Agency (SIA).⁶⁹ Regarding the institutional structure the Supreme Investment Council (SIC) is the highest authority. SIC is a policy making body chaired by the President and composed of several ministers and SIA's chairperson. It meets twice a year, lays out investment policy, and issues policies and regulations. The private sector is not represented in SIC.

SIA implements the investment policy determined by the SIC and issues investment licenses. Its activities also include cooperation arrangements with other countries, promotion of Syria as an investment destination, preparation of investor guidelines and investment maps, and development of a website. Its general manager, which has the position of a deputy-minister, is appointed by a decree. Its board includes the representatives of the Chambers of Commerce, Industry, and Agriculture. It meets at least twice a week. It is affiliated to the Prime Ministry. Decree 9 of 2007 also established a one-stop shop in SIA to streamline a large number of licenses needed to start an investment project. It is not fully operational. UNDP provides technical assistance to improve implementation capacity of SIA.

Investment incentives include exemption from import duties and exemption from other local taxes for five to seven years. SIC determines the scope and the level of incentives.

Syria has Investment Agreements (IA) with 16 countries, and is currently negotiating with 24 additional countries. It is a member of Multilateral Investment Guarantee Agency (MIGA) and the International Center for Settlement of Investment Disputes (ICSID).

Decree 8 (2007) allows foreign companies access to land and repatriation of profits. Decision on land ownership and leasing is with SIC. While companies are allowed repatriate 100 percent of their profits, individuals

⁶⁸ For detailed information about the industrial cities, visit the following websites: www.aic.org.sy, www.a-ic.org, www.eng.ic-homs.sy.

⁶⁹ For details see, www.investinsyria.org, and www.syrianinvestment-map.org.

can transfer only 50 percent of their earnings. The Decree decreased the number of restricted sectors for FDI. The restricted sector list includes air and rail transport, landline telephones, oil refineries, power generation and distribution, port operation, and mineral water. There are also limitations on the foreign ownership.

The FDI inflows have increased significantly after the 2007 FDI legislation reaching US\$1.4 billion before the political unrest in 2011—over 10 percent of gross fixed investment (Table 23). Most of the FDI came from the Gulf countries in the banking, trade, real estate, and mining sectors. Over two-thirds of the FDI are located in the Damascus and Aleppo areas.

Syria: Policy Recommendations

Under the current political conditions one would not expect to these recommendations would be implemented. However, they should be implemented as soon as the situation is stabilized to maintain the momentum created by the earlier reforms.

■ *Tariffs and other charges*. Reduce the number tariff bands to three or four, lower the maximum rate, and

- eliminate the nuisance taxes. Replace the numerous other taxes and charges with VAT, excise, and a small number of fees for the eligible services rendered by the customs administration.
- Non-tariff measures. Review the remaining NTMs, identify the ones with largest impact, and prepare a program for gradual elimination or selective tariffication.
- Customs administration. Continue implementation of reforms with emphasis on implementation of modern risk management techniques, moving away from physical controls; automation of business processes to reduce the room for discretion; introduction of one-stop shops at the borders; full operationalization of the anti-corruption unit; and training of staff.
- Standards infrastructure. Accelerate implementation of the Quality Management Program financed under EU technical assistance.
- Export incentives. Amend the Customs Law to extend drawback to all imports used in production of exports. Also, include a tariff and tax exemption option and bonded warehousing in the Law. Seek technical assistance for putting in place an effective implementation mechanism and ensure that refunds are paid in a timely manner.

Table 23 | Syria Foreign Direct Investment

	2000	2005	2006	2007	2008	2009	2010
Flow, US\$ million							
Inflow	270	583	659	1,242	1,467	1,434	1,381
Outflow	44	80	-11	2	2	-3	0
Stock, US\$ million							
Inflow	1,244	2,532	3,191	4,433	5,900	7,334	na
Outflow	107	428	417	419	421	418	418
FDI/Gross Fixed Investment, percent	8.0	8.9	9.2	15.1	16.7	14.8	12.2
FDI/GDP, percent	1.4	2.1	2.0	3.1	2.8	2.7	2.3
Inward FDI ranking (out of 141)							
Performance index	98	91	105	94	88	69	70
Potential index	74	94	98	104	104	103	na

Source: UNCTAD WIR 2011.

- Free zones. Amend the free zone legislation to do the following: Apply tax exemptions to a limited period rather than for the life of the investment, lift restriction on purchases from local market to strengthen backward linkages, transfer management of free zones to private sector under management contracts
- Export processing zones. Include EPZ and single-factory EPZ concepts in the Customs Law and prepare secondary legislation to define the forms and operational rules of the EPZ system. Developing new fenced area EPZs is not a priority for Syria at this stage because Syria already has industrial estates (industrial cities) with excellent infrastructure facilities. Emphasis should be on promotion of single-factory EPZs to attract local and foreign investment in export-oriented subsectors in Industrial Cities. Converting sections of industrial cities into EPZs should also be considered.
- Trade finance. Improve bookkeeping and accounting practices in the private sector for transparent financial statements to facilitate accurate risk assessment by the banks, enhance credit information system and risk assessment skills in the banking sector, introduce credit guarantee and loan registry systems.
- Institutional capacity and coordination. Set up s secretariat for the Higher Export Council housed in EDPA to ensure that the Council has adequate data and information to carry out its responsibilities. Conduct a needs assessment to identify the skill and institutional needs and develop a program to improve implementation and analytical capacity of the MoET, EDPA and other concerned agencies. Seek technical assistance to implement the program.
- Trade agreements. Ratify the Association Agreement with the EU. Accelerate negotiations with the WTO for accession.
- *Investment regime*. Eliminate the remaining restrictions on FDI particularly on ownership. Seek technical assistance to improve capacity of SIA. Operationalize the one-stop-shop facility.

Jordan: Trade and Investment Regimes

Jordan became a member of the WTO in 2000, signed a FTA with the United States in 2001, and concluded an Association Agreement with the EU in 2002. With the technical assistance it received under these arrangements, Jordan has improved its trade regime significantly; the legal system modernized, customs procedures simplified, the quality infrastructure reformed, the level of and variation in import duties reduced, and quantitative restrictions eliminated. Jordan is one of the few developing countries that has made substantial commitments under GATS, covering a wide range of services, and negotiating accession to the Plurilateral Agreement on Government Procurement. Jordan also signed a number of free trade agreements including one with Turkey.

As a result, Jordan's trade regime is superior to most of the countries in the region including Lebanon and Syria, in terms of the legal and institutional framework, and policy environment affecting exports. It has now a broad based export sector. Further expansion and diversification of exports depends largely on (i) effective implementation of the trade regime, and (ii) the improvement of its behind-the-border policies—high tax incidence, high cost of transport and utilities, administrative hurdles, chronic water shortage, energy deficiency, low domestic savings, and a complex incentive system.

Jordanian economy is dominated by services. Services amount to approximately two-thirds of the GDP. Jordan also receives significant workers' remittances from Jordanians working particularly in the Gulf region. Therefore, the services sector and trade constitute significant importance. However, the focus of this section is on trade policies affecting trade in goods.

Jordan's Trade Regime

Policies Directly Affecting imports

Import duties and other charges. Jordan's applied MFN tariffs are generally within the range of 0-30 percent

with four non-zero bands (5, 10, 20, and 30 percent).⁷⁰ Exceptions are animal feed (40 percent), tobacco and tobacco substitutes (70–100 percent), and alcoholic drinks (180 percent). The average rate was 10.9 percent in 2008 (17.1 percent for agricultural products and 9.9 percent for non-agricultural products).⁷¹ Almost all tariff lines carry ad valorem duties: only seven agricultural lines at the 9-digit level have compound rates. A few other charges are applied mainly for the customs services rendered. Part of these charges is earmarked for improving the customs infrastructure and living conditions for the customs officers.

A general sales tax of 16 percent and a special tax levied on a few products (cement, cars, tobacco and alcoholic products, mobile phones) are applied equally to the domestically produced and imported goods.

Non-tariff measures. All imports are subject to licensing. The Ministry of Industry and Trade (MIT) and other concerned ministries and departments issue such licenses. ⁷² Automatic licenses, issued within a week, are for administrative and statistical purposes. Non-automatic licenses are used for a limited number of products (plastic waste, khat, coral, chromium, toy guns, and holy water) for the protection of health, safety, the environment, and public order and morals. Non-automatic licenses, issued within 15 days, can specify the import quantity during the period of validity. Jordan maintains prohibition and control on trade of a small list of goods for TBT/SPS (technical, safety, environmental, and health), moral and religious reasons, or under international conventions to which Jordan is a signatory.

Customs procedures: There are 40 customs centers. Customs procedures have been computerized using UNCTAD's Automated System for Customs Data (ASYCUDA) with a risk-based inspection system that categorizes shipments into three levels of risks: low risk (green), moderate risk (yellow), and high risk (red). Goods in the green channel are inspected for documentation only. Goods assigned to the yellow and red channels are inspected for TBT and SPS requirements. Clearance of goods in all three channels takes place within a day according to

the authorities. Only about 20 percent of consignments go through the green channel. Jordan also implements a Golden List program under which post-clearance audits are conducted in collaboration with the private sector. To improve efficiency the share of imports going through the green channel must be increased.

Standards and conformity assessment infrastructure. The Jordan Institute for Standards and Metrology (JISM) is the national standardization agency to issue and regulate technical standards dealing with the features of the products or their related production methods and management systems, packaging and labeling requirements, and testing methods of various products. It is the WTO TBT enquiry point. Other institutions such as Ministry of Environment, Ministry of Agriculture, Jordan Food and Drug Administration, Ministry of Health, and Telecommunication Regulatory Authority are also authorized to issue and regulate standards. The JISM and the other agencies noted above are responsible for implementing the previously described risk-based border inspection system.

Jordan's standards system has been significantly improved in the process of the WTO accession. A large number of mandatory standards have been replaced by voluntary standards. The current Standards and Metrology Law is being amended to incorporate provisions for market surveillance. This will allow a reduction of the JISM's border inspections and replacement of them with domestic market inspections.

The Jordanian accreditation system of conformity assessment, which fulfills the requirements of the

Nome essential food products (i.e., meat, fish and poultry) are exempted from import duties.

The following four public companies are exempted from the payment of import duties: Jordan Petroleum Refinery, Arab Bridge Maritime Company, Arab Potash Company, Jordanian Electric Power Company, Irbid District Electricity Company, and Arab Company for Manufacturing White Cement

An "importer card" is required for all imports; failure to present the card results in a 2.5 percent penalty. The Trade Directorate of the MIT issues the cards in the same day at no cost. They carry a special number and file that facilitates customs clearance.

International Organization for Standardization (ISO) norms, currently operates under the JISM. Under this system, 31 public and private laboratories (only for testing, calibration, and medical laboratories) have been accredited. The scope of accreditation will need to be expanded to include inspection and certification bodies. A draft Accreditation Law is under consideration for establishing an independent accreditation agency.

The Ministry of Agriculture is responsible for issuing standards for safety and quality of the food and drugs (SPS measures). It also acts as the Enquiry Point for SPS measures. The Jordan Food and Drug Administration (JFDA) regulate the SPS measures.

Jordan has mutual recognition agreements for TBT and SPS for only quarantine services for live animals with a few countries. ⁷³ Increasing the number of mutual recognition agreements for all imports will help to increase the number of products going through the green channel and reduce the administrative costs.

Policies Directly Affecting Exports

Export restrictions. Exporters need a certificate of registration issued by the Exporters Registry at the MIT. Most exports are subject to automatic licensing. Jordan is introducing non-automatic licensing for dual use products. Jordan levies export duties and fees on scrap metal and mining and quarrying products. Also, the Ministry of Agriculture collets fees on exported agricultural products charged for services rendered such as inspection, and quarantine. Export prohibition on a small list of products is imposed for health, security, environmental, and public moral reasons.

Export incentives. Most export subsidies were eliminated during the WTO accession process. The main remaining subsidy is the exemption from income tax on profits generated from exports of certain products (textiles, chemical products, pharmaceuticals, fertilizer, jewelry, and metals), which must be phased out by 2015 according to the agreement with the WTO.

Jordan implements a duty drawback scheme that allows refunds of import duties and other taxes paid on imported inputs in the production of exports. According

to the authorities, reimbursements take about a month. Jordan also maintains a temporary admission scheme under which companies producing for exports are granted duty exemptions for imports.

Free zones. Exports are also promoted through free zones and qualifying industrial zones (QIZs). Jordan has five public and 24 private free zones. The public free zones are developed and managed by the Free Zones Corporation—a financially and administratively independent body managed by a Board of Directors chaired by the Minister of Finance. Private free zones are developed and managed by private companies under the supervision of the Free Zones Corporation. Free zones are open to foreign and local companies.

The Aqaba Special Economic Zone, the largest zone in Jordan, has free zone status and an investment regime of its own. It is governed by the Aqaba Special Economic Zone Authority (ASEZA)—an autonomous authority with legal, regulatory, and administrative responsibilities within the zone. The priority activity in this zone is services, particularly tourism, trade, and logistics services.

The companies operating within the free zones are granted various incentives including exemption from import duties and other charges and income tax for the segment of production exported. Products sold in the domestic market are subject to normal import formalities including the payment of import duties and taxes. The Free Zone Corporation issues certificates of origin for exports of goods processed or produced in the free zones with a local content of at least 40 percent.

Free zones in Jordan are dominated by commercial activities serving the transit trade and the local market. Over one-third of the products processed in free zones are sold in the domestic market.

QIZs are designated industrial parks in Jordan and Israel from which goods can be exported duty-free and quota-free to the United States. To be eligible, the local

Australia, New Zealand, Kuwait, Syria, Lebanon, Egypt, Algeria, Morocco, Sudan, and Yemen.

content should be at least 35 percent with diagonal accumulation among Jordan, Israel, Palestinian Territories, and the United States. There are 13 industrial parks in Jordan that have been approved as QIZs by the United States. The textile and clothing industry in particular has benefited from the QIZ initiative. About three-quarters of Jordan's exports to the United States come from the QIZs. Textiles and clothing constitutes over 80 percent of these exports.

The Free Zones Corporation manages the public free zones and regulates the private ones, indicating conflict of interest. It is advisable to separate these two functions, which could be done by transferring the management of public free zones to the private sector and turning the Free Zones Corporation into a Regulatory Authority.

Export finance. Jordan does not have a dedicated credit scheme for exporters, but has a loan guarantee scheme implemented by the Jordan Loan Guarantee Corporation, which serves exporters too. However, the Jordan Enterprise Development Corporation serves as the local agent for the export finance and guarantee schemes of the Islamic Development Bank and the Export Credit Guarantee Schemes of the Inter-Arab Investment Guarantee Corporation.

Issues

Jordan is one of the WTO's most frequent users of safeguards; as of 2012, only India and Indonesia had

initiated more safeguard investigations than Jordan. In a number of instances, Jordan's government policymakers' use of import-restricting temporary trade barriers (TTBs) has had direct implications for partners in the MENA region. Table 24 provides information on three case studies that the subsequent analysis examines in more detail.

Jordan's first example is a safeguard investigation that began in April 2012 over steel reinforcing bar, a product that these case studies reveal as facing adjustment pressure in a number of MENA markets. Jordan's imports of steel rebar increased almost ten-fold between 2008 and 2011, from US\$14 million to US\$110 million. The two largest foreign suppliers to Jordan during this period were Ukraine and United Arab Emirates; there was an US\$80 million increase in imports during this period from these two countries alone. Nevertheless, as Figure 36 reveals, Jordan's imports from Turkey (\$14 million) and Syria (\$12 million) also increased substantially in 2011.

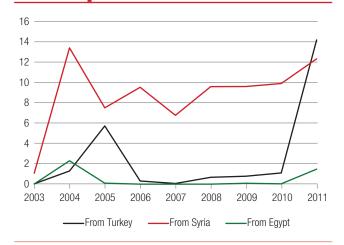
Of ultimate interest in this particular example is whether and how Jordan would impose any new import restrictions on steel rebar at the end of the safeguard investigation. As Figure 36 indicates, Jordan also has some imports of steel rebar from MENA economies such as Egypt, in addition to Turkey and Syria. If Jordan were to apply the safeguard but exempt these economies from its application, a result is that they would receive

Table 24 Examples of Jordan's Trade Frictions Impacting Turkey/MENA Partners

	Product: trade policy	Examples of MENA Trading Partner(s) Affected†	Year of TTB policy action	Affected bilateral trade (estimate)*
1.	Steel rebar: safeguard investigation	Syria (?) Turkey (?) Egypt (?) Palestinian Territories (?)	2012	\$13.4m \$14.1m \$2.3m \$400k
2.	Ceramic tiles: safeguard investigations	Egypt (-) Syria (-) Turkey (+)	2002, 2007, 2008	\$7.5m \$2.2m \$400k
3.	White cement: safeguard investigation	Egypt (-)	2008	\$2.5m

Notes: Compiled by the author from the Temporary Trade Barriers Database matched to trade data available from UN COMTRADE Database via WITS. †Expected positive (+), negative (-) or uncertain (?) outcome for the listed exporter, given the likely way that the new TTB import restriction would be applied and whether the exporter would be excluded or exempted. *Estimates of bilateral imports of the affected products taken at the 6-digit HS level.

Figure 36 Jordan's Imports of Steel Rebar from Selected Source Countries (US\$ millions)



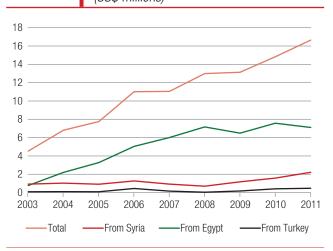
Source: UN COMTRADE Database.

an implicit preference to the import market. This could create incentives to increase imports of steel rebar from such economies.

The second Jordanian example involves imports of ceramic tiles for which the most recent safeguard investigation was initiated in 2008. Jordan's ceramic tiles industry has a relatively long history of requesting that its government initiate TTB investigations. First was a safeguard investigation in 2002 that was ultimately withdrawn without the imposition of new import restrictions. In 2006, Jordan initiated an antidumping investigation on imports of ceramic tiles from Egypt that was subsequently withdrawn. The government initiated a new safeguard investigation in 2007 that was withdrawn, before the government initiated a safeguard investigation in November 2008. This last investigation resulted in the imposition of new import restrictions in March 2010.

As Figure 37 indicates, Jordan's imports of ceramic tiles have increased steadily during this period—from US\$4.5 million in 2003 to nearly US\$15 million by 2010. Egypt, Italy and Syria are the top three suppliers, respectively, to Jordan's market—Egypt's exports in 2010 were US\$7.5 million and roughly one percent of

Figure 37 Jordan's Imports of Ceramic Tiles from Selected Source Countries (US\$ millions)



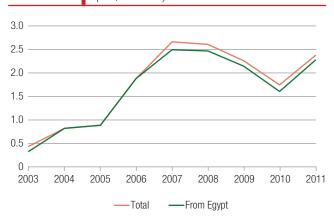
Source: UN COMTRADE Database.

its total bilateral goods exports to Jordan. Syria's ceramic tile exports were more than US\$2 million in 2011, roughly 0.5 percent of its total bilateral goods exports to Jordan.

Jordan applied the safeguard against imports from Egypt and Syria, but the safeguard did exempt imports from most other MENA economies, including Turkey, Libya, Lebanon, Palestinian Territories, Tunisia, Iran, and Iraq. Of these potential exporting economies, only Turkey, Palestinian Territories and Lebanon have recent years in which they have recorded non-zero exports of ceramic tiles to Jordan and thus likely have the short-run capacity to take advantage of the implicit preference granted by the safeguard exemption.

Jordan's third example is the 2008 safeguard investigation on white cement. The investigation was terminated in 2009 without the imposition of new import restrictions, nevertheless, this example provides an important case study for the region. First, as Figure 38 indicates, Jordan's imports of this product had increased significantly, nearly tripling from US\$900,000 in 2005 to over US\$2.6 million in 2008 by the onset of the investigation. Second, Jordan's cement import market was highly concentrated, with over 95 percent of imports in recent

Figure 38 Jordan's Imports of Cement from Selected Source Countries (US\$ millions)



Source: UN COMTRADE Database.

years deriving from Egypt; thus any future new import restrictions would likely have a significant impact on Egypt.⁷⁴

Despite the fact that this particular investigation did not result in new import restrictions, Jordan's cement safeguard investigation provides an important case study for a number of other reasons. First, cement is a traded product that is commonly subject to temporary trade barriers, frequently under the antidumping policy. As another example from the region, Israel initiated an antidumping investigation against Portland cement imports from Turkey and Jordan in 2001 that resulted in new import restrictions that Israel only completely removed in 2007. Cement has also been featured in many antidumping cases around the world, including Central American economies; even the U.S. had a high-profile set of antidumping import restrictions on cement imposed on imports from its North American Free Trade Agreement (NAFTA) partner Mexico from 1990-2009.

More generally, cement has been a frequent target for antidumping because it is a capital intensive, high fixed-cost industry in a market with substantial price fluctuations. In these sorts of markets, firms may find it in their long-run interest to price below average total cost (in the short run) and suffer losses, provided they can cover their variable costs; nevertheless, such pricing behavior satisfies one of the legal definitions of "dumping" under the WTO rules and can therefore result in new import restrictions.

The price of cement is also strongly pro-cyclical since demand is oriented to the construction industry. Furthermore, because cement is so heavy and costly to transport, trade is frequently limited by geographic distance. This can also affect industry concentration in the sense that it can be easier for domestic interests to organize politically and petition the government to initiate an investigation, relative to other domestic industries that may be less geographically concentrated.

Altogether, cement is one industry for which, like steel rebar, the MENA region might expect a number of future TTB investigations as economies liberalize, import tariffs fall, and there is additional international trade.

Jordan's Investment Regime

The Jordan Investment Board (JIB) serves as Jordan's investment promotion agency. It is a government organization chaired by the Minister of MIT. It implements government's policy to stimulate domestic and foreign investment in cooperation with the private sector. JIB has a one-stop-shop facility.

Investment incentives are provided under the Investment Promotion Law of 1995 and its amendment in 2000. Under the Investment Promotion Law, Jordan is divided into zones A, B, and C based on the level of development. Zone C, being the least developed area, receives the highest incentives. Incentives include exemptions from import duties, sales tax, and

Jordan also initiated a 2010 safeguard investigation on imports of clinker (a related product used in cement and construction). Jordan's imports from Saudi Arabia—which has 99 percent of the Jordanian import market for this product—surged from US\$13 million in 2009 to US\$60 million in 2010.

Table 25 | Jordan Foreign Direct Investment

	2000	2005	2006	2007	2008	2009	2010
Flow, US\$ million							
Inflow	913	1,984	3,544	2,622	2,829	2,430	1,704
Outflow	9	163	-138	48	13	72	28
Stock, US\$ million							
Inflow	3,135	13,229	12,713	16,058	16,320	18,705	n.a.
Outflow	44	450	312	360	382	455	483
FDI/Gross Fixed Investment, percent	51.1	51.5	92.5	55.8	45.2	37.6	25.0
FDI/GDP, percent	10.8	15.8	22.7	14.8	12.5	9.7	6.2
Inward FDI ranking (out of 141)							
Performance	9	8	5	11	12	13	31
Potential	67	63	62	66	72	71	n.a.

Source: UNCTAD WIR 2011.

some fees and charges for a certain period of time, and preferential income and social services taxes based on the zone in which investment is made.⁷⁵ Sectors eligible for incentives include: agriculture, industry, railroads, call centers, maritime transport, hospitals, hotels, and distribution services for water, gas, and petroleum derivatives.

Jordan has five industrial estates built and managed by the Jordan Industrial Estate Corporation (JIEC, a semi-governmental company), and two development areas (Mafraq and Irbid) with their own management arrangements. Investment in these locations also benefits from Incentives that are similar to those provided under the Investment Promotion Law. There are about 500 companies operating in the industrial estates. They employ about 50,000 people and account for one-quarter of Jordan's merchandize exports.⁷⁶

The investment Promotion Law does not differentiate between domestic and foreign investors. Under the Law, foreign investors are afforded the same treatment as the local investors. Also, land ownership for foreigners is generally allowed except in the free zones where land is leased. Foreign companies can own 100 percent of any project except for some sectors where foreign equity is either not allowed⁷⁷ or may not exceed 49 or 50 percent.⁷⁸

Jordan has signed bilateral investment agreements with 43 countries.

FDI investment increased significantly in the second half of 2000s constituting an average of 51 percent of gross fixed investment and 13 percent of GDP during 2006–2010 (Table 25). The country ranking of UNC-TAD Inward FDI Performance/Potential Indexes show that Jordan is attracting FDI above its potential. For example, in 2010 ranking in performance was 13, substantially higher than the ranking in potential (71). This is an indication of inadequate behind-the-border policies adversely affecting investment—as noted, investment climate indicators are used in calculation of inward FDI potential index.

A key weakness of Jordan's investment regime is that it has five overlapping schemes (Investment Promotion

⁷⁵ For details see "Jordan Trade Policy Review" World Trade Organization 2008.

Jordan provides technical and financial support to SMEs under the Jordan Upgrading and Modernization Program (JUMP). A large part of these companies are located in the industrial estates.

Passenger and cargo road transportation, quarries for sand and stones, security services, and sports clubs

⁷⁸ Foreign and domestic trade, transport services, engineering services, construction contracts, advertising, brokerage, and travel agencies.

Law, industrial estates, development areas, free zones, and ASEZ), which complicates the incentive system. It is advisable to consolidate them under a single scheme.

Jordan: Policy Recommendations

The main policy recommendations are summarized as follows:

- Customs administration. To speed up custom clearances, increase the share of goods going through the green channel significantly from the current 20 percent. One way to achieve this objective is to increase the number of mutual recognition agreements.
- Standards infrastructure. Amend the Standards and Metrology Law to incorporate provisions for market surveillance. Significantly improve the institutional and skill capacity for market surveillance. Enact the Accreditation Law and establish an independent Accreditation Agency.
- Export incentives. Improve the institutional and skill capacity of the Enterprise Development Corporation.
- Free zones. Separate the operational and regulatory roles of the Free Zones Corporation. This could be done by transferring the management of public free zones to the private sector and designating the Free Zones Corporation as a regulatory authority. Introduce a single-factory EPZ scheme.
- Investment regime. Consolidate different investment incentive schemes under one single scheme for simplicity and clarity.

Lebanon: Trade and Investment Regimes

Lebanon has a long tradition of adopting an open trade regime compared to other countries in the Middle East and North Africa. Since its application for the WTO membership in 1999, it has further liberalized its trade through tariffication of all agricultural restrictions and prohibitions, reduction of customs duties, privatization of some core services, completion of a number of trade agreements (PAFTA, Association Agreement with the EU, FTA with Turkey), modernization of some laws and regulations to align its trade policies and practices with WTO rules. The new legislation includes the Customs Law (2000), the Privatization Law (2000), the Investment Promotion Law (2001), the Telecommunication Law (2001), and the Acquisition of Real Estate Rights (2001).

While import regime has been improved, the policy environment affecting exports is not yet conducive enough to expand and diversify exports in an important way beyond a few services (tourism, finance, real estate, and labor). Export promotion does not appear to be high on the government's economic priority list. Lebanon does not have a clear trade policy and export development strategy to guide resources to export oriented activities particularly in the goods sector. Institutional framework and policy regime is not adequate to place the Lebanese economy on an export-oriented path and take advantage of regional and global opportunities.

The WTO accession negotiations have been an important catalyst for trade and structural reforms. The negotiations need to be completed as soon as possible. The remaining requirements, particularly the enactment of the Competition Law, Exclusive Agencies Law, International Property Law, must be met as quickly as possible to complete the association process in order to lock in the policy achievements and take advantage of the opportunities provided by full participation in the multilateral trading system.

What follows is a broad description of the policies currently in place, however, these are likely to change in the process of ongoing accession negotiations.⁷⁹

⁷⁹ In terms of its size, the service sector is very important in the domestic economy and in international trade. The focus of this paper is on trade in goods. Trade in services will be taken up in a separate paper.

Lebanon's Trade Regime

Policies Directly Affecting Imports

Import duties and other charges. Lebanon uses HS2007 nomenclature. Most tariff groups are specified at the 6-digit level. The MFN applied rates range from zero to 75 percent with a simple average of 6.9 percent and 14 tariff bands (0, 5, 6, 10, 15, 18, 20, 23, 25, 30, 35, 40, 70, and 75). Such a large number of bands increase inefficiency and administrative costs. 87 percent of tariff lines (82 percent of the value of imports) are five percent or less. About 95 percent of the rates are ad valorem. Average rates in manufacturing and agriculture are about five and 18 percent, respectively.

With an average of 6.9 percent, tariff protection is one of the lowest in the region. However, it is advisable to reduce the number of non-zero bands to three to four and the maximum rate to a more moderate level to improve efficiency in customs administration.

Lebanon introduced a VAT of 10 percent in 2002. Excise taxes are also levied on a number of products in Lebanon including alcohol, alcoholic beverages, tobacco, tobacco products, oil, and vehicles. The VAT and excise taxes are applied equally to imports and domestically produced goods (with the exception of domestic finished tobacco products, which are exempt from excise tax). In addition, Lebanon maintains a large number of small fees and charges that does not correspond to the services rendered. Some of them have already been removed. It is expected that the remaining fees and charges will be consolidated, and brought into conformity with the WTO rules in the accession process.

Non-tariff measures. Lebanon issues both automatic and non-automatic licenses for imports. Companies engaged in imports and exports are also required to register at the National Social Security Fund (NSSF) and submit to the customs a confirmation of payment of their obligation to the NSSF for customs clearance. Non-automatic licensing applies to a small share of imports (reportedly, two percent) largely for safety, health, environmental, and security reasons. There are subsectors/products

(cement, electrical cables) under non-automatic licensing aimed at protecting some companies connected to vested interests. The concerned ministries issue licenses, which are valid for 6 months and renewable. Under the current regime, each Ministry has the authority to set rules for licensing and impose trade measures through ministerial decisions. Lack of coordination in setting trade rules creates significant uncertainty and unpredictability in the trade regime.

For some products, import licenses are issued only to those having a license to practice a specific profession (pharmacist to import medical drugs and vaccines, agricultural engineers to import insecticides and pesticides, veterinarians or pharmacists for veterinary medicines). The government is in the process of enacting a Law on International Trade and Licensing to address the licensing issues.

Prohibition on a large number of products has already been eliminated. However, there are still some 154 products at the 4- and 6-digit level on the import prohibition list—mainly for health, safety, and environmental reasons including veterinary drugs and vaccines, pesticides, and animal feed. The conformity of this list with the international norms and recommendations is being discussed with the WTO in the accession process.

Customs administration. Cumbersome customs administration in Lebanon is an important barrier to trade. Lebanon ranks 124 out of the 155 countries in the World Bank's Logistics Performance Index, compared to Turkey, which ranks 32 (Annex Table 27). The main problems include: outdated procedures, excessive checks and long delays, lack of resources, limited ICT capacity, and poor integrity and governance. The government intends to launch a reform program under the EU's Twinning Initiative. The program includes streamlining and automation of the procedures, introducing risk management, strengthening ICT capabilities, and capacity building and training. The program needs to be implemented

⁸⁰ Lebanon submitted its initial and revised offers on goods to the WTO in 2003 and 2004, respectively. These rates are not available to the mission.

effectively and as soon as possible to modernize Lebanon's customs administration in order to improve efficiency, reduce delays, and ensure good governance.

Standards and quality infrastructure and conformity assessment. Under a EU technical assistance program (2004-09), the Government initiated steps to improve Lebanon's standards and quality infrastructure and conformity assessment procedures.⁸¹ Significant preparatory work was completed under this program, but implementation has been stalled because of political difficulties. In particular, a National Quality Policy was prepared but has not yet approved. Also, important new laws and decrees (related to quality infrastructure, technical regulations, metrology, product safety, standardization, food safety, and accreditation) were drafted but have not yet been enacted. Therefore, the Lebanese standards and quality system is not adequate to enhance the competitiveness of the Lebanese products in international markets through better conformance to international rules and norms and to higher level of protection of the health and safety of the Lebanese consumers.

The progress under the EU technical assistance includes strengthening the capacity of the Lebanese Standards Institution (LIBNOR)—the authority responsible for issuing standards, which is also the WTO enquiry point for standards, technical regulations, measurement, and conformity assessment procedures. LIBNOR is now a member of the international standards organizations. The capacity of a number of private and public laboratories has also been improved under the program to perform proficiency testing. In addition, the Government has successfully introduced the Lebanese Excellence Award (LEA) to encourage companies to improve quality and competitiveness.

Also, Qualeb, the national quality agency was set up under the Ministry of Economy and Trade (MoET), and the preparatory work for establishing COLIBAC (the national accreditation body) including its organizational structure, rules and procedures, and quality management system, was completed. Neither agency has been operationalized.

Technical, health, and safety standards certification is needed for importation of a number of products including a range of foodstuff, water, soft drinks, alcoholic beverages, oil and gas, some chemicals, pharmaceuticals, fertilizer, insecticide, paper products, and metal waste and scrap. This certification is called "visa," an official stamping of customs documents. Visas certify the conformity of the imported products to ensure compliance with Lebanese technical and health standards and labeling requirements (TBT and SPS requirements). Representatives of the concerned ministries, such as Economy and Trade, Public Health, Interior, Defense, Telecommunications, Agriculture, and Environment, stamp visas at the customs entry points. Visas are given automatically if importers' documents include a certificate from internationally accredited inspection body and a country with which Lebanon has signed a mutual recognition agreement. Otherwise, the imported products are sent to the local laboratories recognized by the government.

Lebanon will need to complete the reform efforts, preferably under a follow-up technical assistance program, to bring its standards infrastructure up to a level fully compatible with international norms. This is an essential requirement for promoting the level and diversification of Lebanese exports both by products and trading partners. Meeting TBT and SPS requirements is essential to be able to export to the developed country markets including the EU, Turkey, and the Gulf States.

Policies Directly Affecting Exports

Export restrictions. Lebanon does not apply any export tax. Licensing also applies to exports, a large proportion of which is automatic. Prohibition or quota on the export of a number of products has already been eliminated. The remaining products on the prohibition list are medicinal and aromatic plants and forests products (prohibition is aimed at conserving these rare plants from extinction), live sheep and goats, and some chemicals.

For details see the website of the Ministry of Economy and Trade (MoET), www.economy.gov.lb.

Export incentives. Lebanon does not provide export subsidies with the exception of a transport subsidy granted to agricultural exports under the Export Plus Program, which was introduced in 2001 and implemented by the Investment and Development Agency of Lebanon (IDAL). IDAL also implements the Agro Market Access Program (AGROMAP) under which it provides assistance to exporters to participate in international fairs. Assistance for improving packaging, and labeling is also granted by other institutions including Chambers of Commerce, and Ministry of Agriculture. Technical assistance is provided under a United Nations Industrial Development Organization (UNIDO) project to promote export of meat and milk and improve packaging of a few agricultural goods. The Customs Law of 2000 includes the duty drawback scheme for exporters, but it has not yet been implemented—the institutional structure for its implementation has not yet been put in place.

Free zones and warehouses. Lebanon has two free zones at the seaports of Beirut and Tripoli. Little manufacturing is undertaken in the zones. Companies are engaged largely in re-export after minor processing. Value addition, employment creation, and foreign exchange earning by the activities in the free zones are negligible. Close to half of the products that go through the free zones are sold in the domestic market. Products imported into the free zones are exempt from import duties, VAT, and excise taxes. These duties and taxes are paid if the products are sold in the domestic market.

Free zones are established under the Customs Law with the decision of the Higher Customs Council and approved by the Council of Ministers. The current free zones are built and managed by the Customs Administration. The government owns the land and the buildings in the zones. The companies operating within the zones rent the premises. The Customs Law permits the management of the free zones by private companies. The government plans to establish a new larger Special Zone in Tripoli.

Lebanon also has industrial and public warehouses. Goods admitted to the warehouses are subject to the temporary admission regime—temporarily exempted

from customs duties and taxes. Duties are paid if the processed product is sold in the domestic market—the importer can choose to pay either the duties on the manufactured goods or on the value of imported inputs used in the manufacturing process. Both types of warehouses operate under the supervision of the Customs Administration. The Industrial Warehouses are associated with private companies. There are over 100 of them in the country. Multiple companies can use the Public Warehouses to import and store their inputs. Compared to the free zones, more manufacturing is undertaken under the warehousing scheme. The warehouses are established through the decision of the Higher Customs Council after consultation with the General Customs Director.

Lebanon will need to establish industrial parks and form industrial clusters to be able expand and diversify its economy's industrial base and export orientation. This, combined with a factory-level EPZ scheme for export promotion, is preferable to the free zones system.

Export finance. Lebanon does not have a dedicated trade credit program. However, it benefits from the Arab Trade Financing Program (ATFP) established by the Arab Monetary Fund. The ATFP extends line of credit to national banks to finance inter-Arab trade. It also provides other services such as training, trade promotion, and information gathering and dissemination.

Lebanon has a financial company (Kafalat) set up under joint ownership of the banks and the government to provide loan guarantees to SMEs.⁸² It guarantees up to 90 percent of the loan value for SMEs operating in industry, agriculture, tourism, traditional crafts, and high technology sectors. The guaranteed loans benefit from interest subsidies financed by the government. In 2006, Kafalat signed a partnership with the EU and the MoET to increase the size of Kafalat's resources. The banks that

This scheme was created under the Integrated Small and Medium Enterprise Support Program implemented by the SME Support Unit at the MoET. Also, under this program, three Business Development Centers (Berytech, BIAT, and SouthBIC) were established to provide a variety of services including incubation to start ups and existing SMEs.

lend SMEs under Kafalat guarantee do not impose any collateral requirement on top of the guarantee from Kafalat. Kafalat supports both domestic and export activities.

In the absence of a dedicated credit system for exporters, it is advisable to increase Kafalat's resources and institutional capacity to provide technical assistance to potential exporters in areas such as loan application, project preparation, and financial management.

Lebanon's Investment Regime

Lebanon's main legislation defining its investment regime is the Investment Law (Law 360), which was enacted in 2001. The Law provides a framework regulating investment activities and providing local and foreign investors alike with a range of incentives and business support services. In particular it identifies a number of priority sectors including: industry, agriculture, agro-industry, tourism, information technology, technology, telecommunication, and media. The implementing agency of the investment policy is largely with the Investment Development Authority of Lebanon (IDAL), which was established in 1994. IDAL has financial and administrative autonomy and reports to the Prime Minister. It is managed by a Chairman and a Board of Directors of six members. In addition to its role as an investment promotion agency, IDAL is also engaged in promotion of exports particularly of agriculture and agri-processing products.

The Investment Law redefined the role of IDAL as a one-stop-shop promotion agency to eliminate the administrative barriers to promotion of domestic and foreign investment. This role of IDAL has not yet been materialized. However, the one-stop-shop directorate of IDAL guides the investors to complete the formalities to receive a license. As a result, the licenses are provided in a complex administrative process, which includes the following steps: Investor submits application to IDAL with required documents. The One-Stop-Shop Directorate of IDAL assesses the application and submits a report to the Chairman, who then takes the application to the IDAL's

Board. The Board reviews the application in light of the applicable incentives. According to the Investment Law, the application is then sent to the Prime Minister for approval. After the approval, the chairman of IDAL and the investor sign a contract and the license is issued by the Council of Ministers. The process may be simplified by removal of Prime Minister's approval and issuance of licenses by the Council of Ministers.

There are two incentive schemes available to investors of both local and foreign origin:⁸³

- Investment projects by zones (IPZ). Under this scheme, incentives are granted on the basis of projects' geographic location, sector in which they are made, and the size of investment. Incentives include exemption from the income tax for a certain period of time and the fees for the provision of work permit. This scheme divides Lebanon into three geographical zones according to the level of development—Zone A (most developed), Zone B, and Zone C.
- The Package Deal Contract. Under this scheme, incentives are based on the size of investment and the employment to be created by the project. Incentive package is larger in this scheme and includes: exemption from income tax and dividend tax for a certain period, and exemption from (or reduction in) a number of fees such as land legislation, construction permit, and residence permit. To benefit from these incentives, the investor signs a contract with the Lebanese Government represented by IDAL.

As noted earlier, investment in free zones benefit from similar benefits plus exemption from import duties and taxes. Also, Kafalat supports investment by the SMEs through incentives that include loan guarantees, and favorable interest rates and maturity periods.

There are no restrictions on FDI in terms of the sub-sectors in which investment is made and the share of foreign ownership. However, for reasons of national

⁸³ For details see IDAL's website, www.idal.com.lb.

and social security FDI in some services (media, postal, legal, veterinarian, customs brokerage, and nursing) is restricted. Foreign investors are entitled to the incentives granted to domestic investors including the preferential interest and tariff rates, tax exemptions, and loan guarantees available to investors in some priority sectors. Only in the case of air and transport sectors, tax exemption for foreign investors is conditional on reciprocity.

The FDI inflows have been increasing at a rate of about 15 percent since 2006 and these inflows play a very important role in Lebanese economy. FDI inflows reached US\$4.5 billion in 2010—about 13 percent of GDP and 42 percent of gross fixed investment (Table 26). Almost all FDI goes to services sub-sectors. In 2009, about 70 percent of FDI was realized in the real estate and residential sub-sectors originating mainly from Lebanese expatriates and Gulf investors, followed by tourism (22.2 percent), trade (2.3 percent), and finance (1.5 percent). FDI inflows in industry and agriculture are negligible.

Lebanon has ratified bilateral investment agreements with 32 countries for the promotion and protection of investment. They contain provisions ensuring contractual security to investors of the contracting parties and access to international arbitration for investment-related disputes. Lebanon is a member of Multilateral

Investment Guarantee Agency (MIGA) and ratified International Convention on the Settlement of Investment Disputes (ICSID).

A key weakness of the Lebanese investment regime is that it's heavy reliance on fiscal and financial incentives. Good quality infrastructure services at affordable prices, and well-managed industrial parks and sector-specific clusters, which are effective tools to stimulate investment, do not play a notable role in the incentive system.

Also, the capacity of IDAL is particularly limited in gathering and dissemination of information, investors business matching services to establish partnership with foreign investors, conducting investor surveys and research to identify the problems investors face, and communicating these problems to the government. To be an effective investment promotion agency, the capacity of IDAL should be substantially improved and its one-stop-shop role be made operational. Under UNDP assistance, IDAL is setting up a data and information center, and upgrading its website.

Lebanon: Policy Recommendations

The main policy recommendations are summarized as follows:

Table 26 Lebanon Foreign Direct Investment

	2000	2005	2006	2007	2008	2009	2010
Flow, US\$ million							
Inflow	964	3,321	3,132	3,376	4,333	4,804	4,955
Outflow	108	715	875	848	987	1,126	574
Stock, US\$ million							
Inflow	4,988	16,441	19,573	22,949	27,282	32,085	n.a.
Outflow	586	2,741	3,616	4,464	5,451	6,576	7,150
FDI/Gross Fixed Investment, percent	27.6	68.8	61.0	50.3	48.9	41.4	42.4
FDI/GDP, percent	5.8	15.3	14.0	13.5	14.5	13.9	12.6
Inward FDI ranking (out of 141)							
Performance	34	9	16	13	11	8	16
Potential	62	76	81	76	76	74	n.a.

Source: UNCTAD WIR 2011.

- Tariffs and other charges. Reduce the number of bands to three to four and the maximum rate to a more moderate level. Consolidate the remaining fees and charges and bring them conformity into WTO rules.
- Non-tariff measures. Enact the Law on International Trade and Licensing to eliminate ministerial discretion in non-automatic licensing to avoid its use of vested interest and exclusive agency licensing. Ensure conformity with the WTO rules.
- Customs administration. Implement the EU Twinning program as soon as possible to modernize Lebanon's customs administration in order to improve efficiency, reduce delays, and ensure good governance.
- Standards infrastructure. Seek further technical assistance to continue reforming the standards infrastructure. Specifically, adopt the National Quality Policy, and operationalize Qualeb and COLIBAC.
- Export incentives. Prepare an Export Growth and Diversification Strategy as a policy guide, set up an Export Promotion Agency, establish an effective duty and tax drawback system as permitted by the Customs Law.
- Free zones. Transfer the management of the free zones to the private sector. Establish industrial parks and clusters, and introduce a single-factory EPZ scheme to expand the industrial base and exports.
- Trade finance. Increase the size of Kafalat's financial resources and capacity to provide technical assistance to SMEs in areas such as financial management, project preparation, and loan application.
- Institutional framework and policy coordination. Set up a high level Export Council chaired by the Prime Minister and composed of concerned ministries and representatives of the private sector to effectively coordinate and guide export policies.
- *Trade agreements*. Meet the remaining requirements (mainly enactment of various laws and regulations) to conclude WTO accession process, and ratify the FTA with Turkey as soon as possible.

■ *Investment regime*. Improve the capacity of IDAL to provide a wider set of services to the investors. Operationalize its one-stop shop function.

Iraq: Trade and Investment Regimes

In the past 30 years, wars, economic embargo, civil conflict, military occupation, and the following resistance have critically disrupted Iraqi economy—its private sector activities, in particular. Scores of private businesses were closed and entrepreneurs and professionals left the country, creating capital and skill shortages. Infrastructure was destroyed, and the capacity of the government to formulate and implement policies was severely weakened, aggravating the instability and uncertainty created by the security situation. As a result, unemployment has reached about 30 percent, a large proportion of which is younger people.

This process has led to severe dependency in the Iraqi economy in three areas.

- Dependence on the public sector. As the private sector stayed on a declining trajectory for a long time, the share of public sector (The budget/GDP ratio) has increased from 77 percent in 2004 to 86 percent in 2011.84 The public sector is now the main employer. Sixty-two percent of employment is created in the services sector, a large proportion of which is public services. This situation is not sustainable.
- Dependence on the oil sector. Protracted insecurity, destruction of infrastructure, and the flight of capital and professionals affected the non-oil sector most. The share of the oil sector in GDP amounted to 63 percent in 2010,85 but the oil sector constitutes only two percent of employment. Ninety percent of government revenue comes from oil receipts.86 The

⁸⁴ CSIS 2011 p. 4.

⁸⁵ CSIS 2011 p. 4.

⁸⁶ CSIS 2011 p. 19.

structural change from labor-intensive to capital-intensive sub-sectors has significantly weakened the capacity of the economy to create employment for the growing younger population.

Dependence on imports. Disruption of domestic nonoil activities lead to the replacement of domestic production with imports in many labor-intensive sub-sectors in which Iraq has comparative advantage, adversely affecting the employment and poverty situation. These sub-sectors include agriculture, agro-processing and light manufacturing.

The main economic objective is to reduce these dependences, and restore production in the sub-sectors where Iraq holds a comparative advantage in order to re-balance the Iraqi economy. This would require stimulating private-sector activities in non-oil sub-sectors. Foreign trade and FDI would play an important role in achieving this objective. Replacement of imports with domestic production in a number of non-oil sub-sectors where Iraq has latent comparative advantage is an important initial objective. Once the process of revival of these sub-sectors starts, exporting of their products, particularly to the neighboring countries, should be encouraged. Complementing domestic investment with FDI from capital exporting countries in the region will also be necessary. Taking advantage of regional complementarities and strengthening integration with the neighboring countries is therefore an important component of Iraq's economic program.

Iraq's Trade Regime

In 2003, the UN Security Council lifted civilian trade sanctions on Iraq, under which it was allowed only to export limited amounts of oil and import food and humanitarian supplies under close supervision. The trade regime currently in place in Iraq is determined mainly by the Coalition Provisional Authority's (CPA) Orders 38 (Reconstruction Levy) and 54 (Trade Liberalization

Policy) introduced in 2003 and 2004, respectively. Order 54 kept parts of the 1984 Customs Law but suspended all customs tariffs, duties, import taxes, and similar surcharges for goods entering and or leaving Iraq. Some administrative changes were also made by Order 16 (Temporary Control of Iraqi Borders, Ports and Airports) and Order 26 (Creation of the Department of Border Enforcement) in 2003. The Customs Law of 1984 remains in force except as amended by CPA Orders.

Policies Directly Affecting Imports

Import duties and other charges. Order 38 established a uniform 5 percent Reconstruction Levy on all imported goods except food, medicine, medical equipment, clothing, books, and goods delivered as humanitarian aid. Certain entities are also exempted including coalition forces, coalition contractors and sub-contractors, government departments, international organizations, and other agencies providing assistance. There are currently no internal taxes on imports.

The uniform five percent Reconstruction Levy as an import tariff is inappropriate to address the pressing issue of import dependence and the need to replace imports in areas where Iraq has comparative advantage. The government has recently prepared a new tariff schedule to replace the Reconstruction Levy, but implementation has not yet started. The new tariff schedule, which is based on an 8-digit HS system, has 11 non-zero bands (1, 3, 5, 10, 15, 20, 25, 30, 40, 50, and 80). The top band at 80 percent applies to alcoholic and non-alcoholic beverages including mineral water and vinegar. The 50 percent is levied on preparation of meat such as sausages, ham, sugar confectionary (halvah), cigarettes, and artwork. Oil and grain seeds, minerals, ores, organic chemicals, tanning and dying materials, pulp of wood, books, iron and steel are either duty free or carry a five percent tariff. Agricultural and agro-processing products carry tariff rates generally in the range of 10-30 percent, much higher than manufactured products.87

⁸⁷ A detailed analysis of the tariff schedule has not yet been conducted because an electronic copy of the schedule is not yet available.

Preparation of a new tariff schedule is a step in the right direction. It needs to be adopted and put in place as soon as possible to encourage domestic production. It is preferable to implement the new schedule after the customs administration is improved (see below). It is also advisable to reduce the number of non-zero bands to three to four for efficiency reasons.

Import restrictions. Companies must be registered with Customs, which is immediate when all required documents are submitted. CPA Order 54 suspended the complicated import and export licensing system that existed before 2003. Therefore, currently there are no formal licensing requirements in effect.⁸⁸ However, certain items cannot be imported without a license from the Ministry of Trade. They include: fertilizer, industrial explosives, poultry products from countries with avian influenza, and missile technology. Order 54 bans importation of some items including: magazines, CDs, and films contrary to public norms, arms, nuclear material, and non-medical narcotics. Crude oil and all other oil products can only be imported and exported with the authorization of the State Oil Marketing Organization except for products for use by coalition forces and parties working with them. Iraq does not require pre-shipment inspections.

Customs administration. Customs administration in Iraq is a serious barrier to trade. It was ranked 148th out of the 155 countries in 2010 in the World Bank's Logistics Performance Index. The problems Iraqi Customs Administration faces include: weak leadership, uncoordinated customs units, outdated procedures, excessive physical checks and long delays, lack of resources (human, financial, physical), limited ICT capability, and poor integrity and governance. It is necessary to put in place a comprehensive reform and modernization program focused on adoption of international standards as well as investment in much needed infrastructure. Particular attention should be given to implementation of an automated customs system and capacity building in all aspects of a modern customs administration.⁸⁹ Substantial technical assistance will be needed to prepare and implement such program.

Standards and conformity assessment infrastructure. Product standards in Iraq are under the responsibility of the Central Organization for Standardization and Quality Control (COSQC). The COSQC is responsible for developing and adopting Iraqi standards, issuing the Standards Conformity Certificate, which is a document required by all production companies, accreditation of laboratories, and setting and monitoring measurement and calibration norms. The capacity of the COSQC and the laboratories are very limited in their ability to fulfill these responsibilities.

Sanitary and phytosanitary services are provided and certification given by the Ministry of Agriculture, the Veterinary Authority, and the Ministry of Health. Importation of plants, animals, and foodstuff must have certification from these institutions. Certification of TBT and SPS from accredited foreign companies is accepted. If there is doubt, products are inspected in laboratories of the Ministry of Trade.

A comprehensive program will need to be prepared and implemented to modernize the Iraqi standards infrastructure. The program would include: separation of standards setting, conformity assessment and certification, and measurement and calibration functions; investment in infrastructure and capacity building; encouragement of private laboratories; and arrangement of mutual recognition programs. Substantial technical assistance will be needed to prepare and implement this program.

The Ministry of Trade issued new regulations on import and export licensing in 2011. The Economic Committee of the Council of Ministers, acting at the request of the Central Bank of Iraq, ordered that full enforcement of the import and export-licensing requirements should resume on June 30, 2012. Under these regulations traders must obtain a license permit for every shipment and any particular item to be imported and exported. Import and export licenses, which will be issued by the State Company for Fairs and Commercial Services (a SOE under the Ministry of Trade), must describe the goods in particular and specify the amount to be shipped or received. It is not clear whether the new regulations will be implemented. For details, see "Import and Export Licensing in Iraq," USAID-Tijara, May 2012.

For details see "Iraq Customs Administration Report: Diagnostic Mission Aide Memoire," June 2012.

Policies Directly Affecting Exports

Export restrictions. Exporters must be registered with Customs, as is the case for imports. In general, there is no licensing requirement for exports. However, there are a number of products whose export requires a license from the Ministry of Trade. They include: fertilizer, some food items, animals, wood, iron and steel plates, mineral water pipes, ceramics, glass, and metals. The prohibited items are the same as for imports noted earlier.

Iraq does not apply export tax, but a fee of US\$35 per ton is charged for export of scrap metal for administration cost and compensation to the government in recognition of the fact that most scrap material was formerly owned by the government. There is no export subsidy.

Export incentives. Iraq does not have a system in place to provide incentives and promote exports. There was an export Promotion Fund before the invasion, but it is not operational now. Under the previous law, exporters are entitled to drawback 85 percent of imported inputs that go into production of exported goods. This is not applicable now because Order 54 suspended all import duties. Drawback does not apply to the Reconstruction Levy.

While the immediate priority is to replace imports in areas where Iraq has latent comparative advantage, Iraq should also prepare an Export Development Strategy, develop an export assistance and incentive system, and set up an Export Promotion Agency to get the economy ready in time for export diversification away from the oil sector. Incentives would include a duty/tax drawback and credit guarantee schemes. An institutional assistance program, implemented by the Export Promotion Agency, would have collection and dissemination of information, organization of buyer-seller meetings and trade fairs, preparation of manuals, and provision of services such as business incubation, market research, and consultation.

Free zones. Iraq has three free zones: Basra/Khor Al-Zubair, Al-Quayem, and Ninevch Flaifil. They operate under the Free Zones Authority. The main relevant legislation is the Free Zones Law (1998) and the Instructions for Free Zones Management and the Regulation of Investors' Business (1999). Companies operating in the zones are

exempted from all taxes for the life of the business with the exception of the Reconstruction Levy. The activities in the free zones are limited because of security reasons.

It is advisable to transfer the management of the free zones to the private sector to separate the regulatory and operational role of the Free Zones Authority, set up industrial parks with good infrastructure facilities to encourage formation of clusters, and introduce single-factory export processing zones scheme.

Export finance. Iraq does not have any facility for financing export activities. The Trade Bank of Iraq was set up as a specialized trade bank, but now operates as a general commercial bank. Iraq's financial system is underdeveloped and underperforming. This is a clear impediment to overall development of the Iraqi economy in general, and expansion and diversification of its exports in particular. Financing trade should be considered in the context of ongoing reform program that aims to strengthen financial sector infrastructure, including supervision, credit registry, loan guarantee, collateral framework, contract enforcement, and accounting and auditing systems. ⁹⁰ In that context, it is essential to introduce dedicated credit for exporters or loan guarantee schemes and trade insurance system to ease access to credit and reduce risks.

Iraq's Investment Regime

Private Sector Development and investment promotion is a key component of Iraq's National Development Strategy (2005–07 and 2008–10). Significant progress has been made to remove some of the barriers to the development of an investment-friendly environment in Iraq. The new Foreign Direct Investment Law, enacted by the Coalition Provisional Authority in September 2003 (CPA Order 39) and amended in December 2003 (CPA Order 46), the Company Law amended in 2004

In February 2009 the government embarked on a comprehensive two-phase Banking Sector Reform supported by the World Bank. For details of the financial sector issues, see World Bank 2011.

(CPA Order 64), the Investment Law enacted in 2006 (Law No. 13),⁹¹ Industrial Investment Law for Private and Mixed Sectors amended in 1998, and the Law on Private Investment in Crude Oil Refining passed in 2007 (Law No 64) constitute much of the legal structure of the investment environment in Iraq.

As stipulated in the Investment Law, two types of investment commissions were established in Iraq. The National Investment Commission (NIC) was set up in 2009 to formulate the national policy for investment, develop national plans, and monitor implementation. It is exclusively responsible for strategic investment projects of federal nature. The chairman of the NIC has the rank of minister. The board includes, in addition to the chairman, his deputy, four public sector officials, and three representatives from the private sector chosen by the Prime Minister. With a one-stop-shop facility the NIC aims to promote and assist investment particularly in agriculture and industry, create a business environment to attract migrated Iraqi and FDI, and support the housing sector. The Investment Law also provides for establishment of commissions at the regional and governorate level. All 15 governorates have already established their investment commissions. They encourage investment in their governorates and issue licenses.

There is also the Industrial Development Authority under the Ministry of Industry and Minerals (MIM). Its objective is to assist the development of industrial SMEs under the Law of Industrial Investment of 1998 (as amended).

Under technical assistance, the Industrial Investor Guide of Iraq and Investment Guides for Baghdad, Kirkuk, and Anbar were prepared in 2011 to define the fiscal incentives available, the institutional and regulatory framework for implementation of these incentives, and the process of receiving the necessary permits and licenses. Fiscal incentives include exemption from taxes and fees for a certain period depending on the type of investment.

The FDI Law allows ownership in most sectors of the economy (except natural resources, real estate, and financial services and insurance)⁹³ without restrictions in ownership and provides national treatment for foreign firms, and ensures the protection of rights, ownership, and transfer of funds. Purchase of real estate by foreigners is not allowed but an initial leasing license for 40 years is permitted, which is renewable.

Iraq is a signatory of over 50 agreements on Investment Promotion and Protection and 13 agreements on avoidance of double taxation. It is a member of MIGA, but has not yet signed or adopted the United Nations New York Convention on Recognition and Enforcement of Foreign Arbitral Awards and the United Nations Commission on International Trade Law.

FDI inflows in Iraq have been increasing as the security situation improves, reaching about US\$1.5 billion or 20 percent of total fixed investment in 2010 (Table 27). However, the investment is mainly in oil and gas related areas.

Iraq has made a good start to improve its investment climate, but much needs to be done to create an investment-friendly environment to stimulate both domestic and foreign investment in order to diversify its economy led by the private sector. Iraq ranks 174 among 183 countries on Doing Business Indicators (2011). The Investment Climate Assessment for Iraq identifies the main problem areas and suggests reforms in all nine areas of Doing Business Indicators. He with technical assistance from the World Bank, U.S. Agency for International Development (USAID), Swedish International Development Agency (SIDA), and Department for International Development (DFID) the Government has initiated a process of gradually implementing these reforms.

This Law covers investments over US\$250,000. Kurdish Region Investment Law (Law No 3) was also enacted in 2006.

[&]quot;Industrial Investor Guide of Iraq," USAID-Tijara July 2011; "Investor Guide of Baghdad," USAID-Tijara November 2011; "Investor Guide of Kirkuk," USAID-Tijara November 2011; and "Investor Guide of Anbar," USAID-Tijara July 2011.

⁹³ Banking Law No 94 of 2004 governs FDI in financial services, while branches of foreign insurance companies are established under the Insurance Regulatory Law No 10 of 2005. A draft Oil and Gas Law is under consideration.

⁹⁴ World Bank 2012b.

	2000	2005	2006	2007	2008	2009	2010
Flow, US\$ million							
Inflow	-3	515	383	972	1,856	1,452	1,426
Outflow	0	89	305	8	34	116	52
Stock, US\$ million							
Inflow	n.a.	779	1,162	2,134	3,990	5,060	n.a.
Outflow	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FDI/Gross Fixed Investment, percent	0.5	14.9	9.2	54.5	44.1	21.8	20.8
FDI/GDP, percent	0.0	2.8	1.9	4.5	7.9	5.6	5.1

Table 27 I Iraq Foreign Direct Investment

Source: UNCTAD WIR 2011.

Iraq: Policy Recommendations

The main policy recommendations are summarized as follows:

- *Tariffs and other charges*. Implement the new tariff schedule as soon as possible to support domestic production after reducing the number of non-zero bands to three to four and after improving customs administration.
- Non-tariff measures. Rescind the new Ministry of Trade Directive on resumption of import and export licensing.
- Customs administration. Prepare and implement a comprehensive reform and modernization program focused on adoption of international standards and investment in infrastructure with particular attention to selection of an automated customs system and capacity building in all aspects of a modern customs administration. Technical assistance will be needed to prepare and implement this program.
- Standards infrastructure. Prepare and implement a comprehensive modernization program that would include: separation of standards setting, conformity assessment and certification, and measurement and calibration functions; investment in infrastructure and capacity building; encouragement of private laboratories; and arrangement of mutual recognition

- programs. Technical assistance will be needed to prepare and implement this program.
- Strategy, develop an export assistance and incentive system, and set up an Export Promotion Agency to implement the strategy. Incentives would include a duty/tax drawback and credit guarantee schemes. An institutional assistance program would include collection and dissemination of information, organization of buyer-seller meetings and trade fairs, preparation of manuals, and provision of services such as business incubation, market research, and consultation.
- Free zones. Transfer the management of the free zones to the private sector to separate the regulatory and operational role of the Free Zones Authority, set up industrial parks with good infrastructure facilities to encourage formation of clusters, and a introduce single-factory export processing zones scheme.
- Trade finance. In the context of broader financial sector reforms introduce dedicated credit for exporters or loan guarantee schemes and trade insurance system to ease access to credit and reduce risks.
- Trade agreements. Finalize Iraq's Goods Offer and Services Offer and submit to the WTO in order to accelerate accession negotiations.
- Institutional framework and policy coordination.
 Set up an Export Sub-Committee in the Econom-

ic Committee of the Council of Minister to guide trade policies, monitor implementation, and better coordinate policy formulation and implementation. Ensure participation of representatives of the private sector in the Export Sub-Committee. Encourage exporters to form an Exporters Association as an advocacy body.

Investment regime. Continue implementing the reforms recommended by the "Iraq Investment Climate Assessment."

Egypt: Trade and Investment Regimes

Egypt is involved in a number of international trade agreements. Egypt and Turkey signed a bilateral FTA in 2005, which entered into force on March 1, 2007. Turkey's market was fully liberalized in industrial product toward imports from Egypt immediately upon the agreement's entry into force, whereas Egypt's bilateral liberalization is being phased in gradually and is only scheduled for completion on January 1, 2020. Egypt is also a member of GAFTA and the Agadir Agreement (with Jordan, Morocco, and Tunisia). It also has trade preferences with Ethiopia, Eritrea, and Uganda under the Common Market for Eastern and Southern Africa (COMESA).

Egypt has been a member of the WTO since 1995, and Table 28 provides additional detail on its tariff commitments and applied MFN tariffs. The applied MFN tariffs are those that must be paid by exporters in countries that do not have an FTA with Egypt. The level of the MFN tariff also represents the size of the tariff margin preference that exporters in FTA countries will enjoy in Egypt's market, relative to exporters to Egypt from non-FTA countries, once the FTA with Egypt is fully implemented.

Egypt has made WTO-legal commitments on upper limit tariff bindings for over 99 percent of its import products. The simple average rate across all products is 36.8 percent for these binding commitments, which is much higher than the Egyptian government's average

applied MFN rate of 17.0 percent. On one hand, this difference leaves ample policy space for the government to raise import tariffs in response to political-economic shocks without being in violation of its WTO commitments. As the next section details, it is curious that Egypt is such a frequent user of policies such as antidumping and safeguards given that for many of the products it retains sufficient flexibility to increase levels of import protection by simply raising applied MFN rates up to their WTO binding levels. On the other hand, because there is a significant difference between tariff binding rates and applied tariffs so that applied MFN tariffs could be increased considerably, exporters in other countries may feel less secure about their market access in Egypt.

Egypt's average tariffs in agricultural products are quite high. The highest tariffs of 3000 percent are in foodstuffs, where the average binding rate is 276.9 percent, with high average applied rates of 219.5 percent. Within agriculture, applied MFN tariffs are somewhat lower in the animal and vegetable sectors.

Egypt's tariffs in non-agricultural products are much lower, on average, though there is substantial variation across different categories of industrial products. Average tariffs are lowest for imports of minerals, mineral fuels, machinery, and chemicals. Average tariffs are highest in sectors such as footwear, textiles and clothing, and hides and skins.

In a number of instances, Egypt's government policymakers' use of import-restricting TTBs has direct implications for partners in the MENA region. Table 29 provides information on three case studies that the subsequent analysis examines in more detail.⁹⁵

The first example for Egypt involves its imports of steel rebar, primarily from Turkey, a product with a fractious

⁹⁵ Egypt is a relatively frequent user of safeguards and antidumping in particular, these are merely examples of recent use particularly impactful to MENA countries. Other recent examples include a safeguard investigation on nearly US\$1 billion in imports of white sugar, most of which was imported from Brazil, as well as a smaller safeguard investigation on polypropylene that included imports from Saudi Arabia, Kuwait, and United Arab Emirates.

Table 28 Egypt's WTO Tariff Commitments and Applied MFN Import Tariffs

	WTO tariff binding product coverage (in %)	Simple average WTO tariff binding rate, bound products (%)	• •	Simple average applied rate, WTO unbound products (%)	Simple average applied rate, all products (%)	Share of HS-06 lines with duty-free (in %)	Max (%)	Share of HS-06 lines with non ad valorem duties (in %)	Share of HS-06 lines with duties > 15% (in %)
Product	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Overall	99.1	36.8	17.0	3.7	16.8	9.4	3000.0	0.2	19.0
Agriculture	99.7	100.0	67.3	0.0	67.1	13.1	3000.0	0.0	25.5
Non-Agriculture	99.0	27.4	9.6	3.9	9.4	8.9	3000.0	0.2	18.1
By sector									
01–05 Animal	99.1	30.9	8.3	0.0	8.2	26.8	30.0	0.0	21.1
06-15 Vegetable	100.0	27.5	5.1	_	5.1	14.0	30.0	0.0	5.3
16–24 Foodstuffs	95.9	276.9	219.5	0.0	220.6	2.1	3000.0	4.7	60.1
25–26 Minerals	100.0	21.9	2.6	_	2.6	0.9	10.0	0.0	0.0
27 Mineral fuels	97.7	21.8	3.6	0.0	3.4	9.5	10.0	0.0	0.0
28-38 Chemicals	100.0	17.2	6.2	_	6.0	10.0	3000.0	0.0	5.7
39-40 Plastic / Rubber	93.4	33.9	7.5	2.0	7.1	8.1	30.0	0.0	10.9
41-43 Hides, Skins	100.0	45.0	12.4	_	12.4	0.0	30.0	0.0	27.5
44-49 Wood	100.0	34.9	10.9	_	10.6	6.3	30.0	0.0	21.5
50-63 Textiles, Clothing	100.0	29.5	15.2	_	15.2	4.9	30.0	0.0	36.1
64–67 Footwear	100.0	59.2	26.7	_	26.7	0.0	30.0	0.0	87.8
68-71 Stone / Glass	98.5	44.2	11.9	4.7	11.7	2.6	30.0	0.0	21.9
72-83 Metals	100.0	29.3	8.5	_	8.4	3.3	30.0	0.0	14.1
84-85 Machinery/ Electrical	98.8	20.7	6.0	4.6	5.7	20.7	30.0	0.0	8.5
86–89 Trans. Equipment	94.7	34.0	11.9	11.4	11.4	3.8	135.0	0.0	18.3
90-97 Misc.	100.0	31.1	12.3	_	12.0	7.2	30.0	0.0	27.3

Notes: Compiled by the author with data from WTO-IDB and TRAINS (UNCTAD) at the tariff line level.

history of bilateral trade relations.⁹⁶ As Figure 39 illustrates, the most recent episode began in 2009 with a massive surge in Egypt's bilateral imports of steel rebar from Turkey. Total imports of steel reinforcing bar increased to more than US\$1.2 billion, more than 80 percent of these imports derived from Turkey alone. Under pressure from its domestic industry, the Egyptian government initiated an antidumping investigation against imports of steel rebar from Turkey in October 2010. By July 2011 it had decided against imposing antidumping import restrictions.

Despite Egypt not imposing any new TTB import restrictions at that stage, both total rebar imports and those

deriving from Turkey fell dramatically, leveling off at roughly a third of their 2009 level (between US\$280 million to US\$400 million per year) over 2010 through 2012. Nevertheless, in November 2012 Egypt initiated

Egypt had imposed antidumping import restrictions on steel rebar from Turkey beginning in 1999. Turkey challenged those import restrictions under a formal WTO trade dispute in 2002; it was one of the relatively few instances in which the respondent country was not found to have violated significant provisions of the WTO Agreement on Antidumping when it applied such import restrictions. Turkey and Egypt eventually came to a mutually agreed upon solution in the WTO dispute and Egypt removed the antidumping import restrictions after their five year period expired in 2004.

Table 29 Examples of Egypt's Trade Frictions Impacting Turkey/MENA Partners

	Product: trade policy	Examples of MENA Trading Partner(s) Affected†	Year of TTB policy action	Affected bilateral trade (estimate)*
1.	Steel rebar: antidumping investigation on imports from Turkey; safeguard investigation on imports	Turkey (-) Libya (+) Palestinian Territories (+)	2010, 2012	\$1b \$340k \$190k
2.	Cotton yarn, and cotton textile and mixed cotton textile products: safeguard investigations	Turkey (?) Israel (?) Jordan (?) Tunisia (?) Lebanon (?) Morocco (?) Palestinian Territories (?) Iraq (?)	2011, 2012	\$133m \$26m \$3m \$3m \$700k \$390k \$170k \$150k
3.	Blankets: safeguard on imports	Jordan (?) Syria (?) Turkey (?) Lebanon (?)	2008	\$2.4m \$1.1m \$1.3m \$300k

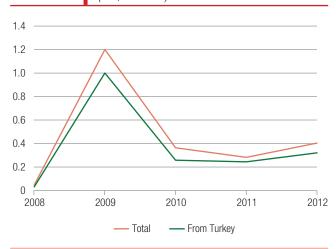
Notes: Compiled by the author from the Temporary Trade Barriers Database matched to trade data available from UN COMTRADE Database via WITS. †Expected positive (+), negative (-) or uncertain (?) outcome for the listed exporter, given the likely way that the new TTB import restriction would be applied and whether the exporter would be excluded or exempted. *Estimates of bilateral imports of the affected products taken at the 6-digit HS level.

a safeguard investigation on imports of steel rebar and in December 2012 the government imposed preliminary safeguards import restrictions. While data on the final outcome of the investigation is unavailable (at the time of this writing), an outcome of new import restrictions could result in additional barriers on Turkey's steel rebar exports. Depending on how any potential safeguard were to be structured, it could also provide implicit preferential access to the Egyptian market to other potential steel rebar exporters in the MENA region if they were exempted—i.e., in recent years, MENA economies such as Syria, Libya, and Palestinian Territories each had greater than US\$100,000 in annual steel rebar exports to Egypt.

Egypt's second example is a set of safeguard investigations on cotton yarn and cotton textile products in 2011–2012. While both investigations resulted in the imposition of preliminary import restrictions, the textile investigation terminated without the imposition of final measures and thus the preliminary measures were revoked. As of the time of this writing, data on the final outcome of the cotton yarn investigation was unavailable.

Figure 39 Egypt's Imports of Steel Rebar from Selected Source Countries

(US\$ millions)



Source: UN COMTRADE Database.

The outcomes of these investigations are important given that these are products for which a substantial share of Egypt's imports derives from other MENA countries. First, as Figure 40 indicates, the safeguards investigated products cover Egyptian imports of roughly US\$1 billion per year, including more than

US\$100 million from Turkey and US\$20 million from Israel 97

There are a number of other MENA countries with significant exports to Egypt in these affected cotton yarn and cotton textile products. For example, Figure 40 also indicates that Jordan exported US\$2–3 million annually to Egypt in these products; Lebanon, Morocco, Iraq, and Palestinian Territories also had exports to Egypt in these products in recent years worth hundreds of thousands of dollars. The outcome of these investigations is quite important for MENA's exporters; especially important would be whether small MENA exporters would be exempted from any imposed safeguard, thus providing them additional preferential access to the Egyptian market.

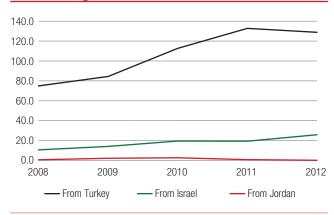
The third example from Egypt is a safeguard that the government imposed on imports of blankets in 2008 and which remained in place until 2011. Most Egyptian imports of blankets derive from China—i.e., by the time the safeguard was removed in 2011, annual Egyptian imports of blankets were US\$33 million, US\$27 million of which were sourced from China. Nevertheless, Egypt also purchased significant imports of blankets from Jordan, Syria (with annual exports sometimes exceeding US\$1 million), Turkey, and Lebanon.

In the blanket safeguard example, the manner through which Egypt applied the safeguard was unclear, i.e., Egypt's notification to the WTO indicated that its policymakers exempted developing country WTO members "subject to certain conditions," but the exact conditions were not articulated as to which countries made the exemption list. Nevertheless, much of the competition that both Egyptian producers of blankets and other MENA exporters to Egypt of blankets face is deriving from China and not regional or any other FTA integration.

The Palestinian Territories and Israel: Trade and Investment Regimes

The Palestinian Territories have a customs union arrangement with Israel under the Protocol of Economic

Figure 40 Egypt's Imports of Cotton Yarn and Textile Products from Selected Source Countries (US\$ millions)



Source: UN COMTRADE Database.

Relations that was signed in 1994. In principle, a customs union acts as both a free trade area—so that the two entities apply zero tariffs on imports from and exports to each other—and each entity applies a common external tariff on imports deriving from third countries. In practice, conflict in the region has not allowed for free trade between the Palestinian Territories and Israel (World Bank 2012).

Israel and Turkey signed a bilateral FTA in 1996 that entered into force on May 1, 1997. Both Turkey's and Israel's market was liberalized in industrial product toward imports on January 1, 2000. Furthermore, the Turkish government indicates that it signed an interim FTA with Palestine in June 2004 that went into force on June 1, 2005. Palestine is also listed as a member of GAFTA.

Israel is involved in a number of other international trade agreements. It signed an FTA with the United States in 1985 that was fully implemented on January 1, 1995, and it signed an FTA with European Union in 1995 that entered into force in 2000. Israel has also signed FTAs with EFTA countries, Canada, Mexico,

⁹⁷ Egypt's largest foreign source of imports in these product categories is China, which peaked at US\$400 million in 2011 before dropping to US\$264 million in 2012.

Table 30 Israel's WTO Tariff Commitments and Applied MFN Import Tariffs

Product	WTO tariff binding product coverage (in %)	Simple average WTO tariff binding rate, bound products (%)		Simple average applied rate, WTO unbound products (%)	Simple average applied rate, all products (%)	Share of HS- 06 lines with duty-free (in %)	Max (%)	Share of HS-06 lines with non ad valorem duties (in %)	Share of HS-06 lines with duties > 15% (in %)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Overall	71.1	21.7	4.4	6.3	4.9	48.7	212.0	7.5	1.9
Agriculture	98.6	75.8	10.6	44.2	12.0	31.2	212.0	27.9	12.2
Non-Agriculture	67.1	10.1	3.1	6.1	4.1	51.3	100.0	4.5	0.3
By sector									
01-05 Animal	51.3	103.5	25.8	4.9	35.6	15.4	212.0	58.8	21.5
06-15 Vegetable	99.3	71.3	8.7	36.0	7.2	26.9	105.0	28.6	7.6
16–24 Foodstuffs	92.2	81.5	6.2	8.2	6.7	24.9	45.0	33.2	4.7
25–26 Minerals	86.8	5.0	0.0	0.9	0.1	99.1	12.0	0.0	0.0
27 Mineral fuels	76.2	6.7	1.2	0.8	1.1	82.9	8.0	0.0	0.0
28-38 Chemicals	85.8	9.2	1.0	5.6	1.7	79.2	100.0	0.4	0.1
39-40 Plastic / Rubber	86.7	12.8	3.8	4.9	3.9	47.4	12.0	0.0	0.0
41-43 Hides, Skins	72.5	16.5	1.9	7.4	3.1	68.1	12.0	2.9	0.0
44-49 Wood	74.3	11.9	2.8	6.8	3.8	60.3	12.0	0.4	0.0
50-63 Textiles, Clothing	26.7	11.3	3.4	8.8	7.3	30.3	12.0	6.0	0.0
64-67 Footwear	53.1	6.9	2.0	11.0	6.2	42.9	12.0	0.0	0.0
68-71 Stone / Glass	79.6	9.5	4.3	5.9	4.6	44.4	16.9	0.0	0.0
72-83 Metals	84.3	8.7	3.2	4.8	3.5	53.0	12.0	4.0	0.0
84-85 Machinery/ Electrical	76.7	8.6	4.1	2.6	3.7	45.4	12.0	1.8	0.0
86-89 Trans. Equipment	38.9	14.5	3.2	3.2	3.2	53.4	100.0	0.0	0.8
90-97 Misc.	75.4	14.4	5.7	3.6	5.4	47.0	100.0	1.1	3.0

Notes: Compiled by the author with data from WTO-IDB and TRAINS (UNCTAD) at the tariff line level.

MERCORSUR countries (Argentina, Brazil, Paraguay and Uruguay), Egypt and Jordan.

Israel has been a member of the WTO since 1995, and Table 30 provides additional detail on its tariff commitments and applied MFN tariffs. The applied MFN tariffs are those that must be paid by exporters in countries with which Israel does not have an FTA. The level of the MFN tariff also represents the size of the tariff margin preference that exporters in FTA countries will enjoy in Israel's market, relative to exporters to Israel from non-FTA countries, once the FTA with Israel is fully implemented.

Israel has made WTO-legal commitments on upper limit tariff bindings for only 71.1 percent of its import products. Therefore, almost a third of Israel's manufacturing import product lines have not been legally bound at the WTO. For the products for which Israel has legally bound the tariffs, the simple average rate for the bindings is 21.7 percent, which is much higher than the Israeli government's average applied MFN rate of 4.4 percent for the bound products.

The Palestinian Authority has reportedly requested WTO Observer status on multiple occasions; nevertheless, as of the time of writing this has not been granted by the WTO membership.

Products that are not bound under the WTO have slightly higher applied average MFN rates of 6.3 percent.

Israel's average tariffs in agricultural products are significantly higher than in non-agricultural products. The highest tariffs of 212 percent are in animal products; Israel also has a significant share of its tariff lines with duties that are not imposed in *ad valorem* terms. Within agriculture, applied MFN tariffs are somewhat lower in the animal and vegetable sectors.

Israel's tariffs in non-agricultural products are relatively low, on average, with MFN applied rates at 4.1 percent. Average applied MFN tariffs are lowest for imports of minerals, mineral fuels, and chemicals. Average tariffs are highest in sectors such as textiles and clothing, footwear, and stone and glass—but even these sectors have average applied MFN import tariffs of less than 7.5 percent. Israel's low applied MFN import tariffs on manufacturing products helps to minimize the amount of trade diversion that might otherwise arise with its substantial network of FTAs.

It is also worth noting that a few of the case studies described thus far affect Palestinian exporters, typically by providing them additional preferential access to the policy-imposing country's markets. Examples include Palestinian exports of steel rebar to Egypt and Jordan, as well as textile products to Egypt.

Israel has also been a relatively frequent user of temporary trade barrier policies, though with only two safeguard investigations, most of this has been through the antidumping policy instrument. In a number of instances, Israel's government policymakers' TTB use has had direct implications for partners in the MENA region. Table 31 provides information on four case studies that the subsequent analysis examines in more detail.

The steel rebar market is one important Israeli example, similar to the case studies already described for Egypt, Jordan, and Morocco. Israel initiated an antidumping investigation in 2009 on steel rebar imports from Turkey, the European Union, Taiwan, Mexico, and Ukraine. However, the investigation resulted in a negative final determination so Israel did not impose any new import restrictions. Nevertheless, in 2009, Israel also initiated a safeguard investigation on steel rebar imports. While the government did impose preliminary import restrictions, the safeguard investigation was also terminated in August 2009 without the imposition of final import restrictions.

As Figure 41 illustrates, Israel's total steel rebar imports nearly doubled between 2005 and 2008, from US\$109 million to US\$217 million. Israel's imports of steel rebar fell by nearly 50 percent in 2009 (corresponding with the global trade collapse), which likely contributed to the government's decisions not to impose new import restrictions at the conclusions of the anti-dumping and safeguard investigations. Nevertheless, at the conclusion of these investigations, Israel's imports of steel rebar subsequently rebounded in 2010 and accelerated to over US\$335 million in 2011.

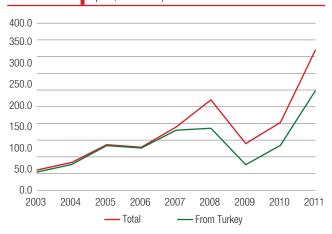
 Table 31
 Examples of Israel's Trade Frictions Impacting Turkey/MENA Partners

	Product: trade policy	Examples of MENA Trading Partner(s) Affected†	Year of TTB policy action	Affected bilateral trade (estimate)*
1.	Steel rebar: antidumping investigation on imports from Turkey, EU, Taiwan, Mexico and Ukraine; safeguard investigation	Turkey (-)	2009, 2009	\$238m
2.	Stretch film rolls: antidumping investigation on imports from Turkey and EU	Turkey (-)	2009	\$12m
3.	Glass wool and rock wool: safeguard investigation	Turkey (-)	2010	\$7m
4.	Grey Portland cement: antidumping on imports from Turkey and Jordan	Turkey (-) Jordan (-)	2001	\$40m <\$100k

Notes: Compiled by the author from the Temporary Trade Barriers Database matched to trade data available from UN COMTRADE Database via WITS. †Expected positive (+), negative (-) or uncertain (?) outcome for the listed exporter, given the likely way that the new TTB import restriction would be applied and whether the exporter would be excluded or exempted. *Estimates of bilateral imports of the affected products taken at the 6-digit HS level.

Figure 41 Israel's Imports of Steel Rebar from Selected Source Countries

(US\$ millions)



Source: UN COMTRADE Database.

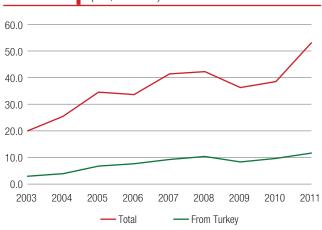
key trade frictions.

Figure 41 also indicates that Turkey is a major source of these imports; Turkey's exports alone increased from US\$107 million in 2005 to US\$238 million in 2011. However, despite the large increase in volume, Turkey's share of Israel's import market has declined from nearly 100 percent in 2005 to 55 percent in 2009, at the time of the initiation of the TTB investigations, before rebounding to roughly 70 percent in 2010–2011. Given the relatively recent surge in steel rebar imports, and the frequency with which the product is targeted by TTB investigations across countries, it would not be surprising to see this issue arise again in the context of Israeli-Tur-

The second example from Israel involves imports of stretch film rolls. Figure 42 illustrates that Israel's imports of this product had increased from US\$34 million in 2005 to US\$42 million by 2008; in 2009, the government initiated an antidumping investigation against imports from Turkey and the European Union. This resulted in the negotiated outcome of price undertakings taking effect in 2010 that are still ongoing.

Turkey's exporters are a major supplier of stretch film roll to the Israeli market. Their exports reached US\$10 million in 2008, when their market share peaked

Figure 42 Israel's Imports of Stretch Film Rolls from Selected Source Countries
(US\$ millions)



Source: UN COMTRADE Database.

at 25 percent of Israeli imports. Nevertheless, the price undertakings outcome—which is a negotiated solution whereby exporters "voluntarily" agree to raise prices in the Israeli market in lieu of having higher antidumping import duties imposed on them—has allowed Turkish firms to retain a presence in the Israeli market, despite the use of antidumping. Nevertheless, Turkey's market share has fallen to 22 percent of Israeli stretch film roll imports as other emerging economies like Brazil, China, and Mexico—countries that were not subject to Israeli antidumping price undertakings—entered the Israeli market and increased their exports during 2010–2011 especially.

Israel's third example involves a safeguard investigation on glass wool and rock wool. The investigation was initiated in 2010; the final conclusion to the investigation is unknown. Nevertheless, the initiation of the investigation signals an adjustment of Israeli industry to new competitive pressure from abroad. Figure 43 indicates that imports of these wool products had increased from US\$14 million in 2005 to US\$22 million in 2008, before dropping off substantially in 2009, along-side the global trade collapse. Imports had resumed by 2010 and were almost back to peak levels by 2011 at US\$21.7 million.

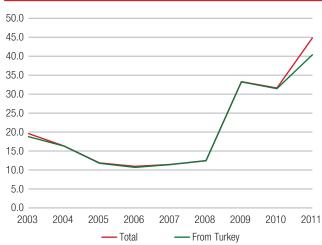
Israel's Imports of Glass Wool and Rock Figure 43 Wool from Selected Source Countries (US\$ millions) 25.0 20.0 15.0 10.0 5.0 2003 2004 2005 2006 2007 2008 2009 2010 2011 Total From Turkey

Source: UN COMTRADE Database.

Turkey is the largest foreign source of these Israe-li wool imports, enjoying 28–40 percent of the Israeli import market for these products in recent years. In 2010, Figure 43 indicates that Turkey's bilateral exports of these wool products peaked at US\$7.5 million. Even though the increase in imports by 2010–2011 may have stemmed more from countries such as China and Slovenia than Turkey, given that Turkey is a major supplier and the investigation is taking place under the safeguard policy, if Israel were to impose any new import restrictions they would almost certainly be targeted at imports from Turkey as well as any other major suppliers.

The fourth example from Israel is an antidumping investigation on imports of cement from Turkey, Jordan, and Romania in 2001. In 2001, Israel's imports from Turkey were US\$18.8 million, from Romania were US\$8.6 million, and from Jordan were US\$2.7 million. Israel quickly negotiated price undertakings with exporters from Jordan and Romania that agreed to raise prices by 34 percent and 106 percent, respectively. On the other hand, it took much longer (2004) for Israel

Figure 44 Israel's Imports of Cement from Selected Source Countries
(US\$ millions)



Source: UN COMTRADE Database.

to decide to impose antidumping duties against imports from Turkey; the duties ranged from 10–32 percent depending on the exporting firm. While the price undertakings remained in effect only until 2005, both Jordan and Romania had exited the Israeli import market by 2003. While the imposed duties on Turkey remained in place until 2007, as Figure 44 indicates, despite the application of antidumping measures, Turkey continued to dominate the Israeli import market for cement, with 98–100 percent of the Israeli import market each year.

Jordan's exporters were not able to re-enter this particular export market in any significant fashion, even after the Israeli price undertakings ended in 2005. Thus this is an example in which the price undertaking agreement was enough to force the exporter out of the market entirely.

The trade data indicates that Jordan had re-entered the Israeli market but with only a negligible amount (US\$21,000) of cement exports to Israel in 2009.

4

TRADE IN SERVICES

here is high potential in the sub-region to integrate further through trade in services. The centrality of services to the economic structure of the Levant region offers a compelling narrative for devising a cooperation agenda aimed at facilitating expanded services trade and the adoption of competition-enhancing regulatory regimes. Current trends and revealed comparative advantages show that there is untapped potential in the Levant to benefit further from integration in services trade. There is a clear preponderance of the service sector in the Levant in both aggregate output and employment terms. During the last decade, services exports exhibited the fastest growth in Syria, Jordan, and Lebanon. Services trade in the Levant has been dominated by travel, transport, and other services, but exports of communication, financial, and insurance services witnessed more rapid change over the last decade. Prospects of competitiveness are also favorable. The Levant countries have revealed comparative advantages in services exports. Egypt, Iraq, Jordan, Lebanon, Syria, Turkey, and the Palestinian Territories have a comparative advantage in the export of travel services. In addition, transport services stand out as a sector where Egypt, Jordan, and Turkey possess a revealed comparative advantage in exporting. Besides travel services, Lebanon has comparative advantages in financial sector, construction and computer services exports.

However, Levant countries are not benefiting from regional opportunities because of restrictiveness of services trade policies. Egypt stands out for the high level of restrictiveness of its applied regulatory regimes in services. Lebanon has the highest level of restrictiveness in cross-border supply. All Levant countries have highly restrictive regulatory regimes governing the temporary mobility of services providers. The sub-region is characterized by the paucity of mutual recognition initiatives aimed at facilitating the mobility of skilled professionals. Egypt and Turkey stand out for the high level of restrictiveness of their applied regulatory regimes in movement

of natural persons. When compared globally in services regulation, the sub-region ranks among the world's most restricted in services trade, with an aggregate level of restrictiveness across all sectors and modes of supply. There are significant barriers to services trade across the Levant, such that a substantial coverage of services in any cooperation, negotiation or regulatory convergence initiative could lead to more rapid liberalization of services than can arguably be accomplished unilaterally.

A major issue emerging from the restrictiveness of services regimes in the Levant concerns the preference of governmental authorities to retain a considerable

degree of policy autonomy and regulatory discretion.

Even in areas that are free of explicit restrictions, *de jure* openness may not always imply or translate into a commensurate degree of *de facto* openness. Across different sectors, the allocation of new operating licenses remains unduly discretionary in many countries. A key reform issue is therefore how regulatory discretion can be reconciled with the need to have clear rules for service providers.

There is a clear need for greater multilateral efforts towards services liberalization in the region. For a deeper regional integration in the services trade, the Levant countries should make significant cooperation and liberalization efforts. As discussed in another chapter of this report, intra-regional integration of services markets will be (net) welfare improving for all Levant countries. While services liberalization offers direct benefits much like it does for goods trade, the policy literature suggests that more pervasive systemic benefits are likely to stem from the positive impact of services liberalization on manufacturing productivity. The benefits from services liberalization for the Levant countries will certainly be larger than those deriving from goods trade liberalization. These issues need to command greater attention among regional policy makers.

Throughout the MENA region, policy makers confront a number of common challenges calling for collective action initiatives and the supply of regional public goods able to tackle the region's most pressing needs. Several such challenges appear amenable to service-centric responses and policy reforms including the need to promote greater market integration across a range of service industries through efforts aimed at enhancing investment climates and initiating the progressive dismantling of key obstacles to trade and investment in services. In the services realm, cooperation in the Levant entails the possibility of preferential negotiations with the GCC countries and an intensification of efforts under existing regional agreements. Expanded service exports are most likely to arise from higher quality regulatory environments. For this to occur, Levant governments must strive to improve the quality of regulatory institutions and endow them with adequate resources and requisite competencies.

This chapter reviews the services sectors and levels of regulatory restrictiveness in the context of efforts at regional and global integration of Levant economies.

The chapter identifies existing and potential barriers to integrating services markets of the sample countries, both within and beyond the Levant region, and advances a number of policy recommendations centered on the promotion of closer regulatory ties in services markets and expanded trade in services. Followed by an overview for trade in services in the sub-region, this study focuses on five sectors for an in-depth analysis (financial services, energy, ICT, air transport, and tourism) discussing how liberalization of services trade under the framework of deeper regional economic integration would help countries take advantage of the regional opportunities.

Overall Trends

The economic structure of the Levant countries suggests a clear preponderance of the service sector in both aggregate output and employment terms. Services contributed nearly half of GDP in Egypt and Syria (more than the MENA average of 42.3 percent) and at least 60 percent in Jordan, Lebanon, and Turkey (slightly lower than world average of 69.5 percent) in 2007 (Figure 45). The share of services in GDP was significantly lower in Iraq where it stood at 21 percent, a level well below the MENA and world averages, and attesting to the distortions typically associated with economies that are centrally dependent on hydrocarbon extraction. Evidence shows that there is a negative correlation between the restrictiveness of policy regimes in services and their share in GDP for all Levant countries.

The services sector is an important generator of employment in the Levant. A country's performance in the service sector as an employer can be assessed by comparing it to its respective income group. As shown in Figure 46,

countries such as Egypt and Syria have a similar division of sectoral employment distribution as the average upper-middle income country. Jordan reflects high-income countries, where services take on much of their employment, especially relative to their agricultural sector. Services accounted for nearly half of total employment in Egypt, Iran and Turkey in 2008 and close to 60 percent or above in Iraq, Jordan and Palestinian Territories. At 52.9 percent, the share of services in employment in Syria 2008 was broadly in line with the average share for the MENA region (52 percent), though slightly lower than the MENA average (53.9 percent). In all Levant countries, the share of services in total employment exceeds the world average (42.9 percent) by a significant margin.

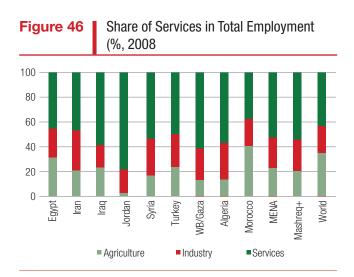
The Levant countries are a net exporter of labor services. The significance of workers remittances in the Levant economies' balance of payments suggests a potential for greater flows of work-related migration, including such of a temporary nature that is amenable to negotiation under regional trade and bilateral migration management agreements (Table 32).

Levant countries have high shares of services in total trade. Over the 2000–10 period, Egypt (41.3 percent), Jordan (28.6 percent), and Lebanon (59 percent) all had average shares of services in total trade well in excess of the average shares in the MENA region (20 percent), and the world (19.5 percent) (see Table 33). This suggests a likely lead role for these three Levant countries from any process directed at integrating services markets on a regional basis. Meanwhile, Syria (23 percent) and Turkey (17.6 percent) report shares in line with MENA and world averages but lower than the MENA average. The lower salience of services exports in Iraq once more reveals the distortive impact of high oil dependency on trade structures.

However, on a global scale, the combined services trade of the Levant is not high. A comparative snapshot of services trade across these economies reveals that Turkey and Egypt are the sub-region's leading services traders, with services exports of US\$35 and US\$23.8 billion and services imports of US\$19.5 and US\$14.7 billion,

Figure 45 Share of Services in GDP (%, 2007) 100 80 60 40 20 Libya Jordan Algeria Turkey Yemen MENA World Iran Irad ebanon. **Funisisa** Mashred+ ■ Industry ■ Agriculture ■ Services

Source: World Bank, World Development Indicators.



Source: World Bank, World Development Indicators.

Note: The GDP share of services in Iraq is for the year 2003. The employment share of services for the World is for the year 2005.

respectively, in 2010. Figure 47 further reveals that Egypt, Jordan, Lebanon, Syria, and Turkey reported a surplus in services trade, while Iraq, and Palestinian Territories reported deficits. Although the combined share of services trade is high for the Levant countries, they are still not competitive globally. These trends appear suggestive of a greater potential for the growth of services exports directed towards the region as opposed to the rest of the world.

During the last decade, services exports exhibited the fastest growth in Syria, Jordan, and Lebanon.

Table 32 Net Remittance Flows 2000–2011 (US\$ millions)

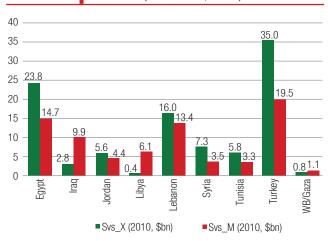
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Egypt	2,820.0	2,876.7	2,878.7	2,881.8	3,327.9	4,960.1	5,194.5	7,476.2	8,452.7	6,894.8	12,148.3	14,031.4
Iran	536.0	682.0	851.0	1,178.0	1,032.0	1,032.0	1,032.0	1,115.0	1,115.0	1,071.8	1,181.1	1,329.8
Iraq	na	na	na	na	na	628.6	-392.4	-14.2	39.5	125.3	128.3	133.4
Jordan	1,647.7	1,818.1	1,949.1	1,974.2	2,058.3	2,150.5	2,481.8	2,954.9	3,322.2	3,094.8	3,145.8	3,013.4
Libya	-454.0	-673.0	-779.0	-668.0	-965.0	-899.0	-929.0	-762.2	-964.2	-1,361.0	-1,609.0	-650.0
Lebanon	na	na	23.8	661.9	1,358.7	912.6	1,757.1	2,807.3	2,814.6	1,809.0	2,674.6	2,578.9
Syria	151.0	140.0	100.0	849.0	813.0	783.0	560.0	780.9	1,115.0	1,138.6	1,092.4	1,329.4
Tunisia	769.0	906.2	1,057.4	1,233.1	1,418.4	1,377.0	1,493.6	1,700.5	1,961.2	1,951.6	2,050.0	1,985.5
Turkey	4,560.0	2,786.0	1,936.0	729.0	804.0	791.0	1,039.0	1,142.0	1,365.0	885.0	818.0	882.0
Algeria	790.0	670.0	1,070.0	1,750.0	2,460.0	143.0	154.0	50.0	77.0	104.0	168.0	131.5
Morocco	2,131.8	3,225.4	2,840.8	3,569.7	4,179.3	4,554.2	5,413.5	6,681.6	6,839.9	6,209.0	6,360.5	7,185.4
Yemen	1,227.5	1,231.0	1,229.7	1,209.9	1,174.3	1,173.1	1,162.2	1,002.8	1,073.7	823.2	1,187.7	1,070.5
Palestinian Territories	1,003.8	1,060.9	1,029.9	549.9	625.3	635.3	916.5	1,064.2	1,204.4	1,189.4	1,490.8	1,526.7

Source: World Bank, World Development Indicators.

Note: Data on remittances paid were not available for Iran over this period and for Turkey, Algeria, Morocco and Yemen during 2000–04. Data on remittances received were not available for Libya over 2007–2011.

Tracking the growth of Levant services trade over time, between 2000 and 2010, services exports grew by 16.3 percent in Syria, 14.8 percent in Jordan, and 14.7 percent in Lebanon. The other Levant economies also experienced a rapid growth of their services exports, not far from the world average of 11.5 percent. During

Figure 47 Comparative Snapshot of Trade in Services (US\$ billion, 2010)



Source: World Bank, World Development Indicators.

the last decade, Lebanon, Jordan, Egypt, Syria, and Turkey have recorded positive trade balances in services.

Services trade in the Levant has been dominated by travel, transport and other services, but exports of communication, financial, and insurance services witnessed more rapid change over the last decade. Table 34 describes the composition of services trade in the MENA economies. Egypt's services trade changed dramatically over the 2005-2011 period, both in terms of value (from US\$14.6 to US\$19.1 billion worth of exports and US\$10.5 to US\$14.1 billion worth of imports) and structure. Significant changes in export structure occurred in the relative share of transport services (up from 32.4 percent in 2005 to 42.8 percent in 2011); computer-related services (CRS, down from 10.6 to 2.4 percent) and other commercial services (down from 20.8 to 11.7 percent). In 2011, Egypt's services trade was dominated by travel, transport and other services.

Lebanon's services trade, dominated by travel, CRS, and other services, also changed significantly over the 2005–2011 period, both in terms of value (from US\$10.9 to US\$19.8 billion worth of exports and from

Table 33 ■ Share of Services in Total Trade (%, 2000–2010)

Country/Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average
Egypt	46.6	46.9	46.5	46.3	46.5	41.6	38.6	37.8	36.3	34.3	32.7	41.3
Iraq	n.a.	n.a.	n.a.	n.a.	n.a.	12.0	10.4	8.4	8.8	12.0	11.6	10.5
Jordan	34.1	31.0	31.8	29.2	25.9	24.8	26.0	26.7	25.7	28.9	30.7	28.6
Libya	5.9	7.3	12.0	9.7	8.1	7.2	6.2	4.9	6.0	10.4	9.9	8.0
Lebanon	n.a.	n.a.	50.0	63.6	60.3	61.0	62.0	59.0	59.4	59.8	55.6	59.0
Syria	28.5	25.8	23.8	22.4	23.5	21.2	19.5	20.8	18.4	22.3	26.3	23.0
Tunisia	21.7	21.2	20.1	19.4	20.0	20.8	20.2	18.4	17.6	20.2	19.1	19.9
Turkey	25.2	22.7	18.7	18.0	17.1	16.9	14.3	13.9	13.9	17.3	15.4	17.6
Algeria	n.a.	n.a.	n.a.	n.a.	n.a.	9.9	8.9	9.9	11.0	14.8	13.8	11.4
Morocco	n.a.	n.a.	n.a.	n.a.	n.a.	29.1	30.1	29.1	26.0	31.6	29.4	29.2
Yemen	n.a.	n.a.	n.a.	n.a.	n.a.	12.8	15.9	14.9	16.4	17.9	18.4	16.0
MENA	22.4	21.9	21.5	21.2	19.8	18.4	18.7	18.7	17.2	20.8	18.8	20.0
Mashreq+	27.0	25.8	29.0	29.8	28.8	23.4	22.9	22.2	21.8	24.5	23.9	24.0
World	19.0	19.7	20.0	19.7	19.5	19.1	18.7	19.2	18.9	21.3	19.7	19.5

Source: World Development Indicators; author's calculations. Note: Data were not available for Iran and Palestinian Territories.

US\$7.9 to US\$13 billion worth of imports) and structure. Significant changes in export structure occurred in the share of travel services (down from 50.9 percent in 2005 to 34.7 percent in 2011); construction (up from 0.0 to 2.7 percent); insurance (down from 1.9 to 0.3 percent); financial (up from 0.5 to 6.2 percent) and other commercial services (up from 45 to 58.1 percent). The structure of Lebanese services imports was more stable during the period, though it witnessed a noticeable change in the share of both construction (up from 0.0 to 3.8 percent) and financial services (up from 0.1 to 2.4 percent). Individual service sectors such as construction, financial and personal, cultural, and recreational (PCR) services also showed sustained growth rates in both imports and exports over this period.

The services trade of Turkey was dominated by travel, transport and other services in 2012. Turkey's services trade also experienced far-reaching changes over the 2005–2012 period, both in terms of value (from US\$26.8 to US\$42.3 billion worth of exports and from US\$11.7 to US\$20.5 billion worth of imports) and structure. Significant changes in export structure occurred in

the share of travel (down from 67.8 to 55.4 percent) and transport services (up from 19 to 31.6 percent). In terms of growth rates, exports of transport, insurance and government services more than doubled. Turkey's services imports witnessed a rise in the share of CRS (from 4.6 to 9.3 percent), construction (from 0.1 to 1.7 percent), financial (from 3.3 to 5.7 percent) and other commercial services (from 31.6 to 38.3 percent) and a decline in the share of travel services (from 24.5 to 19.8 percent). In terms of growth rates, the rise of CRS, construction, financial and PCR and the fall in other commercial services imports was most significant.

However, composition of Levant's services exports is losing global foreign demand and in addition services are being exported to destinations with low growth. To understand the demand-side dynamics, two questions are tested by exploring how a country's current export basket may be shaped in the future in relation to the rest of the world: Is a country exporting those services that are growing in demand by the rest of the world? Is a country exporting to those countries where services demand is expanding at a fast rate? To address

Table 34 Composition of Services Trade in Selected MENA Economies 2005–2011

EGYPT		Exports Imports						
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	6,850.6	8,707.1	46.8	45.5	1,628.7	2,202.5	15.5	15.7
Transport	4,745.6	8,199.4	32.4	42.8	3,731.3	6,474.1	35.5	46.0
Communications	386.9	893.6	2.6	4.7	432.8	442.8	4.1	3.1
Computer and Information	1,548.7	454.6	10.6	2.4	2,300.5	1,964.6	21.9	14.0
Construction	502.9	395.0	3.4	2.1	231.0	266.8	2.2	1.9
Insurance Services	58.2	150.6	0.4	0.8	781.4	1,475.8	7.4	10.5
Financial	137.0	122.7	0.9	0.6	197.6	36.5	1.9	0.3
Royalties and License Fees	136.0	n.a.	0.9	na	182.0	231.6	1.7	1.6
Personal, Cultural and Recreational	82.8	107.5	0.6	0.6	22.1	34.3	0.2	0.2
Government	193.9	109.1	1.3	0.6	1,000.7	940.6	9.5	6.7
Other Services	3,046.4	2,233.1	20.8	11.7	5,148.1	5,393.0	49.0	38.3
Total	14,642.6	19,139.6	100.0	100.0	10,508.1	14,069.6	100.0	100.0
IRAQ		E	oports			lmı	oorts	
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	167.7	1,543.7	47.2	54.7	438.6	1,796.0	7.2	16.2
Transport	176.5	444.0	49.7	15.7	2,811.2	5,358.6	46.1	48.4
Communications	0.5	20.3	0.1	0.7	441.7	77.7	7.2	0.7
Computer and Information	n.a.	102.9	n.a.	3.6	179.8	556.6	3.0	5.0
Construction	n.a.	n.a.	n.a.	n.a.	394.2	n.a.	6.5	n.a.
Insurance Services	0.1	5.8	0.0	0.2	941.4	1,934.8	15.4	17.5
Financial	2.7	39.3	0.8	1.4	39.5	1,096.4	0.6	9.9
Royalties and License Fees	n.a.	n.a.	n.a.	n.a.	28.6	n.a.	0.5	n.a.
Personal, Cultural and Recreational	n.a.	3.1	n.a.	0.1	151.1	6.7	2.5	0.1
Government	7.7	663.4	2.2	23.5	668.4	253.2	11.0	2.3
Other Services	11.0	834.8	3.1	29.6	2,844.7	3,925.4	46.7	35.4
Total	355.2	2,822.5	100.0	100.0	6,094.5	11,080.0	100.0	100.0
JORDAN		F	cports			lmı	oorts	
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	1,440.6	2,999.7	61.7	58.4	585.2	1,160.6	23.0	25.9
Transport	469.8	1,188.2	20.1	23.1	1,341.6	2,500.3	52.8	55.9
Communications	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Computer and Information	328.6	547.9	14.1	10.7	328.6	317.7	12.9	7.1
Construction	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Insurance Services	n.a.	n.a.	n.a.	n.a.	209.4	378.2	8.2	8.4
Financial	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Royalties and License Fees	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Personal, Cultural and Recreational	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Government	94.5	402.7	4.0	7.8	77.2	118.7	3.0	2.7
Other Services	423.1	950.6	18.1	18.5	615.2	814.6	24.2	18.2
Total	2,333.6	5,138.5	100.0	100.0	2,542.0	4,475.5	100.0	100.0

(continued on next page)

 Table 34
 Composition of Services Trade in Selected MENA Economies 2005–2011 (continued)

LEBANON		E	ports			lmp	oorts	
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	5,531.7	6,870.7	50.9	34.7	2,908.1	4,215.1	36.9	32.4
Transport	437.7	1,353.0	4.0	6.8	1,332.2	2,071.0	16.9	15.9
Communications	240.6	491.0	2.2	2.5	138.5	397.2	1.8	3.1
Computer and Information	4,362.0	8,974.2	40.2	45.3	3,242.2	5,058.3	41.1	38.9
Construction	0.3	535.0	0.0	2.7	0.3	497.8	0.0	3.8
Insurance Services	209.3	61.1	1.9	0.3	248.0	250.4	3.1	1.9
Financial	58.1	1,227.1	0.5	6.2	9.9	308.6	0.1	2.4
Royalties and License Fees	n.a.	7.4	n.a.	0.0	n.a.	25.1	n.a.	0.2
Personal, Cultural and Recreational	0.0	166.1	0.0	0.8	0.0	113.2	0.0	0.9
Government	18.7	50.7	0.2	0.3	15.7	19.0	0.2	0.1
Other Services	4,888.9	11,512.6	45.0	58.1	3,654.6	6,669.5	46.3	51.3
Total	10,864.1	19,808.2	100.0	100.0	7,890.2	13,005.7	100.0	100.0
LIBYA		Е	ports			lmp	oorts	
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	250.0	n.a.	46.8	n.a.	680.0	2,269.1	28.9	51.2
Transport	116.0	27.4	21.7	90.1	1,016.0	1,034.0	43.3	23.3
Communications	10.0	3.0	1.9	9.9	43.0	10.2	1.8	0.2
Computer and Information	n.a.	n.a.	n.a.	n.a.	50.0	n.a.	2.1	n.a.
Construction	n.a.	n.a.	n.a.	n.a.	149.0	41.2	6.3	0.9
Insurance Services	43.0	n.a.	8.1	n.a.	160.0	248.9	6.8	5.6
Financial	n.a.	n.a.	n.a.	n.a.	20.0	n.a.	0.9	n.a.
Royalties and License Fees	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Personal, Cultural and Recreational	n.a.	n.a.	n.a.	n.a.	10.0	n.a.	0.4	n.a.
Government	115.0	n.a.	21.5	n.a.	221.0	831.6	9.4	18.8
Other Services	168.0	3.0	31.5	9.9	653.0	1,131.9	27.8	25.5
Total	534.0	30.4	100.0	100.0	2,349.0	4,435.0	100.0	100.0
SYRIA		E	ports			Imp	oorts	
Services	2005 (\$ mn)	2010 (\$ mn)	Share (%, 2005)	Share (%, 2010)	2005 (\$ mn)	2010 (\$ mn)	Share (%, 2005)	Share (%, 2010)
Travel	1,944.0	6,190.1	66.8	84.4	550.0	1,509.8	23.3	42.7
Transport	218.0	529.2	7.5	7.2	1,401.0	1,595.0	59.4	45.1
Communications	185.0	140.7	6.4	1.9	117.0	34.5	5.0	1.0
Computer and Information	86.0	39.4	3.0	0.5	100.0	35.0	4.2	1.0
Construction	14.0	8.1	0.5	0.1	n.a.	12.5	n.a.	0.4
Insurance Services	n.a.	12.3	n.a.	0.2	35.0	121.4	1.5	3.4
Financial	28.0	67.2	1.0	0.9	38.0	13.5	1.6	0.4
Royalties and License Fees	n.a.	1.4	n.a.	0.0	12.0	36.6	0.5	1.0
Personal, Cultural and Recreational	85.0	52.0	2.9	0.7	21.0	18.6	0.9	0.5
Government	350.0	292.7	12.0	4.0	85.0	96.3	3.6	2.7
Other Services	748.0	613.8	25.7	8.4	408.0	368.4	17.3	10.4
Total	2,910.0	7,333.0	100.0	100.0	2,359.0	3,533.1	100.0	100.0

(continued on next page)

 Table 34
 Composition of Services Trade in Selected MENA Economies 2005–2011 (continued)

TUNISIA		Е	ports			Imp	ports	
Services	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)	2005 (\$ mn)	2011 (\$ mn)	Share (%, 2005)	Share (%, 2011)
Travel	2,142.7	1,914.3	55.3	41.4	373.8	606.6	17.7	19.1
Transport	1,135.9	1,355.1	29.3	29.3	1,106.8	1,618.8	52.5	50.9
Communications	64.4	380.4	1.7	8.2	37.8	95.4	1.8	3.0
Computer and Information	134.4	116.4	3.5	2.5	82.5	80.6	3.9	2.5
Construction	151.0	358.2	3.9	7.8	196.5	307.5	9.3	9.7
Insurance Services	40.8	61.0	1.1	1.3	128.7	217.6	6.1	6.8
Financial	57.7	65.7	1.5	1.4	50.1	58.2	2.4	1.8
Royalties and License Fees	25.7	26.4	0.7	0.6	7.7	12.1	0.4	0.4
Personal, Cultural and Recreational	3.7	9.0	0.1	0.2	6.2	5.1	0.3	0.2
Government	120.5	331.9	3.1	7.2	116.4	176.0	5.5	5.5
Other Services	598.2	1,348.9	15.4	29.2	625.9	952.5	29.7	30.0
Total	3,876.8	4,618.3	100.0	100.0	2,106.5	3,177.8	100.0	100.0
TURKEY		Б	ports		Imports			
Services	2005 (\$ mn)	2012 (\$ mn)	Share (%, 2005)	Share (%, 2012)	2005 (\$ mn)	2012 (\$ mn)	Share (%, 2005)	Share (%, 2012)
Travel	18,152.0	23,441.0	67.8	55.4	2,872.0	4,052.0	24.5	19.8
Transport	5,076.0	13,381.0	19.0	31.6	5,146.0	8,605.0	43.9	42.0
Communications	412.0	428.0	1.5	1.0	154.0	299.0	1.3	1.5
Computer and Information	194.0	302.0	0.7	0.7	538.0	1,915.0	4.6	9.3
Construction	882.0	1,343.0	3.3	3.2	8.0	342.0	0.1	1.7
Insurance Services	323.0	947.0	1.2	2.2	891.0	1,321.0	7.6	6.4
Financial	345.0	532.0	1.3	1.3	386.0	1,177.0	3.3	5.7
Royalties and License Fees	n.a.	n.a.	n.a.	n.a.	439.0	740.0	3.7	3.6
Personal, Cultural and Recreational	1,079.0	1,218.0	4.0	2.9	90.0	336.0	0.8	1.6
Government	320.0	752.0	1.2	1.8	1,194.0	1,717.0	10.2	8.4
Other Services	3,555.0	5,522.0	13.3	13.0	3,700.0	7,847.0	31.6	38.3
Total	26,783.0	42,344.0	100.0	100.0	11,718.0	20,504.0	100.0	100.0

(continued on next page)

these questions, a regression analysis was done: plotting, for each country of interest, the growth of the country's export share of each service sector, and the world growth rate of each service sector. ¹⁰⁰ Ideally the correlation between the two indicators would be positive, as this would suggest potential for the rest of the world to "pull" these countries' export sectors. However, for all

Levant countries, the correlation is negative. For example, the sectors "other business services" and "computer and information services" are experiencing high world

¹⁰⁰ To capture as many observations as possible, the growth rate of each service sector in the average levels of the years 2000 to 2002 and 2005 to 2008 was considered.

	Ex	ports		Imports				
2005 (\$ mn)	2010 (\$ mn)	Share (%, 2005)	Share (%, 2010)	2005 (\$ mn)	2010 (\$ mn)	Share (%, 2005)	Share (%, 2010)	
118.7	667.0	38.7	80.1	254.1	577.5	50.4	50.5	
6.8	22.6	2.2	2.7	72.4	91.9	14.4	8.0	
25.4	39.0	8.3	4.7	62.2	36.3	12.3	3.2	
59.4	11.1	19.4	1.3	56.9	70.6	11.3	6.2	
38.8	25.5	12.6	3.1	2.9	4.7	0.6	0.4	
0.0	5.5	0.0	0.7	6.5	14.9	1.3	1.3	
n.a.	n.a.	n.a.	n.a.	0.5	1.2	0.1	0.1	
0.0	5.5	0.0	0.7	2.7	0.3	0.5	0.0	
4.9	5.5	1.6	0.7	11.5	84.4	2.3	7.4	
28.4	49.2	9.3	5.9	33.9	261.1	6.7	22.8	
157.0	141.2	51.2	17.0	177.1	473.3	35.1	41.4	
306.5	832.6	100.0	100.0	504.1	1,142.8	100.0	100.0	
	(\$ mn) 118.7 6.8 25.4 59.4 38.8 0.0 n.a. 0.0 4.9 28.4 157.0	2005 (\$ mn) 2010 (\$ mn) 118.7 667.0 6.8 22.6 25.4 39.0 59.4 11.1 38.8 25.5 0.0 5.5 n.a. n.a. 0.0 5.5 4.9 5.5 28.4 49.2 157.0 141.2	2005 (\$ mn) 2010 (\$ mn) Share (%, 2005) 118.7 667.0 38.7 6.8 22.6 2.2 25.4 39.0 8.3 59.4 11.1 19.4 38.8 25.5 12.6 0.0 5.5 0.0 n.a. n.a. n.a. 0.0 5.5 0.0 4.9 5.5 1.6 28.4 49.2 9.3 157.0 141.2 51.2	2005 (\$ mn) 2010 (\$ mn) Share (%, 2005) Share (%, 2010) 118.7 667.0 38.7 80.1 6.8 22.6 2.2 2.7 25.4 39.0 8.3 4.7 59.4 11.1 19.4 1.3 38.8 25.5 12.6 3.1 0.0 5.5 0.0 0.7 n.a. n.a. n.a. n.a. 0.0 5.5 0.0 0.7 4.9 5.5 1.6 0.7 28.4 49.2 9.3 5.9 157.0 141.2 51.2 17.0	2005 (\$ mn) 2010 (\$ mn) Share (%, 2005) Share (%, 2010) 2005 (\$ mn) 118.7 667.0 38.7 80.1 254.1 6.8 22.6 2.2 2.7 72.4 25.4 39.0 8.3 4.7 62.2 59.4 11.1 19.4 1.3 56.9 38.8 25.5 12.6 3.1 2.9 0.0 5.5 0.0 0.7 6.5 n.a. n.a. n.a. 0.5 0.0 5.5 0.0 0.7 2.7 4.9 5.5 1.6 0.7 11.5 28.4 49.2 9.3 5.9 33.9 157.0 141.2 51.2 17.0 177.1	2005 (\$ mn) 2010 (\$ mn) Share (%, 2005) Share (%, 2010) 2010 (\$ mn) 2010 (\$ mn) 118.7 667.0 38.7 80.1 254.1 577.5 6.8 22.6 2.2 2.7 72.4 91.9 25.4 39.0 8.3 4.7 62.2 36.3 59.4 11.1 19.4 1.3 56.9 70.6 38.8 25.5 12.6 3.1 2.9 4.7 0.0 5.5 0.0 0.7 6.5 14.9 n.a. n.a. n.a. 0.5 1.2 0.0 5.5 0.0 0.7 2.7 0.3 4.9 5.5 1.6 0.7 11.5 84.4 28.4 49.2 9.3 5.9 33.9 261.1 157.0 141.2 51.2 17.0 177.1 473.3	2005 (\$ mn) 2010 (\$ mn) Share (%, 2005) Share (%, 2010) 2010 (\$ mn) Share (%, 2005) 118.7 667.0 38.7 80.1 254.1 577.5 50.4 6.8 22.6 2.2 2.7 72.4 91.9 14.4 25.4 39.0 8.3 4.7 62.2 36.3 12.3 59.4 11.1 19.4 1.3 56.9 70.6 11.3 38.8 25.5 12.6 3.1 2.9 4.7 0.6 0.0 5.5 0.0 0.7 6.5 14.9 1.3 n.a. n.a. n.a. n.a. 0.5 1.2 0.1 0.0 5.5 0.0 0.7 2.7 0.3 0.5 4.9 5.5 1.6 0.7 11.5 84.4 2.3 28.4 49.2 9.3 5.9 33.9 261.1 6.7 157.0 141.2 51.2 17.0 177.1 473.	

Source: IMF BOP Statistics; author's calculations.

growth rates. Yet for most of the Levant countries, the export shares in these sectors are low. In contrast, the sectors in which these countries have large export shares are the sectors experiencing low world growth, including travel and transport services. Furthermore, for each Levant country, plotting the growth in the country's export share of each trading partner against the world import growth rate of each trade partner shows that the correlation between the two proxies is negative, suggesting that for each country, services are exported to destinations with low growth in services demand. The Levant countries' positive balance is driven by traditional services, particularly travel, while the trade balance in modern services is negative.

Despite demand side issues, the Levant countries have revealed comparative advantages in services exports. To assess the Mashreq countries' competitiveness in services vis-à-vis the rest of the world (ROW), Table 35 reports their Revealed Comparative Advantages¹⁰¹ (RCAs). An RCA value in excess of one suggests a comparative advantage in exporting the service concerned.¹⁰² The results presented in Table 35 suggest that the Levant

countries (Egypt, Iraq, Jordan, Lebanon, Syria, Turkey, and the Palestinian Territories) have a comparative advantage in the export of travel services. In addition, transport services stand out as a sector where Egypt, Jordan, and Turkey possess a revealed comparative advantage in exporting. Besides travel services, Lebanon has comparative advantages in financial sector, construction, and computer services exports. Comparative advantage is a

$$RCA = [Xik/Xit]/[Xnk/Xnt]$$

where X represents exports, i is an exporting country, k is a services sector, t is the sum of all sectors and n is a set of other countries usually the rest of the world (ROW).

¹⁰¹ The RCA index measures the share of a sector's exports in a country's total services exports relative to the share of that sector's exports in the comparator's (here ROW) total services exports.

The RCA compares the share of exports of a country in world exports with the average share of exports of all countries in the world exports for a particular services sector. An RCA index above one therefore indicates that a country has a share of services exports in a particular services sector that is higher than the global share of exports in that same service sector, and is considered to have a revealed comparative advantage in that sector. The higher the ratio, the more competitive is the country in the given sector.

Sector/Country	Egypt	Iraq	Jordan	Lebanon	Libya	Syria	Tunisia	Turkey	Palestinian Territories	Algeria	Morocco
Communication	0.6	0.1	0.0	0.4	0.4	0.3	0.8	0.2	0.6	0.6	0.9
Computer	0.3	0.2	0.5	1.3	0.0	0.0	0.1	0.0	0.1	2.9	0.7
Construction	1.4	0.0	0.0	1.7	0.0	0.1	4.0	1.5	1.4	2.4	0.2
Financial	0.1	0.1	0.0	2.0	0.0	0.1	0.2	0.2	0.0	1.0	0.0
Insurance	0.2	0.1	0.0	0.2	10.1	0.1	0.6	1.1	0.4	1.2	0.6
Royalties and license fees	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Transport	2.0	8.0	1.2	0.2	3.8	0.4	1.6	1.6	0.2	1.3	0.9
Travel	2.7	3.0	3.3	2.5	0.7	4.3	2.4	3.1	4.1	0.3	2.3

Table 35 ■ Revealed Comparative Advantages in Service Exports (2010)

Source: IMF BOP Statistics; author's calculations.

dynamic process. The determinants that shape comparative advantage, and therefore productivity, are founded in countrywide variables in which firms in specific services sector can capitalize. Yet it is important to note that policy regulations could also play a role in determining comparative advantage for services.

One setback is that the Levant economies are not strongly linked in bilateral services trade. For example, although Turkey's imports from Syria reached US\$153 million in 2007, this represented only 0.5 percent of Turkey's total services imports for the year. Similarly, Turkey's services imports from Egypt was minimal over the last decade, representing 0.2 percent of Turkey's services imports in 2011. The analysis suggests that linkages through services trade between Turkey and the other countries of interest are not that strong considering Turkey's bilateral imports from outside the region. On the other hand, Turkey's services exports to Egypt was US\$5.8 million 2011 (0.01 percent of Turkey's total services exports and 0.04 percent of Egypt's total services imports). Services trade intensity for these two countries confirms that trade between Egypt and Turkey has an extremely low intensity compared to trade with the rest of the world.103

In fact, Turkey and Egypt are under-exporting with each other in trade services, which may suggest the existence of untapped potential between these countries. A cross-country gravity model was estimated for

the purposes of this study to evaluate Levant countries' bilateral trade relative to their services trade potential. ¹⁰⁴ Gravity services trade model estimates indicate that the estimated potential export volumes predicted by structural trade determinants in the Levant region are close to or lower than the realized intra-regional trade values between 2005 and 2009. The results (Table 36) show that Egypt is under-exporting with Turkey, and Turkey is under-exporting with Egypt. At the same time, trade

$$TII_{i,j} = \frac{X_{i,j}}{X_{w,j}}$$

where $x_{i,j}$ is exports from i to j, x_i is total exports of i, $x_{w,j}$ is exports from the world to j, and x_w is total world exports.

¹⁰³ Trade Intensity Indexes (TII) is used to measure a country's relative share of exports to a particular country compared to the rest of the world's share of exports to this country. A large index number suggests the trade between a country and its partner is more intense than trade with the country and the rest of the world. Specifically, the TII between exporter *i* and importer *j* is calculated as:

The regression model used is as follows: Bilateral exports were regressed for 2005–2009, in average, on the following country-specific and bilateral characteristics: log of distance, dummy variables for contiguity, common language, common colonial power, and log of GDP of exporter and importer to proxy for economic mass. The structural determinants for each pair of countries together with the estimated regression coefficients are used to compute the bilateral trade potentials. The empirical framework makes it possible to categorize bilateral exports as over-traded or under-traded, depending on the comparison between realized bilateral export values and the model's predictions.

Table 36 Gravity Model of Trade in Services

Dependent variable: log(export value)	Coefficient estimates	Dyadic coefficient estimates
log(distance)	-0.659*** (0.022)	-0.874*** (0.024)
Contiguity	0.776*** (0.122)	0.758*** (0.093)
common language	1.081*** (0.065)	0.533*** (0.053)
common colonial power	-0.122 (0.094)	0.516*** (0.077)
log(importer GDP)	0.727*** (0.009)	
log(exporter GDP)	0.738*** (0.009)	
Observations	7,817	8,583
Adjusted R-squared	0.609	0.791

Source: World Bank WDI, World Bank Trade in Services Database, and CEPII. Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.01,

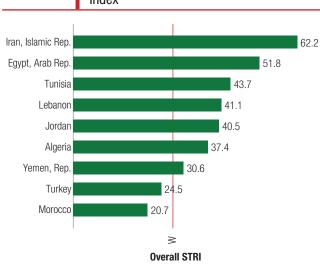
between Israel and three Levant countries is lower than predicted. Israel is under trading in services with Jordan, Egypt, and Lebanon.

There are services trade complementarities suggesting that some countries' export structure matches the import structure of another country. Computing a services trade complementarity index¹⁰⁵ can help identify markets with which a country has an export potential. The index looks at whether a potential importer buys services that a country exports abroad by measuring how well the export structure of one country matches the import structure of another country.¹⁰⁶ The results suggest that, between 2008 and 2010, Turkey's trade complementarity with Lebanon, Syria and Iraq increased. Also Jordan's trade complementarity with Syria increased during the same period.

Services Trade Policy

Egypt, Lebanon, and Jordan have high level of restrictiveness in services trade compared with world averages. Figure 48 provides a comparison of the overall restrictiveness of services trade policies. As measured against the

Figure 48 Overall Services Trade Restrictiveness Index



Source: World Bank Services Trade Restrictions Database.

Note: Services Trade Restrictions Index (STRI) ranges from 0 (fully open) to 100 (closed).

'global' STRI average encompassing all 102 countries, Turkey exceeds the world average, in several instances by a considerable margin. Turkey stands out as more open than other Levant countries. This is largely as a result of its overall greater level of development and integration into world markets. Meanwhile, Egypt stands out for the high level of restrictiveness of its applied regulatory regimes in services.

Jordan has the lowest level of restrictiveness in cross-border supply. Figure 49 shows the policy stance taken by sample countries in regard to cross-border trade

$$TCI_{i,j} = \left(1 - \sum_{p} \frac{\left| x_{i,p} / x_{i} - \frac{m_{j,p}}{M_{j}} \right|}{2} \right) * 100$$

where $|x_{i,p}|$ is exports from i in product p, x_i is total exports of i, $m_{j,p}$ is imports of j in p, and M_j is total imports of j.

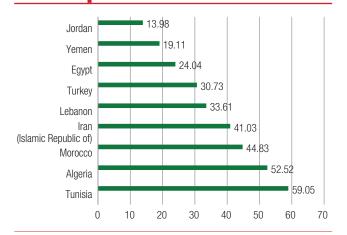
¹⁰⁵ The index is based on bilateral exports and imports at the disaggregated services sectoral level that are then aggregated into a single index for each country pair. The index number varies between 0 and 100. The higher the index number, the higher is the potential for that country to export to the other market.

Specifically, the TCI between exporter i and importer j is calculated as:

Figure 49

Services Trade Restrictiveness Index (Mode 1: Cross-Border Supply)

All Sectors



Source: World Bank Services Trade Restrictions Database. *Note*: STRI ranges from 0 (fully open) to 100 (closed).

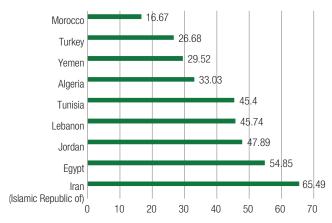
in services (GATS Mode 1).¹⁰⁷ The data reveal wide variance across the sample set, with Tunisia, a country that has paradoxically devoted considerable attention in promoting itself as a destination for FDI in computer and other IT-related services, maintaining a highly restrictive regime on cross-border supply. The significantly lower level of restrictiveness observable in Jordan and Egypt is more in line with both countries' emergence as increasingly competitive regional and global suppliers of higher value-added IT and telecommunications services.

Services trade restrictiveness is high for GATS Mode 3—commercial presence. Figure 50 reveals policy regimes affecting commercial presence (Mode 3 trade in services). The data shows that, apart from Turkey (an OECD member), most Levant countries for which data is available direct medium to high levels of restrictions towards what is arguably the most important and developmentally value-adding mode of contesting services markets. What's more, several MENA countries stand out in maintaining policy regimes that are more restrictive towards services supplied through FDI than on a cross-border basis. This is somewhat paradoxical and not in sync with general trends observed elsewhere given the greater policy and regulatory leverage that host

Figure 50

Services Trade Restrictiveness Index (Mode 3: Commercial Presence)

All Sectors



Source: World Bank Services Trade Restrictions Database. *Note*: STRI ranges from 0 (fully open) to 100 (closed).

states typically enjoy over foreign established firms. Such a stance attests in all likelihood to political economy demands for continued protection in sectors subject either to high degrees of market concentration in the presence of weak competition regimes or to the dominant presence of state-owned actors in key service sectors.

Promoting labor mobility within the Levant and beyond

The Levant countries have highly restrictive regulatory regimes governing the temporary mobility of services

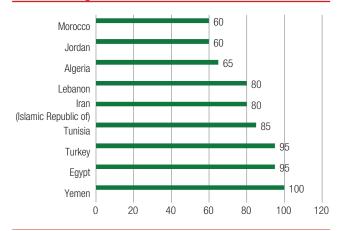
¹⁰⁷ Services have unique characteristics that greatly affect their tradability, including intangibility and non-storability, but typically they also require differentiation and joint production. In order to capture these aspects, the World Trade Organization defines trade in services to span four modes of supply. Mode 1, or cross-border trade, is services supplied from the territory of one country into the territory of another. Mode 2, or consumption abroad, is services supplied in the territory of a nation to the consumers of another. Mode 3, or commercial presence, is services supplied through any type of business or professional establishment of one country in the territory of another, for example, foreign direct investment. And finally, Mode 4, or presence of natural persons, is services supplied by nationals of a country in the territory of another.

providers. There is strong evidence showing that labor market restrictions are imposing a much greater burden on the global economy than the remaining trade restrictions. The gains from integration—in goods, capital and people—are based on harnessing economic advantage from differences in endowments. While GATS Mode 4 suppliers are typically subjected worldwide to the most acute regulatory hurdles, the level of restrictiveness in the sample countries attests to a region of highly fragmented labor markets, weak employment performance, high unemployment, particularly among skilled youth, reflecting in turn a structural mismatch between labor market needs and the supply of skills emanating from tertiary educational institutions throughout much of the region. The Levant, like MENA more broadly, is characterized by the paucity of mutual recognition initiatives aimed at facilitating the mobility of skilled professionals. Egypt and Turkey stand out for the high level of restrictiveness of their applied regulatory regimes in movement of natural persons (see Figure 51). For a deeper regional integration in the services trade, the Levant countries should make significant cooperation and liberalization efforts on labor mobility issues.

Demographic forces provide "arbitrage" opportunities for the Levant where skilled labor can move as part of services trade or FDI skills-transfer to facilitate economic integration. The Mediterranean area is in a critical stage in terms of regional integration of labor markets. Many countries in Europe are facing rapidly aging populations, which will be accompanied by shrinking labor forces in the next decade. The projected changes in the population structures of Western Europe suggest that the region will be facing labor shortages as early as 2025. Even though most of them have entered their own demographic transitions with declining fertility rates, most countries of Southern and Eastern Mediterranean still have relatively young and educated populations who are facing bleak labor market prospects. These current diverging patterns are creating unique welfare enhancing "arbitrage" opportunities for the region where skilled labor can move as part of services trade or FDI skills-transfer to facilitate economic integration.

Figure 51 Services Trade Restrictiveness Index (Mode 4: Movement of Natural Persons)

All Sectors



Source: World Bank Services Trade Restrictions Database. *Note*: STRI ranges from 0 (fully open) to 100 (closed).

Given the geographic proximity and historical migration trends, there are potential demographic benefits of increased mobility between Europe and within the Levant.

There is a narrow window of opportunity to design and implement the necessary regional labor mobility and integration policies. Given the experiences of other developing regions (such as Latin America or Eastern Europe), it will not be too long before the MENA countries complete their demographic transitions. From around 2040, the fertility and population growth are projected to decline. It is important to act now and implement mechanisms that would allow the movement of working-age people within the Levant and to the European countries within the next two decades.

There are several relatively demographic and migration patterns that are influencing the current labor market patterns in regional labor force flows. The largest countries in the region in terms of populations are Egypt and Turkey. Their current populations are estimated to be around 82 and 74 million respectively. Turkey has entered the demographic transition of declining fertility rates much earlier where the current rate is at 2.05. As of 2050, the gaps will increase and their populations are projected to be 122 and 94 million respectively. The decline

in the Egyptian rate is more gradual and is currently at 2.8. It is projected to reach 2.1 in 2050. Although Egypt's migration rate to the EU is low compared to its Maghreb neighbors (around nine percent of Egyptian migrants are in EU countries), it is high in absolute terms, with about 200,000 migrants in the EU in 2000. The majority of Egyptian migrants (55 percent) are low skilled but almost 30 percent have higher education. Turkey sends over 95 percent of their migrants to Europe whereas the rate is around 60 percent for other Levant countries. The second most important destination is the United States attracting 38 percent of migrants from Jordan. Australia and New Zealand are the destinations for a large share of migrants from Lebanon (23 percent), Egypt (15 percent), and Iraq and Syria (10 percent). In terms of specific destinations, colonial and other historical bonds play a critical role. Germany is home to the largest number of Turkish migrants due to special agreements from the 1960s. Netherlands is another important destination for Turkish migrants. Great Britain receives migrants from Lebanon, Egypt, and Iraq. Of course, large numbers of migrants from the region also work as temporary migrants in the oil-rich Persian Gulf countries. This is important for Levant countries, especially Egypt, Jordan and Lebanon.

Levant countries will need to strengthen skills to benefit from regional integration opportunities. Trade in services and FDI follow require high-skilled migration. However, piecemeal evidence suggests that young Arab workers don't seem competitive in business services and high-value added industries. Despite impressive achievements in access to education at all levels of instruction over the last 40 years, MENA countries' educational attainment remains low compared to East Asian and Latin American countries at similar levels of economic development (World Bank 2009b). Most MENA countries have not yet reached the level and quality of human capital of the more dynamic emerging economies. Education systems in MENA countries are biased towards humanities and social sciences at the expense of technical, scientific, or business training. Beyond the choice of curricula, there is also evidence that higher education systems in MENA are not conducive to the critical skills requested for innovation in the knowledge economy (World Bank 2009). MENA countries should call for an urgent adjustment of training programs. Lebanon has the highest skilled migration ratio in the Levant with over 35 percent of tertiary educated workers abroad.

Regional cooperation helps create opportunities for better-managed cross-border labor movement (in the context of high unemployment, in particular among the youth) and for sharing the cost of education. It is necessary to perform a detailed labor market analysis for every country to clearly identify where the shortages, surpluses, and bottleneck are in terms of professions, skills, or vocations so that immediate policies can be implemented when the right opportunities arise. In the case of a deeper regional integration, temporary migration schemes could be adopted that have built-in mechanisms that guarantee return migration.

Labor mobility must be managed within a regional framework where the sending and receiving countries coordinate their policies and actions so that efficiency gains are maximized for all parties involved while the potential distortions and disruptions are minimized. Coordination is crucial to construct a viable legal framework which will achieve multiple objectives: (i) help to prevent concerns about undocumented migration which is one of the main sources of political opposition in Europe to any relaxation of migration restrictions; (ii) lead to stronger protection to the migrants' rights, including social protection and pensions; and (iii) lower all transactions and implementation costs required to establish and maintain labor mobility agreements which can be significant if done unilaterally.

Despite the technical and conceptual limitations of the GATS Mode IV, it remains the only collective action response to the area of labor migration governance that tries to trans-nationalize some elements of national migration regimes. It is therefore worth preserving and empowering this mechanism. One way to do so would be to move the focus towards "contract based" movement of service suppliers rather than employment based movement (which tends to raise sensitivities about foreign workers

having access to domestic labor markets and ultimately residence and citizenship). The advantage of contract based movement is that it would help make temporariness more credible as contracts would be time bound and between firms; it would allow workers to be hired based on competence and performance. An impressive benefit of contract-based movements would also be the reduced incentives to under employed workers. If pursued on a sector-by-sector basis they even offer the opportunity to improve education policies in source countries so as to align with the labor market needs of the labor receiving markets.

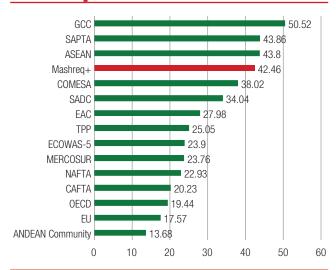
Situating the MENA Region Globally in Services Regulation

The sub-region's overall performance is contrasted to that of leading regional integration zones. Figure 52 situates the Levant (Egypt, Iraq, Jordan, Lebanon, Syria, Turkey, and the Palestinian Territories) combined with outer circle countries (Libya and Tunisia), as "Mashreq+ countries," against the world's leading economic integration zones, comparing prevailing levels of services sector restrictiveness across them. Figure 52 depicts a sub-region that ranks among the world's most restricted in services trade, with an aggregate level of restrictiveness across all sectors and modes of supply roughly in line with those found in South- (South Asian Association for Regional Cooperation—SAPTA) and South-East (Association of South-East Asian Nations-ASEAN) Asia. The fact that the Gulf Cooperation Council, a regionally proximate grouping to which the bulk of labor migration emanating from MENA countries is directed, ranks as the world's most restrictive services market is clearly problematic, as greater openness in the high-income and service-hungry GCC could offer significant new export opportunities for service providers from the MENA region. There is a clear need for greater efforts towards services liberalization in the region.

Sectoral performances tell a similar story. STRIs by sectors and regional groupings tell a story of significant

Figure 52 Situating "Mashreq+" in the World: STRI by Regional Groupings

All Sectors and Modes of Supply



Source: World Bank Services Trade Restrictions Database. *Note*: STRI ranges from 0 (fully open) to 100 (closed).

cross-sectoral uniformity, with the "Mashreq+" ranking across all 9 sectors overed by the World Bank's STRI data set among the most restrictive groupings. In all sectors but banking, where it ranks fourth, the Mashreq+ constitute the world's third most restrictive regional grouping, with restrictiveness levels highest in air transport (international passenger services) and professional services (accounting, auditing and legal services) and arguably too high in the telecommunications sector, both fixed and (especially) mobile, given the sector's impact on economy wide performance and its critical role both to supply chain management and product innovation in IT-related services.

A useful point of departure in determining the optimal stance of domestic policy regimes is to perform a trade-related audit of Levant regulatory regimes in services. One primary purpose for an audit is to help governments benchmark domestic practices against best

¹⁰⁸ Cross-regional STRIs are analyzed: banking, insurance, fixed telecommunications, mobile telecommunications, retail distribution, international air passenger services, international maritime transport services, accounting and auditing, and legal services.

regional or global standards and identify gaps in regulation potentially associated with sectoral bottlenecks. An important derivate benefit of such audits, particularly if they are conducted across the region within a common methodological framework, lies in their ability to identify trade and investment restrictions in services markets whose sectoral incidence, level, or nature may be common to many countries, thus paving the way to formula-based approaches to market opening, for instance in air transport or auxiliary maritime services, or in regard to entry-inhibiting quantitative restrictions such as economic needs tests, nationality requirements, or foreign equity limitations. Annex 29 provides details of performing trade-related regulatory audits in services.

Services trade is crucial to further integrate the region

Not only are services an important component of the economy and can directly enhance regional integration through bilateral trade, they also constitute an important input for other export sectors. Services contribute to each country's export competiveness in other sectors of the economy through forward linkages. If enhanced regional integration will increase exports of manufacturing or agricultural goods, then a competitive services sector is necessary for any country wanting to reach this export potential. In addition, although forward linkages

are relatively more important, backward linkages in services sectors are not negligible for the countries of interest. If enhanced integration in services will increase services exports for the countries in the region, then this will have spillover effects to other sectors of the economy for which these services sectors demand.

Thus having a vibrant services sector is important for regional trade and integration, above and beyond purely services trade. The direct and indirect value added contributions (forward linkages) of the services sectors to the economy are analyzed for the Levant. The linkages of the services sector with the rest of the economy reveal that the largest services contributions are from trade and transport services. Examining the role of services inputs for manufacturing in terms of value added reveals that forward linkages of services accounted for between one quarter and two fifths of the total forward linkages in manufacturing in 2007. The exception is Egypt, which is closer to 10 percent.

Looking ahead, it will be rewarding for the Levant economies to invest in the service economy. A priority for policy makers should be the diversification of the services sector, in particular towards modern and more sophisticated services. Eliminating domestic impediments that may be holding back the development of modern and sophisticated services may benefit growth and regional integration, not only in services but also in the downstream manufacturing sector, owing to the strong forward linkages of services in most countries in the region.

5

THE ROLE OF THE FINANCIAL SECTOR IN ECONOMIC INTEGRATION OF THE LEVANT

n analysis of financial services trade in the sub-region reveals that Lebanese and Jordanian financial institutions have the potential to grow further. Development of cross-border financial services activities exhibits a rather more asymmetric picture than that of merchandise trade activities between Turkey and MENA region. There are eight fully licensed MENA-origin banks now operating in Turkey. These banks are headquartered in Lebanon, Jordan, Libya, and the GCC region. It is especially noteworthy that Lebanese and Jordanian financial institutions are the most active in regional activities. The activities of these banks demonstrate trade-in-services opportunities from increased regional economic activity for those economies of the region that have relatively less natural resource endowment. These banks also play an important intermediary role between the large capital pool in the Gulf area and the biggest economy of the region, which has a considerable current account deficit. All of these observations reveal substantial and multi-dimensional benefits accruing to all sides from enhanced economic linkages between Turkey and MENA region.

Proceeding with necessary financial sector reforms as well as maintaining of macro-financial frameworks which are conducive to support the reform process is essential. Financial institutions of the region provide fairly adequate payment related services such as foreign exchange and fund transfers services to support the current

trade volumes. However, financial sectors lack depth and breadth virtually all across the region. The systems mainly consist of commercial banks, since non-bank financial services are underdeveloped. Consequently, financial backing of trade transactions is weak. Financial markets in the region have not yet reached to maturity. The lack

of cross-border financial intelligence services and effective contract enforcement mechanisms also render proper risk assessment very difficult, if not impossible. Thus, provisioning of cross-border trade credit becomes scarce as well. It should also be noted that financial prices in many countries are hardly market determined. Although the mechanisms employed to set these prices provide some sort of stability, the possibility and/or probability of relatively large discrete movements in key financial prices brings about another element of risk for financial market participants.

This chapter focuses on financial sectors in MENA countries (except the countries in the Gulf and Arabian peninsula) plus Turkey with an objective of finding out how financial institutions of these countries can help to establish deeper economic ties in the region, using current trade relations as a starting point. Understanding the dynamics of how current trade relations may influence the behavior of financial institutions given the level of financial sector development in the region is essential. There is a considerable degree of experience in the expansion of financial services in the region. Especially, Lebanese and Jordanian banks are actively pursuing opportunities beyond the borders of their home countries. There are different types of complementarities between the countries of the region from the financial sector point of view. For example, countries like Turkey, Egypt, Syria, and Iraq have large markets and thus bigger volumes of business and are trying to attract capital. Countries like Jordan and Lebanon have more established linkages, experience in regional activities, and human resources, but also have small economies. Countries like Libya, Algeria and Iraq have important carbon revenues and can have large liquidity that need to be invested abroad. Regionalized financial institutions with good oversight can bring together all these complementarities for the benefit of the region as a whole. Therefore, coordination with regulatory authorities, harmonization of regulatory practices, and linking of financial sector infrastructures seem to be sensible policy choices for the regional authorities.

The Level of Financial Liberalization in the Sub-Region

The level of financial systems liberalization is uneven in the region. For purposes of this work, fully liberalized financial systems are defined as those systems that allow markets determine all financial prices and there are no obstacles to financial flows of any kind. 109 Given the level of financial sector development, especially the dominance of the banking sector, it would be practical to examine the level of liberalization in the region with respect to the level of liberalization in the following markets and transactions: (i) interest rates; (ii) exchange rates; (iii) current account transactions; and (iv) capital account transactions. Table 37 provides a comparative picture of the level of liberalization in each of the countries of the region.

Interest rates and exchange rates are subject to some control mechanisms in virtually all the countries of the region except Turkey. Central banks have been using rather straightforward and traditional tools to set up these key prices. Given the high level of dollarization in many of the economies of the region, these policies have provided significant stability. However, simultaneous pegs to the same currency create significant arbitrage opportunities. These opportunities ultimately create some sort of convergence in interest rates in an environment that is free of capital controls. Consequently, monetary authorities and prudential regulators must resort to various measures to influence lending rates as well as to control macroeconomic conditions.

Lending spreads exhibit a significantly different picture. The difference in lending spreads in Lebanon, Jordan, Syria and Egypt where effectively a dollar peg is used is quite striking. In fact, the spread in Jordan is

Financial flows that need to be intercepted due to legitimate AML–CFT considerations are not included.

One may argue that these policies also perpetuate dollarization. However, these issues are not within the scope of this document. These are merely mentioned to give an accurate picture of the macroeconomic environment in which financial institutions operate.

Table 37 Comparative Picture of Financial Liberalization in the Region

Syria		Interest Rates	Exchange Rates	Current Account	Capital Account
Syria V (managed) No No No Jordan V (managed) dollar pegged V Lebanon V (managed) dollar pegged V Egypt V (managed) managed float V (with few rest.) V (with few rest.) V (with few rest.) V (with few rest.) Tunisia V (managed) managed float V (with few rest.) V	Turkey	✓	✓	✓	✓
Jordan ✓ (managed) dollar pegged ✓ ✓ ✓ Lebanon ✓ (managed) dollar pegged ✓ ✓ ✓ Egypt ✓ (managed) managed float ✓ (with few rest.) ✓ (with few rest.) Libya Tunisia ✓ (managed) managed float ✓ ✓ (with few rest.)	Iraq			✓	✓ (with few rest.)
Lebanon ✓ (managed) dollar pegged ✓ ✓ ✓ Egypt ✓ (managed) managed float ✓ (with few rest.) ✓ (with few res Libya Tunisia ✓ (managed) managed float ✓ ✓ (with few rese	Syria	√ (managed)		No	No
Egypt ✓ (managed) managed float ✓ (with few rest.) ✓ (with few rest.) Libya Tunisia ✓ (managed) managed float ✓ (with few rest.) ✓ (with few rest.)	Jordan	√ (managed)	dollar pegged	✓	✓
Libya Tunisia ✓ (managed) managed float ✓ ✓ (with few res	Lebanon	√ (managed)	dollar pegged	✓	✓
Tunisia ✓ (managed) managed float ✓ ✓ (with few res	Egypt	√ (managed)	managed float	✓ (with few rest.)	✓ (with few rest.)
(Libya				
Algeria basket pegged ✓ ✓ (with few res	Tunisia	√ (managed)	managed float	✓	✓ (with few rest.)
	Algeria		basket pegged	✓	✓ (with few rest.)
Morocco basket pegged ✓ ✓ (with few res	Morocco		basket pegged	✓	✓ (with few rest.)

Note: The above table is constructed based on the latest published IMF Article IV consultation reports. Check mark indicates liberal state.

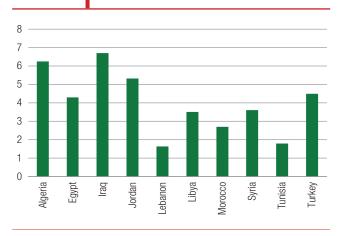
almost three times that of Lebanon (Figure 53).¹¹¹ Similarly, there are significant differences in lending spreads in Maghreb countries where, for all practical purposes, a euro peg is implemented.

While it cannot be said with certainty that discretionary authority over key financial prices in the region has so far presented itself as a constraining factor for financial flows, it is nonetheless a factor of concern to decision makers. The predictability (and therefore credibility) of monetary authorities, especially in countries where serious current and capital account deficits occur, becomes crucial to ensure the smooth flow of funds in and out of the region

Financial Depth

The level of monetization in the region is not much except the relatively highly monetized economies of Lebanon and Jordan. In fact, as shown in Figure 54, GDP weighted M2/GDP ratio for the region is about 70 percent. It is interesting to note that the M2/GDP ratio in Turkey is well below the regional average. In fact, it is the lowest in the region. Based on this measure, one may be tempted to conclude that Turkish financial depth is considerably less compared to other countries of the

Figure 53 Lending Spreads (in percentage points)



Source: Compiled from the reports of national regulators.

region. However, this would not be an accurate conclusion as there are significant macroeconomic differences, both in terms of macro balances and monetary policy stand, which give rise to a significantly different level of broad money supply levels. In fact, the picture is quite different than a simple M2/GDP ratio indicates, even if macroeconomic differences are set aside.

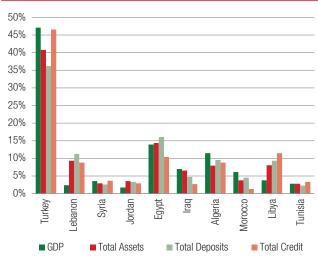
¹¹¹ The difference in lending spreads cannot be attributed solely to monetary authorities' actions to influence lending rates. Given the efforts of these authorities to influence interest rates, the resulting differences in lending spreads are however, noteworthy.

Situating "Mashreq+" in the World: STRI Figure 54 by Regional Groupings All Sectors and Modes of Supply 300% 250% 200% 150% 100% 50% 0% Lebanon Egypt Tunisia Algeria Iraq ■ M2/GDP

Source: World Bank World Development Indicators.

Lebanon, Jordan and Libyan systems hold more total assets than their total share in the region's GDP, almost four times for Lebanon and about twice as much for Jordan. An examination of key financial aggregates reveals a comparative picture. Figure 55 shows the regional share of each country in key financial aggregates as well as each country's share in total regional GDP. The figures for Turkey show a rather mixed picture

Figure 55 Comparative Financial Sector Aggregates (in terms of regional share)



Source: World Bank World Development Indicators; Banks Association of Turkey.

compared with Lebanon Jordan and Libya. While Turkey's economy represents about 47 percent of total GDP of the region, its banking system holds about 36 percent of total banking assets of the region, 41 percent of total deposits and about 47 percent of total credit. Therefore, Turkey's banking system has relatively less assets and deposits compared to its share in regional GDP but the total credits in the country's banking system is about the same as its share of the regional GDP.

Private sector credit is extremely low in many countries of the region. In fact, private sector credit in half of the countries of the region is less than thirty percent of their GDP (Figure 56). It should also be noted private sector credit in Turkey, 112 despite its relatively high share in total domestic credit, is considerably lower than that of Lebanon, Jordan, Tunisia and Morocco.

Regulatory Architecture

Financial systems of the region are primarily regulated by central banks. All banking regulators in the region are central banks except in Turkey where an autonomous agency, Banking Regulatory and Supervisory Agency (BRSA), is responsible for regulating and supervising the banking system. Lebanon also diverges from the rest of the region as it separates regulation and supervision agencies—Banque du Liban is responsible for regulations and the Banking Control Commission carries out supervisory functions in Lebanon. Central banks have the ultimate licensing authority in all the studied countries except in Turkey, where BRSA has the ultimate authority to license banks.

While regulation of banking in the region exhibits by-and-large uniform structures across the region, regulation and supervision of the insurance sector is quite varied and nearly every country takes a different

¹¹² There is considerable amount of borrowing from abroad by Turkish companies. The focus here is on provisioning of credit by domestic financial systems.

approach. Some countries have designated autonomous agencies/commissions organized under the auspices of either ministries of trade or finance with varying degree of authority. For example, Lebanon and Jordan have insurance control commissions under ministries of trade but the Lebanese Minister of Economy and Trade has the ultimate authority to issue licenses. Some countries regulate and supervise the sector by way of a department within a ministry. Algeria and Morocco are examples of this approach. Regulation of the insurance sector in Turkey falls under a department within the Undersecreteriat of Treasury; however, an autonomous commission linked to the Undersecretariat of Treasury carries out supervision of the sector. Egypt has the most distinct approach to insurance regulation— an autonomous agency, Egyptian Financial Sector Authority (EFSA), is designated to regulate the sector. None of these structures are uncommon structures that could be considered unusual since similar structures exist in many other countries.

The regulatory framework for securities and capital markets are very similar in the region. Almost every country in the region has established an autonomous commission to regulate and supervise securities and capital market activities. Although these commissions/agencies were established by way of a special law in all of the studied countries, there are some subtle differences. For example, the governor of the central bank chairs the Lebanese Capital Market Authority. EFSA in Egypt is responsible for regulation and supervision of all nonbank financial institutions. The Securities and Exchange Commission in Turkey is an autonomous and independent agency in contrast to insurance regulation in Turkey where the Undersecretariat of Treasury is basically responsible for regulation.

Regulation and supervision of other non-bank financial institutions in the region is not clear, with a few exceptions. Egypt and Syria's regulatory agencies that are tasked to regulate securities and capital markets have blanket authority over the non-bank segment of the financial sector. BRSA of Turkey, which regulates and supervises the banking sector, has also legal jurisdiction

Total Domestic Credit vs. Total Private Figure 56 Sector Credit 200% 180% 160% 140% 120% 100% 80% 60% 40% 20% 0% -20% Egypt Turkey Irad

Source: World Bank World Development Indicators; Banks Association of Turkey.

■ Total Domestic Credit/GDP

■ Private Sector Credit/GDP

over key non-bank financial activities such as leasing and factoring. It could be said that these institutions are viewed as "bank-like" institutions. The same approach is also visible in Lebanon where Banque du Liban, which regulates banks, also issues regulations for non-bank financial activities.

Financial Market Structures

Financial sectors in the region contain wide range of financial institutions. Distribution of various types of financial institutions exhibits significant variation across the region. Figures 57 and 58 provide a picture of these institutions in terms of type of financial activities (i.e., banking, insurance, and non-bank financial institutions—NBFI) as well as their ownership nature (state, domestic private, foreign). The number of banking institutions is usually the highest in every country except in Morocco and Turkey.

Lebanon and Jordan, which together generate about four percent of regional GDP and hold about 13 percent of total banking assets, have about onethird of total banks in the region. Conversely, Turkey,

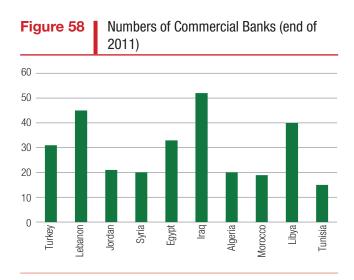
Numbers of Financial Institutions (end of Figure 57 2011) 400 350 300 250 200 150 100 50 Tunisia Jordan Morocco Banks Insurance NBFIs

Source: Compiled from the reports of national regulators and industry associations.

which generates about half of the region's GDP and about 41 percent of total assets of the regional banking system, has only about 12 percent of banks. In fact, Turkey has one of the fewest numbers of banks in the region. These figures signal the fact that the nature of Turkish banking system and the banking systems in the rest of the region is fundamentally different. While Turkey's financial system has one of the fewest numbers of banks in the region, it has the largest numbers of insurance and NBFIs. About thirty percent of insurance companies and about sixty percent of NBFIs of the region are located in Turkey.

Commercial banks hold the bulk of the banking assets. Comparison of numbers of total banks and deposit-taking commercial banks indicates that there are many specialized banks in the region. In some cases (i.e., Jordan and Lebanon), the number of specialized banks equals or even exceeds the number of deposit-taking commercial banks (Figure 58).

All countries of the region are at least legally open to foreign ownership. However, actual penetration of foreign banks is widely different across the region. Turkey stands out in this respect; more than half of the deposit-taking commercial banks in Turkey are foreign-owned. It is especially interesting to note the presence of foreign ownership in Lebanon and Jordan is quite small despite the fact that these countries are relatively open and have

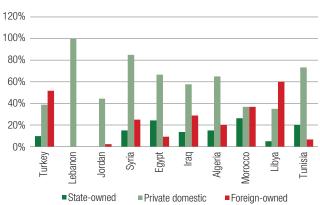


Source: Compiled from the reports of national regulators and industry associations.

liberal financial markets with a large number of financial institutions of their own. The situation in Lebanon and Jordan shows us that foreign presence cannot be attributed solely on the economic regime. The nature of ownership of financial institutions, especially those of deposit-taking commercial banks, also provides important information with respect to the state's presence in financial markets. As seen in Figure 59, there is some degree of state ownership in commercial banking, except Lebanon, which has state-owned specialized banks. It is interesting to note that Egypt has the highest number of state-owned deposit taking institutions.

Every country is unique and generalizations provide insufficient explanations as to why specific countries would have a particular combination of foreign or state-owned banks. For example, Iraq and Libya, both of which are emerging from serious political problems, have relatively more foreign banks and less state-owned banks. However, Tunisia, which is also coming out of significant political turmoil, presents differently, as do Algeria and Morocco, two Maghreb countries with strong links to Southern Europe. This information, pinpoints the need to look at factors beyond economic regime or recent political developments to explain the ownership structures of financial systems. These factors include profit opportunities, credit culture, and macroeconomic

Figure 59 Ownership Structures of Banking Systems (end of 2011)



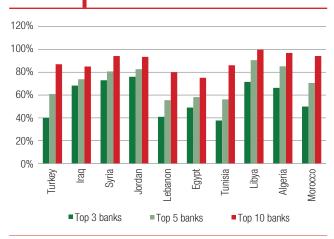
Source: Compiled from the reports of national regulators and industry associations.

balances, and are important determinants of the evolution of financial institutions in these countries.

An oligopolistic market structure appears in the region's financial sectors. Figure 60 shows that the top three banks (in terms of shares in total assets in each country) controls at least sixty percent of the market, except in Turkey and Tunisia where the top three banks control about forty percent of the market. The top three banks are dominant in almost every country, since there is little difference in market shares between the top three banks and the top five banks. Turkey is again different in that the top five banks control about sixty percent. In this case, two additional banks increase the market share of the top tier by fifty percent. Market shares of the top ten banks are more than eighty percent except Lebanon. In Maghreb countries the top ten banks control virtually the entirety of banking assets. Figure 60 indicates a strong cluster of three to five lead banks in each country and implies rather strong competition among the lower-tier banks. Such competition should be more pronounced in Egypt than most places as its top three banks control about fifty percent of the market, but the market shares its top ten banks is the lowest in the region.

The portfolio performance of regional banks is not very good. Non-performing loan (NPL) ratios (NPL to total loans) range from 2.7 percent in Turkey to about

Figure 60 Market Shares of Top Banks (end of 2011)



Source: Compiled from the reports of national regulators.

20 percent in Libya. Lebanon, Morocco and Syria, where NPLs are relatively low compared to other countries also have high NPL ratios by prudential standards, as these ratios are 3.5 percent, 4.8 percent, and 4.8 percent, respectively. The NPL ratio in Jordan is about 8.5 percent and in Egypt is about 11 percent, which are very high ratios. The existence of a high NPL ratio draws attention to capital adequacy levels in the banking system. Fortunately, the studied banking systems are sufficiently capitalized, with capital adequacy ratios ranging from about 17 percent in Turkey to about 11.5 percent in Tunisia. It is especially good to note that banks are well capitalized in Jordan and Egypt, where NPL ratios are high, as capital adequacy levels are 19.3 percent and 15.6 percent, respectively. As for profitability, the banking systems look reasonably profitable. Return on assets (ROA) is the lowest in Tunisia with ROA of less than one percent. ROAs on Jordan, Lebanon, and Egypt are also relatively low with all around one percent level. Algerian system records the highest ROA with about 2.1 percent, followed by Turkish banking system with an ROA of 1.6 percent.

There are significant differences in terms of access to financial services in the region. Utilization of deposit services is highest in Lebanon and Turkey with 922 and 949 per 1000 adults (Table 38). Iraq has the lowest number of depositors with five per 1000 adults.

Table 38 Some Measures of Access to Financial Services

	Turkey	Iraq	Syria	Jordan	Lebanon	Egypt	Libya	Tunisia
Point-of-sale terminals (per 100,000 adults)	3045	n.a.	n.a.	n.a.	1293	58.3	n.a.	172
Depositors with commercial banks (per 1,000 adults)	922	5	233	n.a.	949	n.a.	n.a.	757
Commercial bank branches (per 100,000 adults)	18.3	n.a.	4	21	31.5	4.5	11	17
Borrowers from commercial banks (per 1,000 adults)	841	n.a.	71	n.a.	335	78		171
Automated teller machines (ATMs) (per 100,000 adults)	59	n.a.	8	32	42	9	4	22

Source: World Bank World Development Indicators. POS Figure for Egypt is from Central Bank of Egypt. POS figures are for 2009. Other figures are for 2011.

The figures for credit services are quite low and indicate significant problems with access to financial services across the region. Turkey has by far the highest figure, with about 841 borrowers per 1000 adults, which is very close to the number of depositors. Lebanon has the next highest number of borrowers with 335 borrowers per 1000 adults. This corresponds only about 35 percent of depositors in the system. Egypt, which is the most populous country in the region, has a very low number of borrowers, with only 78 borrowers per 1000 adult which is less than one tenth of number of borrowers in Turkey which is the second most populous country in the region. The numbers of borrowers in Algeria and Syria are also very low. As for service points, Lebanon has the highest number of bank branches with 31.5 branches per 100,000 adults. Algeria, Egypt and Syria have considerably small number of branches compared to the other countries. Table 38 also points the fact that Turkey and the rest of the region has considerably different levels of penetration of technology, especially with respect to POS usage, which is about three times that of Lebanon which has the second highest POS usage. The numbers of ATMs in Lebanon, Jordan, Tunisia and Morocco is relatively better than the other countries. ATM numbers are especially low in Syria, Algeria and Libya.

The biggest difference between Turkey's financial sector and the rest of the region is in the magnitude of capital market activities. Turkey's capital markets dwarf other markets in the region in every respect. Total market capitalization of companies listed in Borsa Istanbul (BIST)¹¹³ is about twice as much as the total of all the

companies listed in regional markets. The difference in daily trading volume is even more striking. Daily trading volume of equities in BIST is equivalent to about one month of total volume in the rest of the region. It should be noted that Turkish capital markets have various other segments including derivatives. Daily volumes on these markets are quite substantial. For example, trading of debt securities has a daily volume of more than US\$10 billion.

The insurance sector is very similar to that of capital markets. Turkey's insurance sector collects about US\$12 billion in premiums. This is about fifty percent more that the total premium collected in the rest of the region. However, the Turkish insurance sector is not well developed compared to its GDP, nor to the rest of its financial sector. Total premiums generated by the sector are less than 1.5 percent of Turkish GDP. Thus, insurance sector in the entire region has a huge potential.

Regional Financial Sector Linkages

The financial sector of each of the countries of the region is unique and very difficult to categorize. However, there are certain similarities and differences between these systems that can provide a basis to explore the linkages between the regional financial sectors. Table 39 provides some measures of linkages between the regional

¹¹³ BIST is the only exchange entity of Turkey, and combines the former Istanbul Stock Exchange, the Istanbul Gold Exchange, and the Derivatives Exchange of Turkey.

	Have regional and foreign banks operate locally	Regional and Foreign Banks have significant operations	Have home-grown institutions operate in the region	Regional operations of home-grown institutions are significant
Lebanon	+	+	+	+
Jordan	+	+	+	+
Turkey	+	+	-	-
Iraq	+	+	-	-
Egypt	+	-	+	-
Syria	+	-	-	-
Libya	+	-	+	-
Tunisia	+	+	-	-
Algeria	+	_	_	-
Morocco	+	+	-	-

systems. The first measure is about openness of the systems (i.e., whether the systems allow foreign financial institutions operate); the second measure is about whether openness has yielded an effective local presence of regional and foreign financial institutions; the third measure is whether there is an interest on the part of local financial institutions to go abroad, particularly to the region; and the fourth measure is about the success of the local institutions in regional endeavors.

The financial sector of the region could be classified in three tiers. First tier systems are those that have foreign operators with significant presence and, at the same time, domestic institutions that have significant regional operations. Hence these systems have strong regional linkages. Lebanon and Jordan are the two countries that fall in this category. Second-tier systems are those systems that have foreign and regional institutions that operate with some significance, but these systems do not have domestic institutions that operate in the region. Turkey, Iraq, Tunisia, and Morocco fall in this category. These systems have not only made a choice to attract foreign institutions but they have also provided an environment for these institutions to become significant players. However, asymmetry between local presence of foreign institutions in these markets and the presence of domestic institutions in the region raises curiosity. Morocco's situation is especially interesting as there is a considerable number of Moroccan banks that operate outside but these operations are mainly in Francophone Africa. Third-tier institutions are those that do not fall in either of the above categories. Consequently, there are few similarities between these countries. Egypt, Syria, Algeria, and Libya fall into this category. While all of these countries have foreign and regional institutions operating, these institutions do not have much significance. Both Egypt and Libya have financial institutions that operate in the region but these operations have not reached any significance in the markets in which they operate or for the institutions themselves.

Cross-border activities of regional financial institutions are especially significant for first-tier and second-tier countries. Lebanon and Jordan's (i.e., first-tier countries) financial institutions draw substantial economic benefits from their regional activities. Therefore, these countries' economies benefit from these activities through their financial institutions. On the other hand, second-tier countries (Turkey, Iraq, Morocco, and Tunisia) directly benefit from the activities of these financial institutions in various forms such as additional volume of financial intermediation, linking of domestic real sector with their counterparts in other countries, additional employment, and additional volume of foreign direct investment.

Lebanese banks are the most active financial institutions outside Lebanon. Lebanese banks have presence in 31 countries, and out of 44 Lebanese banks 17 have a presence abroad. Moreover, this presence is especially significant for some of the banks; substantial portions of total assets and income of some leading banks in Lebanon are related to their operations abroad. At least 20 percent of total net incomes of these banks are generated from operations outside of Lebanon. It is noteworthy that credit extended outside is even more than the relative level of assets of foreign operations. Furthermore, the relative level of credit of outside of Lebanon is higher than relative level of deposits in these countries. The Lebanese banks provide substantial intermediary services by mobilizing funds to their foreign operations. Given the limits of Lebanese economy, most of these funds are also generated from outside.

Although Jordanian banks activities in the region are not as large as Lebanese banks, they also demonstrate how small economies of the region can develop institutions that operate within the most sophisticated segment of the services sector that demands significant human resources. There are some interesting examples of Jordanian banks that operate outside of Jordan. First example is Arab Bank, which is the oldest Jordanian bank and one of the pioneers of regional banks. It has operations in 30 countries and about half of its total assets, deposits, and credit belong to its activities outside Jordan. Moreover, about 86 percent of its net income is generated outside Jordan. Another interesting example is Capital Bank, which is one of the newer and smaller banks in Jordan that realized the limitations of the Jordanian markets for a small new entrant and subsequently looked for opportunities outside. It made an entry into Iraq about four years ago and now Iraqi operations earn more than the bank's operations in Jordan.

Among the second-tier countries, Morocco and Turkey are interesting to examine. Foreign banks have significant operations in Morocco, but the majority of these banks are mainly French banks and the Arab Bank of Jordan is the only bank from the region to operate in Morocco. Moroccan banks appear rather oblivious to the region, and they primarily seek opportunities in Africa. There are currently about 20 subsidiaries of Moroccan banks operating outside the country. The profile of banks from Morocco is similar to those of Lebanon and Jordan, especially in Francophone Africa. Turkey is interesting, since it has eight banks owned by banking groups headquartered in the region and the Gulf, including banks from Lebanon, Jordan, and Libya, but activities from banks from Turkey are mainly limited to representative offices and there is no Turkish-owned bank operating with a full banking license in the region. Regional banks in Turkey have not gained much market share because these banks have not had a strategy to become large retail banks in Turkey. However, these banks have now started to pursue business in retail markets. For example, Bank Audi, which just started its operations this year, will have 32 branches by the end of this year and will reach 100 branches within five years. Turkland Bank, which is now a joint venture between BankMed of Lebanon and Arab Bank of Jordan, is also implementing growth strategy and has branches in all major cities in Turkey. Although these operations are still less than ten percent of total foreign banks operating in Turkey, the rate of increase is very large as the assets of these banks have grown more than four times over the last five years.

The Egyptian system has large public sector banks which are mainly focused on the local markets. Given the dominance of these banks and the size of the country it was very difficult for regional banks with limited resources to hold a significant position within the Egyptian financial system. In addition, the presence of large international banks such as CitiBank, large French Banks, and banks owned by large Gulf-based companies made it even more difficult for the regional banks to become significant players in Egypt. The situation in Algeria is more or less the same with an added problem of more difficult market access.

Dynamics of Regionalization

Financial markets linkages in the region are established by way of some banks that chose to operate beyond their national markets. However, the nature of these linkages varies from one country to another. Some countries have produced regionally active banks, some are hosting them, and yet some countries have both types. Understanding the forces that create these dynamics is important not only for clues for the future evolution of regional financial markets, but also to identify underlying forces that can play an important role in the broader regional integration process. This raises two questions: (i) is there a market access problem in the region so that regional financial institutions are having problems setting up operations in certain countries? and/or (ii) are regional financial markets not attractive enough so that there is not much interest in operating in certain countries?

Market access issue is crucial because it is a first level constraint to establishing financial sector linkages in the region. Although there are no legal impediments for any financial institution to apply for a license in all the countries of the region, there are some practices that effectively limit market access in some countries. For example, Egypt does not issue new commercial banking licenses but allows the purchase of existing institutions. This practice essentially raises the franchise value of existing institutions and makes entry more expensive in the Egyptian market. Rather restrictive licensing policies in Egypt have similar characteristics of the recently abandoned Turkish practices following the banking crisis of 2000 in Turkey. Egyptian authorities believe that there are too many small and weak banks and the system needs to go through some consolidation.

Algeria has very a restrictive licensing policy. In fact, there are some applications from very strong regional institutions that have been pending for years. Syria is another country with highly restrictive licensing practices. When Syria made it possible for foreign banks to register and operate in the country, it required tough conditions that would be very difficult to accept, especially by reputable large foreign banks. Among these requirements were reserving a controlling share for local shareholders. Although later this was reduced to minority

shareholding, the minimum capital requirement was pushed to very high levels.

Lebanon, Jordan, and Iraq do not have major problems with respect to market access. Turkey, after about a decade, has started issuing new licenses. In fact, Turkey issued the first new license to Bank Audi, a Lebanese bank with a strong regional presence. Thus, Turkey signaled strongly that an end to a process that started after the banking crisis of 2000, in which many Turkish banks failed. Turkey had very relaxed licensing environment prior to 2000, and many local and foreign banks had been established. However, after the banking crisis, Turkey's regulatory authorities implemented a policy of consolidation by implementing restrictive licensing policy. Easy access to Turkish capital markets and other nonbank financial institutions such as the insurance sector allowed foreign institutions to enter Turkey's financial system and become very important players. For example, a majority of trading in BIST originates abroad. Nonetheless, the recent change in bank licensing policy is consistent with Turkey's aspirations to make Istanbul an international financial center. The government has made sizable investments in this regard. Lebanon and Jordan have very open policies to attract foreign institutions as the financial sector is viewed as an important service sector and source of income in these countries. In fact, both of these countries have a policy of issuing licenses only to foreign institutions and not to domestic institutions.

Morocco and Tunisia have been implementing policies to privatize the economy. The financial sector was also included in this general policy of liberalization and privatization. These efforts undoubtedly paused during the recent political events in Tunisia but the indications are such that privatization policies will continue. Morocco's liberalization and privatization efforts also yielded an increased private and foreign presence in the financial sector.

Attractiveness of financial markets in terms of potential growth and income generation is an important criteria for regional financial institutions to expand in the region. Growth and profit opportunities in the region's financial markets should be the focus when a financial institution decides on whether or not to regionally expand. However, an evaluation of opportunities abroad cannot be made without regard to local conditions and the state of financial institutions there. This is a three-step process. The first step is to establish the geographical footprint of the institution's overall growth strategy-determining whether to grow locally or expand regionally or both. This involves an evaluation of whether a financial institution has the capability to expand regionally. The second step is to evaluate the attractiveness of markets in any given country in the region relative to market conditions at home. The third decision process is about determining the destination given the decision on regional expansion. Turkish financial markets appear to be the most attractive followed by Lebanese, Algerian and Moroccan markets. Egyptian, Tunisian and Libyan markets come after these markets. It must, however, be emphasized that none of these markets have reached maturity, and there are significant growth potentials in all markets. It is a rational choice for financial institutions from other countries to move into Turkish markets. It is also rational for Turkish financial institutions try to gain more ground and solidify their market shares in their own local markets. In other words, inward looking strategy for Turkish financial institutions also makes sense. This strategy is especially relevant given the fact that Turkish markets are attracting global interest and market access for foreign institutions are relatively easy. However, market attractiveness is simply not sufficient to determine a strategic move to regional markets. This is because there are second order conditions that would ultimately determine feasibility of regional expansion. These conditions are basically concerned with necessary ingredients of expanding regionally.

Financial institutions must have the capacity in order to be able to seek cross-border opportunities. Financial and human resource capacities are certainly binding constraints in this regard. And although it may not be essential, experience in foreign markets is a tremendous asset that would at least facilitate the decision-making process prior to expansion. Table 40 provides some

qualitative appraisal of financial institutions with respect to these key conditions for regional expansion. It is relatively easy for Turkish, Lebanese and Jordanian banks to move into other countries in the region. Expansion for Syrian, Tunisian and Iraqi institutions appear to be very difficult at this point in time. It should be noted that Iraq and Libya will have considerable financial resources once stability and security is permanently established. Thus, these countries together with Algeria can establish partnerships with other countries in the region that have technology and larger human resource pool. Thus, there are significant complementarities in the region to build more integrated and deeper financial markets.

Trade and Financial Sector Linkages

Financing trade flows are usually the primary motivation while financial institutions move into other countries. It is also the most practical entry point to foreign markets for several reasons. First, trade finance allows banks to focus on corporate finance and taking relatively well-defined risks for a limited time without committing large amounts of capital. Thus, banks would have time to further assess options such as retail banking as they try to understand local conditions and their comparative

Table 40 Capacity to Expand Regionally

	Financial Capacity	Experience in foreign markets	Human Resource Capacity
Lebanon	+++	+++	+++
Jordan	++	+++	+++
Iraq	+	+	++
Turkey	+++	+++	+++
Syria	+	+	+
Egypt	+	++	++
Libya	++	++	+
Tunisia	+	+	++
Algeria	+++	++	++
Morocco	++	++	++

advantages. Second, small and compact units can carry out trade finance-focused operations. Thus, human resource needs can be managed better while monitoring from headquarters is easier. Third, operations can start rather quickly by capitalizing on comparative advantages and avoiding tough competitive responses from the beginning. In fact, partnerships and mutually beneficial cooperative arrangements can be sought. Consequently, taking hold in the markets would be easier. Given these considerations, the question of whether trade flows offer substantial income prospects becomes highly relevant.

Expansion into Turkey, Iraq and Egypt markets would give a financial institution possibility to compete in trade finance services for about 60 percent of intra-regional trade volume. These countries basically have strong "pull" factor emanating from their intra-regional trade position to attract financial institutions from other countries in the region. Regional trade carries relatively high share in total trade of Jordan and Lebanon. Therefore, financial institutions of these countries may want to use this relatively intense trading relationship as a comparative advantage and competitive edge by moving into countries, especially to their major regional trading partners. These moves would also help them to solidify their domestic market conditions should other financial institutions expand into their local markets. Therefore, it could be said that these countries have relatively strong "push" factor that encourages local financial institutions expand in the region.

Potential Financial Sector Income from Trade Finance

It is a challenge to estimate financial sector income from potential regional trade finance. Trade finance related financial services can be grouped in three categories: (i) financing of production of exports; (ii) financing purchase of imports; and (iii) provision of letters of credit and similar services. It is difficult to come up with precise estimates of income that could be earned by financial institutions from these three categories. The nature

of credit needs on both sides of trade relations could be different depending on the products involved. For example, products such as agricultural commodities (i.e., lint cotton) would take about nine months to produce but a fairly standard industrial product (i.e., shirts) depending on the size of the order could be manufactured rather quickly. As for letters of credit and similar other trade facilitation services, there are several difficulties in assessing the volume of banking revenue from these services. Therefore, any attempt to estimate banking income from trade finance could only be an indication if some rather basic assumptions could be made. For these purposes, the following assumptions are used:

- Production of exports require three month working capital, 85 percent of which could be borrowed against purchase orders;
- Purchase of imports require six months of credit of about 85 percent of import values to allow sufficient time to recover at least; and
- About 20 percent of imports are done by irrevocable letters of credit, which requires 25 basis points fees.

Significant opportunities exist around trade flows in the region for financial institutions. Using the above conservative assumptions provide a baseline indication of the magnitude of revenue that could be raised by financial institutions from regional trade related transactions. Based on these assumptions, revenue estimations are presented in Table 41. Potential revenue from regional trade transactions is about 17 percent of total net income of regional banking sector. This corresponds roughly about seven percent of total net income.

¹¹⁴ This is a conservative estimate based on the reported Return on Assets (ROAs). A one percent ROA was assumed considering the fact that the bulk of banking assets are in Turkey, Lebanon, Jordan and Egypt. All these countries have ROAs around one percent except in Turkey where ROA is 1.6 percent.

¹¹⁵ Assuming a 2.5 percent lending spread, given the prevailing lending spreads in the region, and excluding administrative and operational expenses that could be partly recovered by additional charges and fees during normal banking relations.

Table 41

Estimated Potential Revenue of Banking Services for Trade Flows in the Region (US\$ millions)

Revenue and Income from Regional Trade	Revenue	Income
Interest from credit for production of exports	796.29	284.39
Interest from credit for purchases of imports	1,592.57	568.78
Fees for Letter of Credit for imports	113.76	113.76
Total	2,502.61	966.92
Revenue from Global Trade		
Interest from credit for production of exports	7,032.57	2,511.63
Interest from credit for purchases of imports	18,298.95	6,535.34
Fees for Letter of Credit for imports	1,307.07	1,307.07
Total	26,638.58	10,354.04

Note: Figures are estimated by authors. A seven percent interest rate was applied for credit. Interest income figure is calculated by using 2.5 percent lending spread.

figure for global trade is even more striking and nearly 1.75 times the total net income of the regional banking sector. This is about 80 percent of total net income of the regional banking sector. It should be noted that these estimates do not take into account externalities associated with trade related engagement by banking sector. These relations will undoubtedly bring other opportunities for the banks involved. These estimates are simply carried out to have some sense of the magnitude of the potential business volume, and at least to have an idea about the range of revenue and income trade relations imply for regional financial institutions. They are not by any means intended to be point estimates.

6

REGIONAL INTEGRATION OF ENERGY SYSTEMS IN THE LEVANT

he demand for energy, especially in the electricity sector, is high in the region, and there is a clear need to expand the electricity generating capacity to stimulate private sector growth and to benefit more from regional economic opportunities. A range of electricity interconnection infrastructure exists among the grids of Mashreq countries (Iraq, Syria, Lebanon, Jordan, Egypt, and the Palestinian Territories), Maghreb countries (Libya and Tunisia) and outlying countries (Turkey and Iran). Tunisia (along with Algeria and Morocco) is interconnected to the European grid and operates synchronously with them. Mashreq countries and Turkey have been trading electricity for over a decade and a half, though the volume of trade is far below the potential. The main bottleneck is a shortage of power in most of the Mashreq countries and the inability to add capacities based on gas, which over the past decade has become scarce and much higher priced than before. Rapidly rising electricity and gas demand in Egypt has rendered the only two existing regional gas pipelines (the Arab gas pipeline and Arish-Ashkelon gas pipeline), practically unutilized.

The Mashreq countries need to compete in the international market place for gas. The sub-region needs additional transmission lines to relieve local bottlenecks for cross-border flows and also needs to sharply improve its ability to operate the grids synchronously in a sustained fashion through upgrades of grid codes and regulatory arrangements. Gas trade infrastructure, by way of LNG import terminals, exists (in Turkey) or is being constructed/pursued (in Jordan, Egypt, Lebanon, and Syria) or planned (in Iraq). These will support the

growth of LNG trade. The Mashreq region has large gas reserves, and 94 percent of these reserves are in two countries, Iraq and Egypt. However, both Egypt and Iraq face significant constraints in expanding their gas production capacity to meet the demand. For Egypt the constraint is the size of its gas reserves, and for Iraq the constraint is its implementation capacity. Iraq has the potential to develop as a major supplier of pipeline gas. A positive development is the offshore gas discoveries of Lebanon. It is estimated that the technically recoverable

hydrocarbon reserves in the Levant basin region covering 83,000 km² in the Eastern Mediterranean (Lebanon, Israel, Cyprus, Turkey, Egypt and Syria have territorial stakes in this region) at around 1,689 million barrels of oil and 122.4 tcf (3.5tcm) of gas. Significant natural gas discoveries have been made in the offshore areas of Israel (especially in the Leviathan field), and in 2010 a U.S. hydrocarbon exploring company confirmed the commercial viability of the gas deposits. Lebanon planned to divide its offshore area into blocks and carry out international rounds of biddings to award exploration and production contracts.

This chapter draws upon the results of previous World Bank studies to provide an understanding of the prospects, challenges, and barriers of regional energy integration especially in relation to the gas and electricity sub-sectors. The countries in the region are classified as five core countries: Iraq, Jordan, Syria, Lebanon and Turkey, and five adjoining outer-circle countries: Egypt, Libya, Tunisia, Palestinian Territories, and Iran. For the purpose of discussions relating to electricity and gas sectors, the countries are grouped into Mashreq countries (Egypt, Iraq, Jordan, Syria, Lebanon, and Palestinian Territories), relevant Maghreb countries (Libya and Tunisia) and relevant outlying countries (Turkey and Iran).

Power Sector Background

Sustained high economic growth and consequent changes in lifestyles in the Mashreq countries have triggered a rapid increase in energy demand, especially in the electricity sector. Although part of this growing demand may be curbed through more effective energy conservation policies and technologies, there is a clear need to expand the electricity generating capacity in all countries of the region. One of the most significant bottlenecks in developing new power generating capacity is the supply of the required fuel. The region depended in the older days on oil for power generation. This dependence was reduced (from 55 percent in 1990 to

46 percent in 2010) as gas became a desirable substitute owing to its economic and environmental attributes. The share of gas in power generation increased significantly from 26 percent to 45 percent from 1990 to 2010. However, in recent years gas availability has turned into a serious issue in countries such as Syria, Jordan, and Egypt, which have realized that their domestic gas production is not sufficient to meet the needs of their power sectors. Lebanon and Palestinian Territories have no domestic production of gas and Iraq's gas sector was in great disarray on account of the war. This has triggered a search for sources of imported gas and/or electricity.

Gas and electricity trade require construction of cross-border or dedicated infrastructure facilities that, in turn, require well-structured regional integration schemes. Regional integration of gas and electricity systems enables the connected countries to trade energy. However, the interconnected networks, particularly power grids, impart other benefits such as increased reliability, reduced reserves, and economies of scale in construction of larger generation plants. Cross-border projects face numerous technical, institutional and implementation challenges. A distinct feature of regional integration projects is the length of preparation time. Most of these projects have taken many years (or several decades) to prepare. Each project has been structured and restructured a number of times. It is sometimes the deficiency in the initial formulation that results in further revisions. It is also the difficulty of working out the cross-border issues, and coordinating solutions among the participating countries. This is indeed an area that the World Bank and its partners have tried to help the countries foresee and resolve before such issues paralyze the progress of the projects.

Electricity demand has grown significantly in the Mashreq countries in recent years. Peak electricity demand increased at an annual rate of 5.4 percent from 1990 to 2010, growing from 17,446 MW in 1990 to 49,974 MW in 2010. During 2010–2030, peak demand is forecast to more than double, growing at of about 3.8 percent per year (Table 42).

49,974

	1990	2000	2010	2020	2030				
		Peak Demand (MW)							
Egypt	6,902	11,736	22,750	42,263	56,716				
Iraq	5,162	4,865	13,381	16,006	21,510				
Jordan	624	1,206	2,670	4,547	6110				
Syria	3,258	5,990	7,843	10,448	14,041				
Lebanon	1,220	1,681	2,510	3059	3875				
Palestinian Territories	280	495	820	1393	2401				

Table 42 | Historical and Forecast Electricity Demand in Mashreq Countries

17,446

Source: Compiled from the reports of national regulators.

Mashreg Total

Note: The Mashreq total peak demand is a simple sum of the individual country demands. It does not take in account load diversity among the countries, which is not currently known.

25,973

The total investment that will be needed for the expansion of generation, transmission, and distribution of electricity in the Mashreq is estimated at US\$131 billion by 2020, and an additional US\$108 billion by **2030.** 116 Mobilizing such levels of investment will require substantial changes in energy policy to increase electricity prices, improve the financial performance of the power sector, and attract private sector investors. 117 Figure 61 shows Mashreq electricity generation by fuel type. Total gas use in power generation is projected to increase from 32.9 bcm in 2008 to 102 bcm in 2030. An adequate supply of natural gas may prove most challenging in all Mashreq countries (including in Egypt, currently a major exporter of gas and LNG). The installed generating capacities, electricity generation, and imports and exports of electricity in these countries (as of 2010) are summarized in Table 43. The power grids of these six countries are interconnected. Further Syria is interconnected to Iran and Turkey, and Iraq is interconnected to Turkey and Iran and Egypt is interconnected to Libya.

Libya has interconnections to Egypt on the east and Tunisia on the west. Tunisia, Algeria and Morocco are well interconnected among themselves and with the European network, and operate synchronously with the EU power grid. More than 98 percent of Tunisian power generation was based on natural gas, while in Libya only about 38 percent of the generation was based on gas, the

rest being based on liquid fuels. Power sector details of Tunisia and Libya are summarized in Table 44.

77,716

104,653

Turkey and Iran are the outlying countries and are significant from the point of the view of the region's energy trade. Turkey is interconnected to Syria, Iraq, and Iran; Iran is interconnected to Turkey and Iraq. Turkey is a gateway to EU power systems as it has connections to Bulgaria and Greece and is operating synchronously with the EU grid. Both operate large power systems, the basic details of which are summarized in Table 45.

Turkey's installed capacity includes about 15.9 GW of hydropower and 1.32 GW of wind power, the outputs of which vary as a function of hydrology and wind. Such variable output from about a third of the installed capacity is the basic rationale for Turkey's electricity trade, enabling it to export during periods of surplus and import during periods of deficit. Turkey's plans to fully construct all available hydropower sites and add 20,000 MW of wind power capacity by 2023 will further emphasize its need for power trade.

¹¹⁶ These figures are based on estimates for Egypt's expansion plan of approximately US\$101 billion to meet 150,000 GWh of demand growth, with approximately 82 percent allocated for generation, 13 percent for transmission, and 5 percent for distribution (World-Bank-sponsored report, Energy Cost of Supply and Pricing Report, October 10, 2008).

The forecasts and investments estimates made about five years ago have turned out to be somewhat conservative. The current estimates for most of these countries are substantially higher.

Table 43 Key Data on the Power Sector in Mashreq (2010)

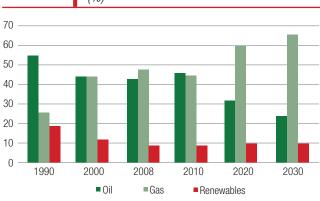
	Installed Capacity (MW)	Generation (GWh)	Exports (GWh)	Imports (GWh)
Egypt	24,726	138,782	1,118	183
Iraq	15,006	48,906	0	6,153
Jordan	3,243	14,777	58	670
Syria	8,200	46,413	1,043	690
Lebanon	2,313	11,211	0	1,249
Palestinian Territories	140	431	0	1,605
Mashreq Total	53,628	260,520	2,219	12,769

Source: Compiled from the reports of national regulators.

Note: Effective and available capacity in Iraq was about 8,000 MW only.

Iran has a total nominal installed capacity of 61.2 GW, but its average available effective capacity is only 54 MW. About 15.6 percent of the effective capacity is hydro, while the rest is thermal, fired mostly by gas (about 74 percent), and partly by liquid fuels

Figure 61 Mashreq Power Generation by Type of Fuel (%)



Source: Compiled from the reports of national regulators.

(26 percent). It has significant seasonal variations (maximum loads are in May to August) and daily variations (daily peaks at 9 PM) in demand. These conditions and the fact that Iran is the world's second largest gas producer make electricity trade meaningful for Iran. Apart for the interconnections to Turkey and Iraq, it has also interconnections to Turkmenistan, Armenia, Azerbaijan, Afghanistan, and Pakistan.

There is a regional electricity network in place in the Mashreq region. The electricity network is part of the Arab power system, which was initiated in 1988 by a five-country agreement between Jordan, Syria, Egypt, Turkey, and Iraq. Each country undertook to upgrade its electricity system to a regional standard. The project was extended to eight countries with the addition of Lebanon, Libya, and the Palestinian Territories. There are presently a number of high-voltage interconnections between the national power systems of Egypt, Iraq, Jordan, Lebanon, Syria, Palestinian Territories, Libya, Turkey, and Iran.

Table 44 Basic Details of the Power Sector of Libya and Tunisia

2010						2010–2 (forecast gro	
	Installed capacity MW	Energy generation GWh	Exports GWh	Imports GWh	Peak Deman MW	Peak demand	Energy
Libya	8,349	32,559	152	70	5,759	5.4%	5.4%
Tunisia	3,571	14,821	122	141	3,010	3.9%	3.7%

Source: Compiled from the reports of national regulators.

Table 45 Basic Details of the Power Sector of Turkey and Iran

		2010)20 vth rate)
	Installed capacity MW	Energy generation GWh	Exports GWh	Imports GWh	Peak Demand MW	Peak demand	Energy
Turkey	49,524	211,208	1,318	1,144	33,392	7.2%	7.2%
Iran	61,203	232,994	6,707	3,015	38,891	7.7%	7.7%

Source: Compiled from the reports of national regulators.

Table 46 Regional Interconnections

Countries	Circuits/Voltage	Capacity	Year of Operation
Turkey – Syria	1 x 400 kV	1135 MVA	2007
Syria – Jordan	1 x 230 kV	55 MVA	1977
Syria – Jordan	1 x 230 kV	267 MVA	1980
Syria – Jordan	1 x 400 kV	1135 MVA	2000
Syria – Lebanon	2 x 66 kV	110 MVA	1972
Syria – Lebanon	1 x 230 kV	267 MVA	1977
Syria – Lebanon	1 x 400 kV	1135 MVA	April 2010
Syria – Iraq	1 x 230 kV	267 MVA	2000
Jordan – Egypt	1 x 400 kV	550 MVA	1997
Jordan – West Bank	2 x 132 kV (operated at 33 kV)	20 MW	2007
Egypt – Libya	1 x 220 kV	120 MVA	1998
Egypt – Gaza	1 x 22 kV	17 MW	2006
Iraq — Turkey	1 x 400 kV (operated at 154 kV)	200 MW	2002
Iraq – Iran	1 x 400 kV	325 MW	April 2009

Source: Compiled from the reports of national regulators.

A list of interconnections between the Mashreq countries, and with Turkey, Iran and Libya is provided in Table 46.

Although the Mashreq countries appear to be strongly interconnected, there are numerous transmission constraints in the national systems that limit transfers between countries. More generally, the exchange of power among these countries has been much less than the available interconnection capacity. There are a number of structural and institutional reasons for the limited electricity trade the most important of which are the lack of adequate generating capacity in the interconnected countries and the inability to operate the

interconnected systems in the synchronized mode in a consistent and sustained fashion.

Despite the interconnection agreement, trade among the EIJLLPST countries¹¹⁸ has been modest. The related regional committees do not appear to be fully functional. Primary obstacles to electricity trade are tight generation supply, lack of a harmonized regulatory

¹¹⁸ The EIJLLPST interconnection was initiated in 1988 by a five-country agreement among Egypt, Iraq, Jordan, Syria, and Turkey, and has since grown to include Libya, Lebanon, and Palestinian Territories. Through the agreement, each country committed to upgrading its electricity system to a minimum standard.

framework, limited access to national transmission networks, and the fact that trade is generally limited to a single government-owned entity in each country. Additionally, the interconnected systems are often not synchronized, meaning that part of a national grid system may need to be isolated from the main grid to accept imports from another country. The lack of surplus generating capacity and generation fuel in the interconnected countries means they often do not have spare energy to trade. Further, in some areas the transmission system is not synchronized, necessitating isolated generation to facilitate trade. For example, when Syria exports energy to Lebanon, part of the grid in Lebanon must be disconnected from the main national grid.

Nevertheless, the EIJLLPST interconnection has brought significant benefits. For example, Jordan can rely on its interconnections with Egypt and Syria for about 250 MW of capacity during system emergencies. In 2007 Jordan's reserve margin was negative 130 MW. In the absence of its interconnections, Jordan's loss-ofload expectation was 53 hours, more than triple the target level of 15 hours. The interconnections therefore enabled Jordan to avoid considerable load shedding in 2007. In addition, Jordan, Egypt, and Syria share spinning reserves. By minimizing spinning reserve requirements in this manner, generation is operated closer to its optimum output level, thus improving efficiency and reducing fuel and maintenance costs. Opportunities for short-term trades have also been realized through the diversity of demand. Syria has a winter peak while Egypt and Jordan have summer peaks. Syria can make sales to Egypt and Jordan during summer when it has surplus generating capacity, and Jordan and Egypt can make sales to Syria in winter when they have surplus generating capacity. These staggered sales are particularly relevant when there are different generation technologies in the countries.

Overall, the value of the EIJLLPST interconnection is currently suboptimal. It is used primarily for ancillary services such as reserve sharing, while energy transactions to take advantage of differences in production costs are limited. Further, Turkey being allowed to

join the European network has resulted in the need for connection of Turkey to third countries on the basis of a back-to back HVDC interface. Pending the construction such interfaces, third countries can connect to Turkey only on the basis of secure islanded mode to protect the Turkish and the European system. They cannot synchronize with the Turkish grid. The existing and proposed major power interconnections among these countries are shown in Figure 62.

Gas Sector Background

Historically, gas demand in the Mashreq countries has been driven by the availability of gas supplies. Through the 1990s, Jordan, Syria and Egypt utilized all of their gas production for domestic use. Jordan and Syria continue to use their gas production domestically and seek to further expand development of domestic gas fields and production facilities. 120 Egypt began exporting gas in the early 2000s both in the form of LNG to various parts of the world, and as piped gas to Jordan, Syria, and Lebanon through Arab Gas Pipeline (AGP) and to Israel through the Arish-Ashkelan pipeline. Egypt's total gas exports peaked at 18.32 bcm in 2009 and started declining thereafter as a function of increasing domestic demand and political and commercial issues. The two pipelines were idle with no supplies or highly interrupted supply from Egypt for nearly two years. Supply for Jordan through AGP was resumed toward the end of 2012. Supply to Israel, however, remains cancelled. Since early 2013, Egypt is actually pursuing the option of importing LNG for its domestic use. Lebanon had no domestic gas production (though the recent discovery of extensive gas resources in the Levant offshore area have been reported

¹¹⁹ In EIJLLPST, Libya, Egypt, Jordan, and Syria are synchronized with one another, but not with the other EIJLLPST countries, and not with Turkey.

¹²⁰ Jordan for example signed in October 2009 a deal with BP to explore for natural gas reserves in the Risheh field near the border with Iraq, an investment that could reach billions of dollars.

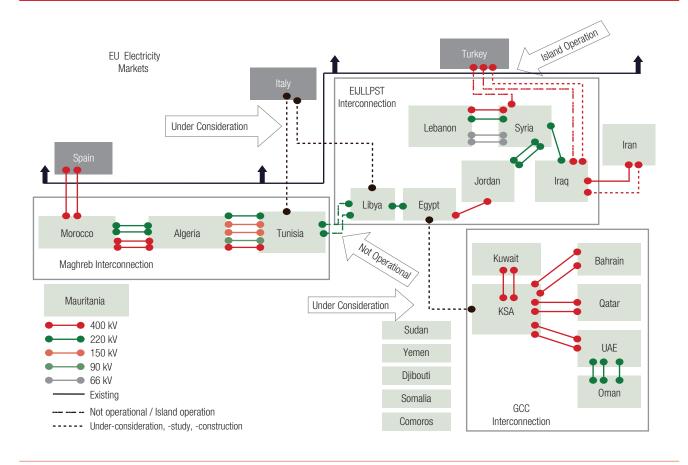


Figure 62 The Existing and Proposed Power Interconnections

Source: The World Bank.

Note: Medium voltage interconnections between Jordan and West Bank and between Egypt and Gaza exist and operate in island mode

and are being pursued) and after several years of planning efforts managed to get small quantity of Egyptian gas through Syria, ¹²¹ but supplies were discontinued in less than a year.

A positive development is the offshore gas discoveries of Lebanon. Two-dimensional and three-dimensional seismic surveys carried out during recent years seem to indicate 87 hydrocarbon sources along the Lebanese coastal areas in the Mediterranean Sea. U.S. Geological Survey is believed to have estimated in 2010, that the technically recoverable hydrocarbon reserves in the Levant basin region covering 83,000 km² in the Eastern Mediterranean¹²² at around 1,689 million barrels of oil and 122.4 tcf (3.5tcm) of gas. Significant natural gas discoveries have been made in the offshore areas of Israel

(especially in the Leviathan field), and in 2010 Noble Energy Limited (a U.S. hydrocarbon exploring company) confirmed the commercial viability of the gas deposits.

In this context, Lebanon accelerated the passage of its Law on Offshore Oil Reserves. It further planned to divide its offshore area into blocks and carry out international rounds of biddings to award exploration and production contracts. However, though the law was passed in August 2010, issuance of decrees to make the law effective

Egypt and Lebanon reached an agreement in September 2009 to supply natural gas to Lebanon's Beddawi power plant. Partial delivery of gas started mid October 2009, enough to power operation of one turbine at the Beddawi power plant.

¹²² Lebanon, Israel, Cyprus, Turkey, Egypt, and Syria have territorial stakes in this region.

has been delayed considerably. Meanwhile Lebanon has raised the issue with UN that Israel may be drilling in the exclusive economic zone of Lebanon. Though Israel and Cyprus have concluded littoral agreements defining their exclusive economic zones, other parties such as Lebanon, Turkey and Egypt have raised objections. These territorial disputes inject a great deal of uncertainty in exploration and production of gas in these areas. However the dispute between Lebanon and Israel relates only to about 854 km² (out of the total area of 83,000 km²).

Lebanon engaged a British firm (Spectrum Geo) to carry out the 2-D and 3-D seismic surveys (in its offshore areas), which have resulted in substantial gas finds (about 25 tcf) in areas not covered by the disputes between Israel and Lebanon. Gas seems to occur initially at depths of 3.5 km and again at lower depths of 6 to 7 km. Cost implications would be clearer after the exploration and production wells are drilled. The newly appointed Petroleum Administration Authority has carried out the prequalification step and has prequalified 12 international operators and 37 non-operators for participation in the licensing rounds. However the regulations regarding the fiscal regime and legal framework do not appear to have been passed and announced. Extraction and use of gas by 2015 is envisaged. The schedule is considered optimistic by many observers.

If Lebanon succeeds in developing its offshore gas reserves, the first priority will be to meet its own demand for the power sector, which is severely starved for fuel. However export of gas by pipeline by Lebanon via Syria to Turkey and then on to EU seems difficult because of the conditions in Syria and the lack of completion of the Arab gas pipeline segment connecting Syrian and Turkish gas systems. Israel is unlikely to need Lebanese gas, as it will have plenty of gas of its own. The only other destination for Lebanese gas exports could be Jordan to which gas pipelines have to pass through Israel or Syria. Lebanon could connect to the Arab gas pipeline in Syria and use it to send gas southwards to Jordan, and even possibly to Egypt. On the whole however the prospects for Lebanese gas exports by pipeline do not appear to be

bright. However it could consider export of gas in the form of LNG. The adequacy of gas for such LNG exports is not clear.

Lebanon has taken major steps to arrange for the import of LNG by initiating the construction of an LNG import terminal. It is not clear whether it will proceed to import LNG on the basis of long-term contracts and whether there is a conflict between the two initiatives in the medium term. The offshore terminal will be privately owned and constructed and on the basis of a tolling arrangement will receive the LNG imported by the government, re-gasify the LNG and send the gas to the government owned pipeline system. The tolling contract will be for a period of 12 or more years to enable the private owner to recover the costs of investment. The capacity of the terminal would be about 5 bcm per year.

Palestinian Territories have no gas infrastructure, but there is an undeveloped gas field lying off-shore at Gaza Marine with a proved reserve of about 35 bcm. Its electricity sector plans include the use of natural gas for power generation. Iraq has significant gas reserves, but owing to the decade-long conflict and limited gas infrastructure, has been able to consume only limited quantities of gas. Iraq is flaring most of the associated gas production. Nevertheless, gas consumption in the Mashreq countries has grown at an annual rate of 8.3 percent during 1990–2010 and is expected to grow at an annual rate of 6.75 percent during 2010–2030 (see Table 47).

The Mashreq region has large gas reserves, and 94 percent of these reserves are in two countries, Iraq and Egypt, accounting for 55 percent and 39 percent, respectively (Table 48). Gas production in Mashreq countries was only 14 bcm in 1990, but increased to 70.7 bcm by 2010 at an average annual rate of 8.4 percent. The current plans indicate that production will increase from 70.7 bcm in 2010 to 220.95 bcm in 2030 at an annual rate of 5.86 percent. Nearly 91 percent of the production increase will come from Egypt (58.7 bcm) and Iraq (79.35 bcm). However, both Egypt and Iraq face significant constraints in expanding their gas production capacity to the extent envisaged in current plans.

Table 47 | Historical and Forecast Gas Consumption in Mashreq Countries (bcm)

	1990	2000	2010	2020	2030
Egypt	8.24	21.78	45.10	72.80	97.79
Iraq	1.98	3.15	1.30	35.16	61.00
Jordan	0.12	0.26	4.20	5.6	8.1
Syria	1.69	6.10	8.50	20	39
Lebanon	0	0	0.15	7	10
Palestinian Territories	0	0	0	1.8	2.8
Total	12.03	31.29	59.25	142.36	218.69

Source: Compiled from the reports of national regulators.

 Table 48
 Basic Data on the Gas Sector of Mashreq Countries 2010

	2010 (data in bcm)					
	Reserves	Production	Consumption	Exports	Imports	
Egypt	2,200	61.30	45.10	15.17	0	
Iraq	3,200	1.30	1.30	0	0	
Jordan	6.2	0.30	4.20	0	2.1	
Syria	300	7.80	8.50	0	0.69	
Lebanon	0	0	0.15	0	0.15	
Palestinian Territories	35	0	0	0	0	
Total	5741.2	70.7	59.25	15.7	2.94	

Source: Compiled from the reports of national regulators.

For Egypt the constraint is the size of its gas reserves, and for Iraq the constraint is its implementation capacity.

However it is not clear whether Egypt will maintain its 2010 export level or reduce it to meet rising domestic demand. If Egypt were to maintain its exports at the 2010 level of 15.17 bcm, its surplus would be about 12 bcm by 2020 and 7 bcm by 2030. The rapidly rising internal and external demand for Egyptian gas has triggered political sensitivities to further exports and a technical need to revisit gas allocation policies and priorities. A moratorium on any increase in gas exports, announced in 2008, is still in force.

The government of Iraq has prepared a gas utilization plan (as a part of its comprehensive energy strategy) in order to utilize its gas fields in the south (which are the largest reserves and mostly associated

with oil production) for domestic use and for export to Kuwait. It would also develop the gas reserves in the north and west for export to Syria and Turkey, and eventually Europe. The plan aims at producing about 55 bcm by 2020 and 81 bcm/year of gas by 2030 of which about 20 bcm should be available for exports. However, in the aftermath of the decade-long change of regime, Iraq faces major institutional and governance problems not conducive to the rapid growth of the gas industry. The lack of clear agreement on the role of the central government and the provincial governments is a constraint adversely affecting wider competition for exploration and production rights.

Considering the risks and uncertainties in the long-term supply of gas through pipelines, the gas importing countries of the region are considering the

Table 49 Gas Data for Libya and Tunisia (2010) (bcm)

Country	Reserves	Production	Consumption	Export	Import
Tunisia	92.00	3.30	5.30	0.00	1.25
Libya	1,500.00	15.80	6.90	9.75	0.00

Source: Compiled from the reports of national regulators.

LNG import option. Several studies have been undertaken into the potential for LNG supply to Lebanon indicating the economic viability of such an option to Lebanon. Jordan and Syria are also pursuing similar LNG import option.

Libya's gas exports declined due to the political turmoil. In 2010 Libya had reserves exceeding 1,500 bcm, produced 15.8 bcm and exported 9.75 bcm. The country exported 9.41 bcm of gas in 2010 by pipeline to Italy and 0.34 bcm of LNG to Spain. But exports declined steeply in 2011 to 2.4 bcm (2.3 bcm by pipeline and 0.1 bcm as LNG). Tunisia has a modest reserve of 92 bcm of gas but is believed to have 510 bcm of shale gas, which it is making a major effort to develop. In 2010 it had a marketed production of 3.30 bcm and imported 1.25 bcm of gas (see Table 49). Tunisia is a transit country for the gas pipeline from Algeria to Italy and thus its gas needs are met by domestic production, imports from Algeria and royalty gas as transit fees, which it may draw in cash or in kind. See Table 49.

If Tunisia's development of its shale gas resources proves successful, it would become a notable exporter. Projected production levels, domestic demand and export surpluses for Tunisia and Libya through 2030 are summarized in Table 50. Libya is projected to have additional annual export surplus of 5.25 bcm in 2020 and 5.75 bcm in 2030, while Tunisia's import needs would grow to 5.20 bcm by 2020 and to 6.70 bcm by 2030. It is planning to export gas to EU using the Algeria-Italy pipeline (Enrico-Mattei pipeline), after meeting its own demand.

Iran is world's third largest producer of gas after the U.S. and Russia. Its reserves were reported at 33.1 trillion cubic meters; its production in 2010 was 146.2 bcm, most of which was consumed domestically

(see Table 51). In 2010, it imported 6.35 bcm of gas from Turkmenistan and Azerbaijan and exported gas to Turkey (7.77 bcm), Armenia (0.4 bcm) and Azerbaijan (0.25 bcm). Except in 2010, Iran had been a marginal net importer of gas despite having the second largest reserves and the third largest production in the world. Its consumption of gas has increased from 62.9 bcm in 2000 to 144.6 bcm in 2010 at an annual rate of 8.7 percent and it is expected to grow at about seven percent per year in the coming decade. 123 In view of the high growth of domestic demand and the steeply growing gas reinjection needs of the oil wells, Iran's ability to dramatically increase its volume of gas exports by pipeline in the near future is considered doubtful by many. This conclusion is particularly likely given the international sanctions, domestic policy stance, and organizational complexity of the country, which are unlikely to attract the foreign investment needed to increase production.

Turkey, on the other hand, has modest gas reserves and a small gas production, but has a high and growing demand gas met by imports from several sources. Its gas demand grew from 14.6 bcm in 2000 to 39 bcm in 2010 at an annual rate of 10.3 percent. However, Turkish authorities estimated conservatively in 2009 that the domestic demand will grow to 65.9 bcm by 2020, and 76.4 bcm by 2030 at a much slower rate of about 3 percent per year. In 2010 Turkey imported by pipeline 28.76 bcm of gas from Russia (16.64 bcm), Azerbaijan (4.35 bcm) and Iran (7.77 bcm). It also imported 7.92 bcm of gas as LNG from various parts of the world. It has extensive gas

¹²³ Sources for data on Iran include: BP Energy Statistical Review 2010 and 2011, Natural Gas Exports from Iran, USEIA, 2012

Table 50 Gas Sector Projections for Tunisia and Libya (bcm)

	Projected don	nestic demand	Projected pro	oduction level	Current exports	Projected sur	plus or deficit
Country	2020	2030	2020	2030	2010	2020	2030
Tunisia	8.50	10.00	3.30	3.30	0.00	-5.20	-6.70
Libya	20.00	40.00	35.00	55.50	9.75	5.25	5.75

Source: Compiled from the reports of national regulators.

Table 51 Gas Sector Data for Iran and Turkey (2010) (bcm)

	Reserves	Production	Consumption	Export	Import
Iran	33,100	146.2	144.6	8.42	6.85
Turkey	6.2	0.7	39	0	36.68

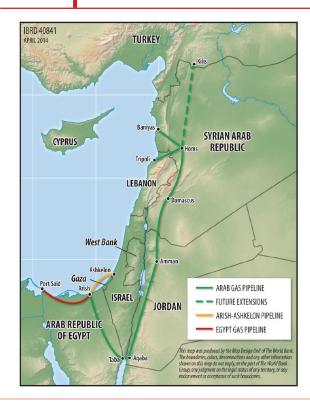
Source: Compiled from the reports of national regulators.

transmission, storage, and distribution facilities and a sophisticated competitive gas market and is emerging as a major gas hub for transit of pipeline gas from the East and the South to EU.

Existing cross-border gas networks are operational in the region. As illustrated in Figure 63 the Arab Gas Pipeline (AGP), intended to supply Egyptian gas to Jordan, Syria and Lebanon, and eventually to the EU through Turkey and the Arish-Ashkelon pipelines, intended to supply Egyptian gas to Israel, are the two existing cross border pipelines in the Mashreq region. Sections of the AGP up to Homs in Syria as well as the spur from AGP to Tripoli have been constructed and became operational in phases. Jordan started getting supplies in July 2003, Syria in July 2008, and Lebanon in October 2009. The construction of the section from Homs to Kilis (in Turkey) and then on to the Turkish gas network has not yet been undertaken in view of the emerging concerns about the adequacy and availability of Egyptian gas. Syria therefore sought agreement with Turkey to construct the pipeline from the Turkish end up to Aleppo in Syria to import gas from Azerbaijan via Turkey. The plan was to link Homs to Aleppo when Egyptian gas supply became certain or if Iraq's export plans materialized. At that point the gas flow could be reversed in the Aleppo-Kilis section.

Trade on the AGP has been limited. Trade volume is far below its annual design capacity of 10 bcm and even lower than the contracted quantities. The only firm sales on the AGP have been made between Egypt and

Figure 63 | Existing Pipelines in the Region



Jordan. Egypt had been slow in ramping supply up to its export commitment to Syria and Lebanon due to infrastructure constraints. Egypt exported 3.3 bcm to Jordan, 0.9 bcm to Syria and 0.3 bcm to Lebanon, representing about 45 percent of the AGP design capacity. It was expected that by 2013, Egypt's gas exports through the AGP would increase to 4.2 bcm to Jordan, 2.2 bcm to Syria and 0.6 bcm to Lebanon, representing 70 percent of the AGP design capacity. However, in the context of regime change, the resentment of the Egyptian people against gas exports resulted in serious damages to the pipeline infrastructure and prolonged interruptions of supply in 2010 and 2011. In the course of 2011 the supply through AGP ceased fully, causing major problems to Jordan, which is almost entirely dependent on imported energy. Except for about a year Lebanon did not get any supply. 124 Supply to Jordan through AGP was resumed in late 2012 and has reached the level of about 2.48 bcm by early 2013. Supply to Israel faced resentment from the beginning and supply disruptions through pipeline damages became commonplace. Later in 2012 Egypt formally cancelled the contract claiming that the Israeli importing company had defaulted in payments.

Another pipeline worth mentioning is the short pipeline from southern Iraq to Kuwait, extensively damaged during the war and in need of rehabilitation or replacement, which has not happened despite the declarations of the two governments.

Egypt has two natural gas liquefaction plants. One plant is at Damietta (called the SEGAS plant) with a single train and a design capacity of 4.8 million tons/year, and the other plant is at Idku (called ELNG) with two trains and a capacity of 3.6 million tons/year. It has also has provision for constructing an additional six trains in the future. In 2010 LNG from Egypt was exported to Spain (2.62 bcm), the United States (2.07 bcm), and 14 other countries all over the world (5.02 bcm) The LNG exports had declined from 14.97 bcm in 2006 to 9.71 bcm in 2010 and further declined to 8.6 bcm in 2011.

Libya has an under-sea gas pipeline. Greenstream, a 520 km long 39-inch diameter gas pipeline, from Melitah to Gela in Sicily, is operational since 2004. Libya has also a LNG facility at Marsa el-Brega, built in 1971 with an annual capacity of 2.3 million tons. But owing to historic developments in Libya, the facility's annual production capacity has declined to 0.7 million tons and it is being operated by a subsidiary of the Libyan national oil company. Royal Dutch Shell and the subsidiary have had agreements since 2005 to rehabilitate and upgrade the annual capacity to 3.2 million tons (possibly by constructing a new plant and prospecting for additional gas supplies). Plans to construct new LNG facilities at Melitah and Ras Lanuf are also being pursued. A map of the region indicating the existing and possible key cross border gas pipelines, as well as existing and planned LNG terminals is given in Figure 64.

Potential for Increased Electricity and Gas Trade

Potential electricity trade in the region will reduce the cost and increase the reliability of power supply.

Power trade is, by and large, in the form of opportunistic electricity exchanges among the interconnected systems based on the hourly variations during each day and seasonal variations during the year in each system. To the extent the interconnected countries are in different time zones (function of latitude) or have different seasons (function of longitude and elevation) or differing working days and holidays, there will be diversity in the demand variations in each country resulting at any given time some country having surplus capacity/energy while the others have capacity/energy deficits enabling trade. In addition, differing short-term marginal costs among the interconnected systems also create the arbitrage inducing trade.

¹²⁴ There are also reports of suspension of supply for nonpayment of dues by Lebanon.

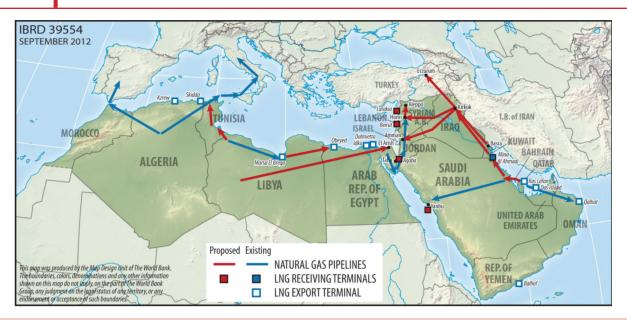


Figure 64 ■ Existing and Proposed Gas Pipelines and LNG Terminals

Regional trade helps the electricity systems to lower their reserve margin, increase reliability, and enable investments in generation projects with economies of scale. The full benefits of trade are achieved only when the interconnected systems operate synchronously observing a common grid code, and adhering to the technical standards relating voltage and frequency regulation, quality standards of supply, communication, and protection systems. For sustained synchronous operation, each country should have enough capacity of its own to meet its forecast demand reliably.¹²⁵ In daily operations, when demand exceeds available capacity, the system should have in place an orderly shedding of excess loads to protect the system stability and quality of supply. Otherwise the unbalanced system will draw power from the interconnected systems more than the planned volumes, thus jeopardizing the interconnected systems. When systems cannot be thus synchronized, limited power exchange can take place in an island mode, when the source is islanded from the supplying grid and synchronized with the receiving part of the recipient grid. Another, though somewhat more expensive, option is to

interconnect the grids through a back-to-back HV AC/DC interface.

When power trade among the member systems of the regional grid become stable and reliable, investors could consider establishing generating capacities much larger in size. Such a decision would be based on the comparative advantage of the host country such as access to lower cost fuel, site facilities, distance to potential markets, and business friendly approach of the host governments. Often the establishment of such generation facilities leads initially to bilateral trades and later to the evolution of regional markets. The ultimate goal of an integrated power market is to optimize the supply of electricity within a broad, regional (rather than confined, national) framework. Often this is thought to be achievable in a market environment where every party has equal access to all networks (domestic, regional, and international); where market data and information (pricing, market operation, and capacity allocation) are

¹²⁵ Such capacity could also include firm power purchase agreements with other countries, with guaranteed transmission rights.

transparent; and where electricity tariffs cover the cost of supply, power-grid codes are harmonized, systems are synchronized, and markets liberalized.

The international experience indicates that the above conditions can be met only over time as the participating countries reform their electricity sectors. The sector is reformed through unbundling the generation, transmission and distribution functions, evolution of transparent transmission and distribution (wire services) tariffs, evolution of transparent, fair, and stable regulatory arrangements, and price reform at all points reflecting cost of supply. However, at the initial stages electricity trade is promoted through the construction of the additional transmission links to enable free flow of power within and across the countries (operating synchronously) and additional generating capacity (or that acquisition of firm PPAs with guaranteed transmission rights) to properly balance the demand and supply in each country. Institutional arrangements at this stage should include a regional coordinating body with full and empowered functionality and regional settlement arrangements. The institutional arrangement would then evolve over time into the structure that is needed to plan and operate an integrated network of participating countries.

Export surplus in natural gas trade appears to exist, prima facie, in Iran, Iraq, Libya, and Egypt. Despite having the world's second largest reserves, and third largest annual production of gas, Iran has been a net importer of gas in recent years, except in 2010. It has major institutional, organizational, and policy constraints inhibiting the sound and economic growth of the sector and attracting the needed investments. The political situation and the international sanctions regime are also not conducive to enable any optimism in this regard. As of now, one can only envisage Iran maintaining the level of pipeline exports to Turkey on the basis of getting gas imports from Turkmenistan, and the volume increasing only in the context of Turkmenistan agreeing to supply large volumes to EU through Turkey and Iran through the Nabucco or other planned alternative lines.

Iraq has substantial associated and non-associated gas and the rapid development of its oil export business is expected produce a large volume of gas. Iraq needs to look for opportunities to gather the associated gas and export it through pipeline to its neighbors on the basis of flexible supply contracts which allow the volume to rise in line with increases in production and transportation of gas in Iraq. Turkey, Jordan, Lebanon and Jordan could benefit by this development, since the pipeline distances are relatively short. Thus the list of new possible pipelines includes several from Iraq to these countries often making use of the AGP system. Iraq has also the ambition to supply large volumes such as 30 bcm to EU through Turkey. However Iraq governance must improve the differences of opinion between the central government and the Kurdish region authorities on their roles and responsibilities in the hydrocarbon sector must be reconciled to enable the country to attract the much needed investment for the development of the sector.

Libya has also the potential for increasing its gas exports. Libya's incremental exports are more likely to go to the EU's attractive, dependable and solvent market, based on its several years of trade association and experience, rather through long and difficult pipelines to the AGP system. It is also expanding its capacity for LNG exports for which Mashreq countries could compete in the international market.

Egypt's gas export potential cannot be taken for granted. Rapid increases in domestic demand caused substantially by the country's energy pricing and subsidy policy, makes it politically difficult to maintain even the existing level of exports, while the domestic power gas shortages create great public ire. Exports through AGP and the Arish-Ashkelon pipeline aced the risk of supply disruption and contract cancellation, highlighting the political risks of gas trade by cross-border pipelines. Egypt still has a moratorium against incremental exports and is pursuing the proposal to import LNG to meet its rising domestic demand for gas. The best that can be hoped for under these circumstances is the possibility of Egypt maintaining about 3 bcm supply to Jordan, far

below the AGP design capacity of 10 bcm. The spare capacity will have to be made use of by Iraq when its exports develop.

Levant countries should be prepared to compete with the EU for LNG supplies in terms of prices, adherence to contracts, and payment terms. All countries have access to seacoast and several countries (Jordan, Lebanon, Syria, and Egypt) are pursuing the construction of LNG import terminals. Turkey already has these facilities. As long as the countries needing gas imports can afford to import LNG in the internationally traded or long term contract market, by suitably adjusting the domestic gas user prices, gas trade can expand in the form of LNG.

Main Bottlenecks to Regional Integration of Energy Systems

There are a number of institutional, regulatory, and technical constraints to the expansion of electricity and gas trade in the Levant. However, the overarching bottleneck is the unavailability of gas or electricity to sell, which is in turn influenced by the lack of economic incentive to develop export capacity. Gas/electricity trades impart significant benefit to the importing countries. For example for most countries in the region the import of gas yields a benefit of more than US\$11/MMBTU, yet their expectation is to pay a substantially lower price for the imported gas. The reason is that electricity and gas trade have traditionally been viewed as a means of utilizing idle capacity or idle resources. However, the nature of the business has changed; sellers need to develop additional capacity for export purposes and will not undertake the required investments unless they are confident of an attractive return on their investment.

Unlike oil, there is not yet a generally accepted international price for gas. Cross-border gas transactions are thus mostly based on negotiated prices. There is often a wide range for price negotiation from the seller's cost of supply, typically ranging from US\$1-3/MMBTU,¹²⁶ to

the buyer's benefit from using gas, potentially exceeding US\$11-12/MMBTU. This wide range creates a problem of differing expectations between sellers and buyers. The LNG market is helping to narrow the range of price negotiation. Global demand for gas has grown rapidly, pushing up gas prices; nevertheless, there is a need for much stronger economic incentives if suppliers of gas and electricity are to invest in capacity expansion aimed at energy exports. Table 52 includes the main benchmarks to consider in the discussion of gas prices. The estimated values are assumed based on Egyptian gas information. The framework follows Egypt's decision chain in determining: (i) the amount of gas to be produced at each given time; (ii) the amount to be allocated for domestic use; (iii) the amount to be allocated to exports in the form of LNG; and (iv) the amount to be allocated to exports in the form of piped gas to Mashreq countries.

Domestic gas use imparts the highest economic benefit to Egypt even though the financial return may be low due to the prevailing energy price subsidies. Egypt therefore is likely to assign the highest priority to meeting the gas requirements of its own economy. Should there be additional gas to allocate to exports Egypt is likely to give priority to LNG exports to Europe or Asia rather than to piped gas exports to other Mashreq countries unless the importing Mashreq countries are willing to pay comparable prices. The essence of the recommendation here is that Jordan, Syria, and Lebanon should be prepared to provide a commercial incentive to encourage Egypt to supply the Mashreq market via the AGP prior to any further allocation to LNG. While the relevant price levels are subject to research and negotiation, the emerging gas price is likely to be much higher than the underlying prices of previous contracts between Egypt, Jordan, and Syria. Higher gas prices would provide a strong commercial incentive for exploration and development of Egypt's large estimated yet-to-be-found gas reserves.

Short-term power exchanges are often based on idle capacity and are feasible as long as the price covers

¹²⁶ This excludes depletion premium.

Table 52 Estimated Price for Egyptian Gas (US\$ /MMBTU in 2009 Prices)

Estimated Price	Explanation
	Benchmarked on Egypt's Cost of Gas Supply
Long-run marginal cost (LRMC) — US\$1.5–2.6 Depletion premium — US\$1.4–3.6 Economic cost — US\$2.90–6.2	Cost of gas development and production in Egypt's new gas fields is expected to be much higher than in the past. Based on the projected gas production profile and current reserves Egypt would need to switch to alternative fuels as gas supply becomes a constraint, resulting in a depletion premium of US\$1.4 in 2010, increasing to US\$3.6 by 2020.
	Benchmarked on Egypt's Opportunity Cost
Benefit from Domestic Use: Avoided cost in power — US\$7.5–12.5 Avoided cost in residential and commercial sectors - US\$11	The power sector serves as the first vehicle for shifting in and out of gas consumption. The avoided cost (or netback value) in power constitutes an important measure of gas use in the domestic market estimated on the basis of a steam plant fired with heavy fuel oil compared with gas use in a steam plant (lower netback), or a combined cycle plant (higher netback). The avoided cost in the residential/commercial sector is based on the alternative of using diesel oil and LPG.
Benefit from LNG Export European gas price (average 2011): US\$10.61 (-) Re-gasification cost — US\$0.45 (-) Shipping cost — US\$1.00 (-) Liquefaction cost — US\$3.8 (-) Pipeline cost — US\$0.25 (=) US\$5.11	LNG prices are normally linked to a basket of energy products but are also correlated with gas prices in major markets (North America, Europe and Asia). The sharp decline in gas prices in North America resulted in a drop in LNG prices in 2010. However, LNG prices in other major markets (Asia, EU, and Far East) have substantially recovered to previous levels and have even increased. The European price is considered an appropriate benchmark for exports of LNG from North African countries.
	Benchmarked on the Benefit of Gas Use in Receiving Countries
Netback value (avoided cost) estimated for: Jordan — US\$8.00 Syria — US\$7.60 Lebanon - US\$8.30 to US\$10.00 Turkey — US\$8.00	The alternative plant built in the absence of gas is steam plant fired with heavy fuel oil. Jordan, Lebanon and Turkey import fuel oil while Syria uses mostly domestic oil. Netback values are reduced by the cost of transmission to the destination country.
	Expected Price for Egyptian Gas
At the Egyptian border: US\$4.00-6.00 Transport to Jordan — US\$0.50 Transport to Syria — US\$0.65 Transport to Lebanon — US\$0.70	Estimating a fair price is not an exact science; however, Egypt should receive a price that would encourage gas exploration and development, and allocation of gas to pipeline exports rather than LNG. Based on an average levelized cost of transportation from Egypt to each of destination countries.

Note: LRMC is estimated at US\$1.5 to US\$2.6. Financially, Egypt buys gas from producers at about US\$3 while receiving some of the gas in return according to a production-sharing contract. The average cost is about US\$1.6.

variable costs including fuel and operation and maintenance. For example, there may be an economic basis for short-term exchanges of electricity between Egypt and Syria because their peak demand occurs at different times of the day. Longer-term trades generally occur when a country has a cost comparative advantage over another country, or has excess generating capacity forecast for an extended period of time. Currently, the more likely scenario is for Egypt to export electricity to other Mashreq countries. The indicative costs for short and long-term export of electricity from Egypt are summarized in Table 53. Under the current conditions the cost of electricity generated in Egypt for short-term power exchanges during the

peak period when it has oil plants on the margin would be US\$0.10/kWh. However, the cost of electricity generation could be much lower (US\$0.041–0.061/kWh) in the future if Egypt has gas plants on the margin. Similarly, the longer-term electricity trade could be based on a cost of generation ranging from US\$0.039–0.051/kWh. Short-term exchanges and longer-term trades of Egyptian electricity would only make sense if the importing countries were willing to pay prices in excess of these levels plus the cost of transmission. A further implication is that Egypt may want to weigh the potential returns from the export of electricity versus the export of gas. It appears that electricity export to a market like Turkey where

Table 53

Estimated Price for Egyptian Power (US cents/kWh in 2009 Prices)

Expected Price (US cents/kWh)

Short-term Exchange-Oil

Fuel cost: 9.3 Variable 0&M cost: 0.7 Generation cost: 10.0

Short-term Exchange-Gas

Fuel cost: 3.9 to 5.9 Variable O&M cost: 0.2 Generation cost: 4.1 to 6.1

Long-term Trade

Capital cost: 1.0 Fuel cost: 2.5 to 3.7 O&M cost: 0.4 Generation cost: 3.9 to 5.1

Market Price in Turkey

Wholesale: 10.8

Transmission Costs

To Jordan: 0.03
To Palestinian Territories: 0.03

To Syria: 0.21 To Lebanon: 0.26 To Turkey: 0.36

Explanation

In Egypt's present configuration peaking and some intermediate units run on HFO. The fuel cost is calculated as the levelized value of HFO based on World Bank forecasts of international oil prices.

Egypt may have gas-fired open-cycle turbine generation available for sale at certain times of the day and year. The fuel cost is calculated as the levelized value of gas at US\$ 4 to 6/MMBTU.

The long-term trade is based on a large volume electricity export over an extended period of time in which case Egypt would invest in gas-based combined cycle generation. Fuel cost is based on a natural gas price of US\$4.00–6.00 per MMBTU.

Average wholesale price in Turkey's balancing market from August 2006 to April 2009 (73.88 Euros/MWh converted at exchange rate of 1 US\$ = 0.6822 Euros)

wholesale prices are quite high, close to US\$0.11/kWh average in recent years, may prove more profitable than gas exports to the same market.

The Relevance of the Neighboring Countries

The linkages to the outlying countries Turkey and Iran as well as the European Union (EU) need to be taken note of in the context of the energy integration of the countries under discussion. Libya plans to connect to the EU grid through a submarine cable as well as interconnection to Tunisia, which is already connected to the EU systems through Algeria and Morocco. Mashreq countries have had an aspiration to connect their power grids to the EU system. This is often envisaged to take place through Turkey. At the same time Turkey has pursued a vision of becoming an energy hub and has restructured

its gas and electricity sectors in line with the EU practices and according to the EU standards that facilitate cross-border energy trade. Turkey is an excellent destination for electricity exports with attractive prices, market structures and market players. Additionally, Turkey has been rather successful in establishing a market structure and regulations that are conducive to energy trade. The Electricity Market Law of 2001 obliges the transmission and distribution companies to allow open, guaranteed, and non-discriminatory access to the network by third parties to facilitate competition in the electricity market. The arrangements to facilitate cross-border gas trade have been concrete. Until 2001 the state owned Oil and Gas Pipeline Corporation (BOTAS) was the monopoly responsible for imports, transmission, wholesale operations, storage, and distribution of natural gas. The Natural Gas Market Law of 2001 reorganized the structure of the market to enable private sector entry and competition on the lines of the EU gas directives. Under this law BOTAS was not allowed to sign new import contracts till its market share fell to 20 percent, was obliged to transfer 80 percent of the existing contracts or the volumes of supply under them to new entrants by 2009, was not allowed to carry on further distribution activity, and was obliged to privatize its distribution subsidiaries. Private sector investments were allowed in imports, exports, gas trading, storage, and distribution. Only transmission was envisaged to be in the public sector.

Lessons emerge from studying the EU energy systems. The liberalization of the European electricity markets has encouraged more integrated dispatch based on economic grounds across regions. Several reform measures have been undertaken in the EU through various directives with the objective of promoting competition in the internal electricity market and enabling cross-border transactions. The first package of directives, issued in 1996, enabled the largest consumers to choose their suppliers and also provided for open access. A second package of directives were issued in 2003 that required a step-wise opening of the retail market with the target of full opening by July 2007. Still, there was a view that electricity

markets largely remained national in scope and had high levels of market concentration. This led to issue of the third package of directives in June 2009 which aimed at full retail market liberalization and a level of effective unbundling that would promote development of cross border transfer capacity and cross-border competition.

Iran complements the Mashreq energy networks, while at the same time can potentially compete in exporting electricity and gas to some common destinations particularly Turkey and Europe. Iran's substantial gas reserves give it a comparative advantage in electricity exports to Turkey and also possibly via Turkey to the European systems. Iran can also be a key transit country for electricity exports from Turkmenistan to Turkey and beyond. However, in view of the high growth in domestic electricity and gas demand and also the steeply growing gas reinjection needs of the country's oil wells, the ability of Iran to dramatically increase its volume of gas or electricity exports in the near future is considered doubtful by many, especially in the context of international sanctions and a limited ability to attract foreign investment needed to increase gas production.

The Impact of Renewable Energy Development on the Regional Integration Agenda

Regional integration efforts are becoming somewhat intertwined with the development of renewable energy. The impact of renewable energy (RE) development is four fold. First, most RE sites (wind farms and solar fields) are far from the power grids and would require dedicated transmission lines to evacuate power to the grid; this affects the overall transmission capacity and the possibility of electricity trade. Second, RE power supply is expected to grow substantially and provide a source of electricity export. For example, Egypt alone is planning to add more than 7000 MW of wind energy over the next 10 years. Third, wind energy and solar energy installations provide intermittent or interrupted power supply

(as opposed to the continuous and dispatchable power supply from conventional power stations). The supply from such RE sources is difficult to absorb in smaller grids. Regional integration of power networks results in larger and more diversified power generation capacity than in isolated national markets, and thereby provides a better opportunity for the development of RE and the absorption of power from them. Development of regional grids could possibly provide stronger commercial incentives for the development of a local industry in the manufacturing of the RE equipment. Fourth, there is a substantial international financial support for RE development which could be tapped into by the public and private entities in order to expand RE generating capacity while strengthening cross-border interconnections that offer synergy between RE and regional integration.

The impact of renewable energy on the regional integration agenda has been explicitly addressed in various solar initiatives. In particular, the MENA Concentrated Solar Power Initiative is formulated to promote the application of CSP in the MENA region, which receives some of the most intensive solar radiation in the world and has some of the best markets for solar energy within the region. The Initiative has received approval from the Clean Technology Fund for US\$750 million concessional financing in support of a proposed investment plan with a total cost of US\$6 billion. It is also worth noting that the development of RE in Mashreq (and more broadly MENA) will be further strengthened by the financial incentives for export of clean energy to Europe. These exports will in turn require capacity reinforcement of major transmission corridors within Mashreq countries (i.e., the Egypt-Jordan-Syria transmission corridor) as well as expansion of the transmission interconnection between Syria and Turkey. Therefore, the completion of the synchronization of Turkey's transmission network with the EU grid and the prospect of long term integration of the electricity networks of Turkey and the Mashreq will provide a massive transformation opportunity to the entire Mediterranean Basin for enhancing the security of the energy supply, and in

development of solar power in the MENA region and green electricity exports to Europe.

Potential Projects for Regional Integration

Recent studies by the World Bank have identified a set of potential projects in electricity and gas sectors. A summary list of the proposed projects in the electricity sector is given in Table 54 and a similar list for the gas sector is given in Table 55.

The Role of the World Bank and other Development Partners

To move the preparation and implementation of gas and electricity integration forward in the Mashreq region two parallel tracks need to be pursued. The first track relates to the harmonization of: (i) technical codes and standards for the national energy systems; (ii) regulation in the national energy sectors; (iii) goals and milestones for energy sector reform relating to, in particular,

open access and consistent and fair pricing of transport; (iv) energy pricing and taxation; and (v) identifying an independent process and procedure for resolving disputes relating to regional energy transactions. The second track relates to help in cross-border transactions. This is an area with significant gaps in terms of realistic information, preparatory steps for, and structuring of such transactions.

The World Bank provides technical support in energy sector. In the area of harmonization, the Arab League and the World Bank carried out a joint study on the institutional and regulatory framework for electricity trade. The results of the study are now being used by the Arab League and Arab countries to develop and set up a harmonized legislative structure and the electricity cross border codes necessary for promoting electricity trade among Arab countries and with targeted neighbouring regions including the EU market. The World Bank carried out a study of gas integration and trade among Arab countries. This study has also identified the potential gas trade projects for implementation within a short-, medium-, and long-term framework. In relation to the second

 Table 54
 Proposed List of Power Sector Investments to Support Increased Regional Trade

No.	Project	Remarks
1	Second 400 kV Line between Egypt and Jordan	To enable larger flow from Egypt to Jordan, Syria, Lebanon, and Turkey
2	A second 400 kV Interconnection between Syria and Lebanon	To enable increased flow of Egyptian power to Lebanon
3	Upgrading Iraq to Syria Interconnection from 220 kV to 400 kV	To enable initially Iraq to import from and later export to Syria larger volumes of power generated based on Iraqi gas (Akas Gas field)
4	A 400 kV 800 km long line from Iraq to Jordan	Jordan can facilitate independent power producers (IPPs) to set up large Iraqi gas based generation and Iraq can import power from Jordan initially and later use the line to sell its own power to Jordan and the connected networks.
5	A new 400 kV line 101 km long from Jordan to West Bank	To enable adequate flows to West Bank
6	A 50 km long double circuit 220 kV line from El Arish in Egypt to Gaza	To provide adequate and reliable supply to Gaza
7	Second 400 kV line from Iraq to Turkey	This will enable flow of an additional 400 MW of power through the interconnection
8	A second 400 kV line between Iraq and Iran	To increase at a later date the capacity beyond the present capacity of 325 MW for exchange.
9	Upgrading of the Egypt to Libya interconnection to 500 kV AC line or through a back to back HVDC line $$	To enable Egypt to be a part of the Mediterranean Power Ring
10	A regional coordination center	To coordinate the interconnected operations of the regional grid and also to facilitate regional optimization of generation and transmission planning.
11	IPP owned New Generation capacity of 500 MW or more in Jordan using Iraqi/Egyptian gas	To supply Lebanon, Iraq, Syria, and Palestinian Territories, besides Jordan

Table 55 Proposed List of Gas Sector Investments to Support Increased Regional Trade

No.	Project	Remarks
1	Expansion of trade through AGP to Jordan, Syria, and Lebanon.	Egypt to increase yearly supply volume to 10 bcm (full capacity). In 2010 the supply was only 3.36 bcm and it declined in 2011. Supply resumed at the end of 2012.
2	Gas pipeline from Homs to Aleppo in Syria to complete the last phase of the AGP.	240-km-long, 36-inch-diameter. Capital cost US\$395.5 million. Capacity 10 bcm/yr. Removes constraints in Syrian system for gas flow.
3	Iraq-Syria pipeline.	93-km-long, 22-inch-diameter pipeline from Akas field (Iraq) to Syrian gas network near border. Capacity 4 bcm/yr. Capital cost US\$116 million. Annual sales initially 2 bcm rising to 4 bcm in 10 years.
4	Kirkuk (Iraq)-Akas-Homs (Syria).	780-km-long, 48-inch-diameter pipeline. Capacity 15 bcm/yr. Capital cost US\$1,711.80 million. This can supply Syria, as well as Jordan and Lebanon and Turkey (via AGP).
5	Kirkuk (Iraq)-Amman (Jordan).	984-km-long, 42-inch-diameter pipeline. Capacity 10 bcm/yr. Capital cost US\$1,889.76 million. This can supply Jordan and other countries on the AGP. May not be needed (or undersized) if line 4 is built.
6	Kirkuk (Iraq)-Erzurum (Turkey).	589-km-long, 48 inch-diameter pipeline. Capacity 20 bcm/yr. Capital cost US\$1,292.49 million. This will supply gas from northern Iraq to the Nabucco pipeline.
7	Basra (southern Iraq)–Kirkuk-Erzurum (Turkey).	1,390-km-long, 48-inch-diameter pipeline. Capacity 20 bcm/yr. Capital cost US\$3,049.65 million. This will supply gas from the whole of Iraq to the Nabucco pipeline. This could also be sized to accommodate 30 bcm exports if production in Iraq develops.
8	Western gas fields of Libya to Arish in Egypt.	2,800-km-long, 48-inch-diameter pipeline. Capacity 25 bcm/yr. Capital cost US\$6,142.5 million. This will feed into the AGP and could also supply Egypt. The transit fee payable on the AGP segments should enable the expansion of their capacity.
9	Marsa El Brega (eastern Libya) to Obeyed (western desert of Egypt).	571-km-long, 40-inch-diameter pipeline. Capacity 8 to 12 bcm/year. Capital cost US\$1,041.30 million. Yearly 0&M cost US\$10.68 million. This will supply to the western Egyptian system.
10	LNG import facilities for Jordan at Aqaba.	Capacity 4 bcm/year (FSRU). Capital cost US\$300 million.
11	LNG import terminal in Lebanon.	Capacity 5 bcm/year (FSRU). Capital cost US\$350 million.
12	LNG import terminal in Syria.	Onshore facility. 5 bcm/year capacity. Capital cost US\$500 million.

track, i.e., formulating transactions, the World Bank pursues, through its operational activity, support for implementing cross-border energy projects. The World Bank and its partners can assist Mashreq countries in this particular area by:

- Playing the role of convener and facilitator by bringing together the stakeholders: governments, regional entities, private sector, financiers and donors, and (non-government organizations (NGOs);
- Proposing specific schemes to the relevant sub-sets of stakeholders;
- Supporting project implementation by providing finance from its own funds, and mobilizing resources from other donors and the private sector; and
- Coordinating project implementation, which is often the biggest challenge in regional integration projects.

IMPROVING CONNECTIVITY: THE ROLE OF ICT AND TRANSPORT SERVICES

onnectivity is a major issue in the Levant. There are complementarities to be realized from trade in IT services in addition to the benefits of enhanced information and communication technologies (ICT) services as an enabling platform for trade in other sectors. ICT can help increase the overall enabling environment for enhanced economic cooperation and trade integration in the Levant. There is a large opportunity for telecommunications services trade. In some of the Levant countries, FDI in telecommunications has represented up to 40 to 50 percent of all FDI in the past few years. Also, there is a strong opportunity for the mobile app and software markets to grow beyond national borders and create greater value added at a regional level, benefiting from larger economy of scales. However, the region is lagging behind the world in crowdsourcing, which could otherwise have a great potential for job creation through ICT-enabled trade of professional services. There is limited scope for trade in hardware, or to develop a hardware industry for export purposes.

Furthermore, air transport patterns in recent years in selected regional markets suggest that fast growth is possible. Turkey, which aspires to serve the region as a hub, has seen rapid growth in air passenger traffic, within the region and with the rest of the world. Turkey is in fact already emerging as a de facto hub with strikingly increased in traffic in recent years with all countries in the region, including Iran. This growth has occurred despite the fact that Turkey still has more restrictive bilateral air services agreements with many countries of the region

than those countries have with each other. Turkey is not a member of the plurilateral arrangement that governs air passenger traffic among most of the Arab states—the Inter-Arab Freedom of the Air Programme of the Arab Civil Aviation Commission (ACAC). Instead, WTO measures suggest that Turkey's bilateral passenger traffic arrangements with these countries are quite restrictive. Moreover, the ACAC agreement itself seems not to have lived up to its potential and has been less liberal in practice than its formal terms would suggest. There are

significant gains, in terms of higher likelihood of direct flights and the magnitude of passenger traffic, from establishing and fully implementing a regional open skies agreement. The chapter discusses the role that improved connectivity through better ICT and transport services can play in trade integration in the Levant.

The Role of ICTs for Enhanced Economic Cooperation

ICT services help connect, innovate, and transform local trade regimes; they create the necessary enabling environment for trade to flourish. Connectivity enhances virtual platforms for outsourcing and offshoring activities. Innovation lends itself to the development of new hybrid goods and services across industries by harnessing the power of communication technologies. Transformation happens through the development of digital platforms that can facilitate the administration of trade processes for businesses and governments.

ICT services have become an important foundation for trade competitiveness in an increasingly connected world. "By disrupting traditional economic production, copyright law and established competition, ICT services pave the way for a new set of economic laws, where empowered individuals are put on a level playing field with industry giants" (TED-Blog 2008). Coupled with advances in transportation technologies, improved ICT services have led to the creation of new organizational innovations in which industry supply chains can now span countries and borders, increasing global trade both within industries and between them.

Communications costs and Internet access have an impact on trade patterns. Using a model of bilateral trade, Fink et al. (2005) found that communications costs affect trade patterns significantly. Clarke (2008) investigated the question whether Internet access affects the export performance of enterprises in low- and middle-income economies in Eastern Europe and Central Asia. He

found that Internet access stimulates export activities by industrial and service enterprises. Clarke and Wallsten (2006), in a study of 27 developed and 66 developing countries, found that one percentage point increase in the number of Internet users is correlated with a boost in exports of 4.3 percentage points.

There is growing consensus that high-speed broadband Internet is a driver of competitiveness and productivity. The impact of ICT services on economic growth has been well documented. A number of studies have found a positive contribution of broadband and mobile penetration to economic growth. A World Bank study, using a panel of 120 countries concluded that an increase of 10 percent in broadband Internet penetration in developing countries could result in 1.38 percent GDP growth; in addition, a 10 percent increase in mobile penetration could result in a 0.81 percent increase in GDP growth. 127

ICT Trade Flows in the Levant: Identifying Key Complementarities

Despite considerable variation in the size of ICT sectors in the Levant region, comparative advantages in ICT trade can still be identified. In Turkey, the gross expenditure on ICT goods and services (at US\$403.5 per capita) including computer hardware, computer software, and communication services is around double the MENA regional average (US\$178 per capita). Countries such as Lebanon and Tunisia have large shares of ICT services exports (47.8 percent and 10.8 percent respectively) relative to the overall amount of ICT exports, which places them at a comparative advantage in terms of ICT exports (Table 57).

Comparative advantages do exist in the trade of ICT goods and services in the Levant that could be better exploited with respective government policies and trade agreements. Despite the fragmented data, the

¹²⁷ Qiang and Rossotto 2009.

Box 1: International Communications Costs in the Levant

The cost of international communications is an important obstacle to enhanced trade cooperation in the region. As presented in Table 56, there is large difference between Turkey and neighboring countries. Turkey's skype-out rate stands at 3.7 cents compared to higher rates in the region, such as 15.9 cents in Egypt, 20.8 cents in Jordan, and 39.5 cents in Tunisia. Fixed broadband penetration in Turkey (39.3 percent) is almost double the weighted average penetration in neighboring countries (21.2 percent). This indicates the need to reduce international telecom connectivity cost among the Levant countries as an important foundation for enhanced trade integration and economic cooperation.

 Table 56
 Key Telecommunication Statistics, Eastern Mediterranean Region 2013

	Skype-out Rate (US c/min.)	Fixed Broadband Penetration (%)	Mobile Broadband Penetration (3G+4G) (%)	Population 2011 (million)
Turkey	3.7	39.3	58.5	73.6
Tunisia	39.5	23.4	5.09	10.7
Libya	30.2	8.6	23.08	6.4
Egypt	15.9	14.1	58.6	82.5
Lebanon	12.6	29.6	28.4	4.3
Syria	39	3.6	4.2	20.8
The Palestinian Territories	25	25.1	0	4.3
Jordan	20.8	25.4	51.7	6.2
Iraq	39	6.7	0.5	32.96

 ${\it Source}. Tele Geography's \ Global Comms \ Database \ (http://www.telegeography.com), \ 2013.$

 Table 57
 ICT Goods and Services Exports (% of goods/services exports, BoP) 2008–2011a

	ICT Expenditure per capita (US\$)	ICT Services Exports (% of service exports)	ICT Goods Exports (% of goods exports)
Egypt	113.5	7	0.2
Iraq	_	4.4	n.a.
Lebanon	_	47.8	0.9
Libya	_	n.a.	n.a.
Jordan	261.7	n.a.	1.5
Syria	_	2.5	0
Tunisia	212.7	10.8	7.4
Turkey	403.4	1.7	1.7
MENA	178	30.3	2.3
World	620.1	31	10.1

 $\textit{Source}. \ \textbf{IMF BoP database and World Bank Private Participation in Infrastructure Project Database, latest available data.}$

^a Most recent data shown.

Table 58 Revealed Comparative Advantage in ICT Goods and Services Exports

	ICT Services	ICT Goods
Egypt	0.57	0.1
Iraq	0.35	_
Lebanon	3.86	0.46
Libya	_	_
Jordan	_	0.77
Syria	0.2	_
Tunisia	0.87	3.79
Turkey	0.14	0.87

Revealed Comparative Advantage (RCA) Index¹²⁸ captured in Table 58 below indicates a clear comparative advantage for Lebanon in the export of ICT services and for Tunisia in the export of ICT goods. Tunisia also exhibits some inclination to have comparative advantage in the export of ICT services, as does Turkey for the export of ICT goods.

Turkey and Egypt are leaders in terms of telecom sector investments. This can be attributed to the large domestic telecom sector markets in both countries in addition to their geographic position that allows these two countries to act as an important telecom sector connectivity hub in their neighborhoods. Turkey boasts the largest telecom sector in the region by size of infrastructure investments with an average yearly investment of around US\$3.5 billion between 2005 and 2011. Egypt trails in

closely at second place with around US\$2 billion in telecom sector infrastructure investment between 2005 and 2011. Despite significant telecom sector demand and potential, other countries in the region are only at a fraction of that Turkey and Egypt's levels (Table 59).

Opportunities for Enhanced Trade in ICT Goods and Services

Business Process Outsourcing

The Levant region offers the same appeal as other outsourcing destinations in the world. The global Business Process Outsourcing (BPO) market is expected to grow at an average of 6.5 percent until 2015 (Nelson-Hall 2013). With a growing pool of young, low-cost, and highly skilled workers, businesses in the region have found it increasingly easy to compete in the global outsourcing market. Apart from this, companies are finding other unique advantages, including a time zone that

 Table 59
 Investment in Telecom Sector Infrastructure with Private Participation US\$ Millions

	2005	2006	2007	2008	2009	2010	2011
Egypt	1,827	3,751	1,908	1,414	1,791	2,113	980
Iraq	475	90	3,700	284	447	456	386
Lebanon	0	0	0	0	0	0	0
Jordan	141	364	30.7	90	164	301	295
Syria	170	45	59	95	108	65	75
Tunisia	106	2343	76	99	287	966	181
Turkey	7,329	1,992	2,215	3,954	3,908	2,381	3,055

Source: World Bank Private Participation in Infrastructure (PPI) Database, 2013.

¹²⁸ The Revealed Comparative Advantage (RCA) Index shows whether ICT exports perform better or worse for a given country than the average throughout the Eastern Mediterranean region. RCA is calculated as the ratio of ICT exports per total service exports in a given country to the average share of ICT exports per total service exports in Eastern Mediterranean region. A value greater than 1 indicates a comparative advantage in ICTs, whereas a value less than 1 indicates a comparative disadvantage. This methodology is adopted by OECD Working Party on Information Economy in its 2006 Information Technology Outlook.

roughly overlaps with the world's three biggest economies of North America, Europe, and Asia in addition to the region's geographic proximity to Europe. Currently, the outsourcing industry in the Levant is still at an early development stage and includes IT support, call centers, and software services. In parallel, countries in the region have established special industrial zones in which foreign companies are allowed to offshore their production process benefiting from lower labor and capital investment costs. Coordinating between various outsourcing services and these industrial zones can lead to new horizons in which manufacturing business process are better integrated boosting regional trade and enhancing the competitive advantage of these countries in global markets.

BPO is already common practice in countries such as Egypt, Tunisia, Jordan, and Turkey, which benefit from key competitive advantages especially related to lower labor costs. Cities such as Istanbul, Cairo, and Alexandria are ranked in the top 100 global outsourcing destinations in 2013 (Tholons 2013). These cities have suffered from bouts of political unrest in recent years, which has adversely affected their rankings. For example, in 2011, Egypt ranked number four worldwide as a prime outsourcing destination according to AT Kearney's Global Services Location Index (Gott 2011). Jordan has made serious efforts in recent years to develop their domestic outsourcing sector. This includes call centers, BPO parks, knowledge process outsourcing, shared services, and IT consulting services. Egypt formed a 600 seat global resource center for IBM; a global application support center for Oracle with approximately 500 engineers; 1,736 call center agents for Vodafone who serve the Middle East, Australia, UK, and New Zealand; and both a global innovation center (one of only two in the world) and call center for Microsoft.

The most notable advantage of IT outsourcing in Turkey can be seen through the Technology Development Zones. Turkey maintains roughly 20 Technology Development Zones (TDZs) and is in the process of constructing more. These TDZs allow businesses to enjoy a number of commercial advantages such as tax breaks

on labor, capital, and profits. Turkey also maintains over 250 Organized Industrial Zones (OIZs) that provide existing infrastructure, tax exemptions, and lower water, natural gas, and telecommunication costs. These zones, like the TDZs, aim to increase foreign investment and ultimately provide an ideal ground for BPO initiatives.

Jordan's strengths in outsourcing are in financial services, healthcare, pharmaceuticals, energy and renewable energy, information and communications technology, and engineering services. IT has been one of the fastest growing sectors in Jordan over the past 10 years. There are over 82,000 engineers in Jordan, but only 8,000 who work in their specialty. The government of Jordan is playing a major supportive role in strengthening the country's outsourcing service as a key sector for job creation. It has recently launched a new Development Zone Strategy, encompassing multiple specialized zones targeted at specific industries. These development zones offer financial incentives to complement existing economic advantages for outsourcing activities to Jordan.

BPO services in manufacturing industries have the potential to increase production efficiency and reduce export costs. In recent years, Turkey's main textile manufacturers have invested in special industrial zones in Egypt benefiting from the overall lower cost production in the country, but more needs to be done on the policy level in order to fully realize the potential of such cooperation. Providing the necessary policy incentives would allow textile manufacturers to boost their production capabilities by outsourcing their manufacturing supply chain at various production stages. Turkey's textile industry is composed of a large number of SMEs that are losing their competitive advantage on global markets due to increasing wages and higher production costs. Enabling such enterprises to expand their manufacturing processes towards lower cost countries such as Egypt, Tunisia, and Jordan can create positive spillovers for all participating countries.

Crowdsourcing

The ability to contract work online is a newly emerging field in today's globally connected world. The

proliferation of ICTs worldwide has made it possible to distribute tasks among workers across the world, enabling greater cost efficiencies and job creation opportunities across geographic borders. Crowdsourcing is the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community. 129 This consists of elancing and microwork—the definition of both terms might vary across the existing literature, but the key difference is that elancing tasks are more advanced and typically represent themselves complete projects which are offered in the virtual marketplace to professionals or elancers, while microwork tasks are small and are parts of projects. 130 Examples of elancing include market research, data input, data verification, copywriting, graphic design, and software development. Typical microwork tasks include answering survey questions, tagging images, and translating lines of text with workers earning on average only a few cents to a couple of dollars per task.

Crowdsourcing is a particularly promising area for digital earning opportunities for developing countries and especially marginalized strata of the society or remote areas. There has been rapid growth in the number of crowdsourcing platforms. TxtEagle claims to have reached 2.1 billion people in emerging markets using readily available mobile technology platforms for data collection and airtime compensation. According to one of the market studies, over one million workers have earned US\$1–2 billion via crowdsourcing work allocation in the past ten years worldwide (Frei 2009). In the Palestinian Territories, with the population close to four million people, microwork is expected to create up to 55,000 part-time jobs within the next five years.

As crowdsourcing, and microwork in particular, is still at a nascent stage in its development, Levant countries can take the lead in terms of promoting a virtual work culture in order to enhance the export of knowledge products across industries. Egypt and Turkey are regional leaders in crowdsourcing. In 2012, there were 2,072,203 registered elancers who earned

almost US\$200 million. Egypt ranked in 18th place with 12,292 registered elancers, mostly in IT and creative sectors, who earned US\$1.6 million. To compare, 7,699 elancers in Turkey earned US\$1.4 million. By earnings, the countries are in 23rd and 25th place correspondingly among the 25 top countries in the world. It's interesting to note that the percentage of individuals using the Internet is almost the same in both Egypt and Turkey, around 45 percent. In Egypt, young women's share of temporary jobs in IT clubs and Internet cafés is respectively at 43 and 58 percent and increasing at twice the rate as men.

IT services: Software, Mobile Apps, and Gaming

Complementarities in the development of mobile apps, software and gaming are strong in the Levant region especially amongst Lebanese and Jordanian exporters; and Egypt and Turkey as importers. Lebanon exhibits a high RCA in the export of ICT services and Jordan is home to a vibrant IT software industry while Egypt and Turkey have large domestic IT software markets. In addition, countries of the region have good opportunities to integrate their mobile apps, software and gaming industries if the necessary policy frameworks and incentives are in place. There are good opportunities for enhanced engagement between Lebanon and Jordan in the area of software development, mobile apps and gaming. This could further enhance these countries' exporting capabilities to the Levant region to further economic cooperation between countries of the region.

Jordan has established itself as one of the leading countries in the region in terms of ICT services. With a highly educated work force, the country is enjoying rapid development in IT education, computerization, and e-government, in addition to the rapid spread of knowledge centers in remote areas, accompanied by the establishment of a legal environment sustaining this progress.

¹²⁹ Merriam Webster Dictionary.

¹³⁰ Virtual Economy: Paid Crowdsourcing Technologies.

Jordan boasts a growing pool of 19,000 IT related workers and a steadily inflow of 6,000 graduates yearly. In 2012, the ICT industry accounted for more than 14 percent of the country's GDP and is growing at an annual rate of 25 percent. ¹³¹ In addition, more than 50 percent of IT services exports in 2011 were to the Arab Gulf region (mainly Saudi Arabia); very little trade activity takes place in the Levant.

Jordan is also home to one of the region's largest mobile apps and gaming services sectors. In 2011, Jordanian companies developed around 70 percent of the Arab world's online and mobile games. According to the Ovum Research, digital games sales in the Middle East and Africa in 2011 accounted for an estimated US\$900 million out of the US\$24 billion global market: but that figure is set to rise at a compound annual growth rate of 29 percent to reach US\$3.2 billion in 2016, compared with global growth of 17 percent for the same period.

Lebanon is another country with a great potential to become the regional IT services hub. In Lebanon, the size of the domestic IT sector was at US\$336.7 million in 2012, constituting an increase of 6.8 percent from US\$315.4 million in 2011 and is projected to grow to US\$363.8 million in 2013. Lebanon's IT market is benefiting from new investments in telecommunications infrastructure, which will significantly enhance the sector production capabilities. Forecasts estimate the IT market to grow in Lebanon at a compound annual rate of 12 percent during the 2013–2017 period and to reach US\$571 million in 2017. Lebanon's IT sector also benefits from a highly skilled, IT-literate, and multilingual workforce and is well positioned to become a regional hub in IT services with potential for fast growth.

Turkey's ICT sector is much larger compared to other Levant countries. The Turkish IT market is projected to achieve a compound annual growth rate of 16 percent during 2012–2016. Turkey's software market was valued at US\$933 million in 2012 and is forecasted to reach US\$1.5 billion in 2016. Turkish software manufacturers benefit from a large domestic market that

can be enhanced with further competition from regional markets such as those in Jordan and Lebanon.

ICT Goods

In the Levant, the export of electronic devices and technology products is weak and prospects for competitiveness are not favorable. Given the region's uneven accession standards to the World Trade Organization in terms of the ICT goods trade agreement and fierce competition at the international level, countries have little prospects for enhanced trade in electronics and technology products. The growth in the ICT trade in goods has been driven by Asia with China, which accounts for US\$508 billion, being a locomotive. 136 Overall, global exports of information and communication technology (ICT) goods-products such as mobile phones, smartphones, laptops, tablets, integrated circuits, and various other parts and components—climbed by four percent to US\$1.8 trillion in 2011, and now account for 11 percent of total merchandise exports. 137 Globally, the top ten exporters of ICT goods have made up four fifths of total ICT trade with Asia representing US\$1.2 trillion or 64 percent of the world total. Compared to Asia, Tunisia's electronic products share of total manufactured goods is only at six percent. Jordan's high technology exports current share is at three percent. Lebanon's share of high tech exports shrank significantly down to two percent in 2011.¹³⁸ Although Turkey has a large share of manufactured goods in its exports structure (about 78 percent), trade specialization remains in low-to-medium-tech products—these products accounted to almost 38 percent of the country's manufactured exports

¹³¹ Information and Communications Technology Association of Jordan, 2012.

¹³² Jordan Times 2011.

¹³³ Business Monitor International, 2013.

¹³⁴ ibid.

¹³⁵ ibid.

ibid.http://unctad.org/en/pages/InformationNoteDetails. aspx?OriginalVersionID=37

¹³⁷ UNCTAD 2013.

¹³⁸ WBI 2012.

to Europe in 2011. In addition, 58 percent of Turkish overall exports are low-technology goods, and new export production is increasingly done in low technology products. The country is highly dependent on imported intermediary goods, and the aggregate contribution of high technology goods to the competitiveness effect is negative (Gors and Selçki 2013).

Constraints to Enhanced Connectivity and Trade

The Levant region suffers from various hurdles affecting connectivity for improved trade. For example, limited competition in all countries, except Turkey and Jordan, causes international communication prices to be high, thereby creating a competitive disadvantage to trade. Furthermore, lack of regulatory harmonization, arising from different policy and regulatory frameworks in the sector, requires that investors devote a considerable amount of time learning the "rules of the game" in each country in the region.

Limited competition at broadband access level

Turkey and Jordan have opened up their telecommunications markets to full competition. In 2008, Turkey implemented a policy of full liberalization, making its market structure and regulatory framework aligned with that of European Union member countries. As a result, Turkey has a high number of licensed operators, the lowest international communications costs, and a well-developed broadband market. Jordan has also eliminated most barriers to entry in the telecommunications sector, has licensed multiple operators, and enabled utilities to provide broadband backbone infrastructure. This has created a vibrant market for international communications in Jordan (even though the incoming international call prices remain higher than in Turkey), and mobile broadband has witnessed considerable growth.

By contrast, the rest of the countries in the region present serious entry barriers. In particular, Lebanon

does not have private participation in the sector. All networks are owned by the state, with two management contracts for the operations of the mobile networks. Competition in mobile communications has been introduced in the remaining countries. However, considerable differences remain. Tunisia and Syria have only recently enabled mobile operators to offer 3G services, hence a low level of penetration of mobile broadband. Egypt and Libya, however, have introduced both competition in mobile communications and introduced 3G services a few years ago. As a result the penetration of mobile broadband in Egypt is close to Turkey's. Finally, mobile broadband is only present in the Kurdish region of Iraq, and most Iraqis do not have access to 3G services. The Palestinian Territories does not have 3G mobile services, due to the fact that the necessary frequencies were not allocated by the Israeli authorities.

Limited competition at international connectivity level

Considerable entry barriers, or monopolies, at the international communications level are present in the Levant, except Turkey and Jordan. As a result, in spite of multiple submarine cables crossing the Eastern Mediterranean region, there is limited competition. National incumbent operators are usually the shareholders of these submarine cables, limiting the amount of effective competition. The market structure for international communications in the Eastern Mediterranean countries is summarized in Table 60.

Limited redundancy

The physical layout of the international submarine cables poses a redundancy issue. All submarine cables in the region go through Alexandria, Egypt, and the Suez Canal. This makes the regional Internet infrastructure particularly vulnerable to disruptions, natural disasters, and act of terrorism. To increase the network redundancy and resilience, several fiber optic terrestrial backbone networks are emerging, transiting through countries of the Eastern Mediterranean region. These include:

Table 60 Competition for International Submarine Cable Connectivity

Market Structure	Countries	
Monopoly	Iraq, Lebanon, Syria, Libya, Tunisia	
Competition	Jordan, Turkey	
Monopsony*	The Palestinian Territories	

Source: World Bank MENA Broadband Report 2013.

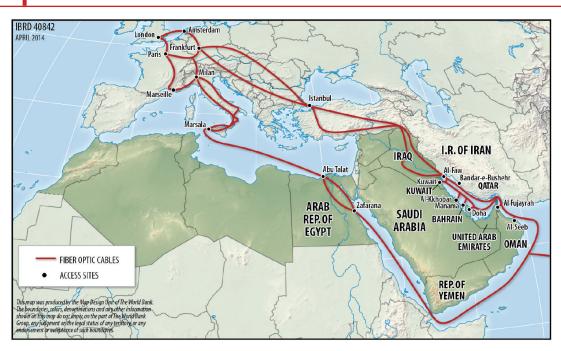
- Gulf Bridge International, going through Iraq to Turkey and Europe, and proving a full loop with submarine connectivity around the Gulf and through the Suez Canal into the Mediterranean (Figure 65).
- JADI link emerging from Saudi Arabia through Jordan, Syria and linking to Turkey then Europe. Providing an alternative terrestrial link to Europe than the underwater cable links in the Suez Canal (Figure 66).

Lack of regulatory harmonization

The region has an incoherent framework of telecom regulations, except Turkey and Jordan. Turkey and Jordan have evolved their regulatory framework to be able to support a fully liberalized telecommunications market. As a result, these two countries tend to be more advanced than the other countries in the region. Both countries regulatory framework includes: (i) interconnection (which is the rate charged by competing operators for sharing their telecom infrastructure, which can help drive down prices); (ii) unbundling of the Local Loop, including bitstream (which allows competition in broadband at a local access level); (iii) a licensing regime able to support a fully liberalized market; (iv) colocation; and (v) rules to allow the use of fiber networks developed by network utilities (transport and energy utilities having developed fiber backbone networks for their own corporate use).

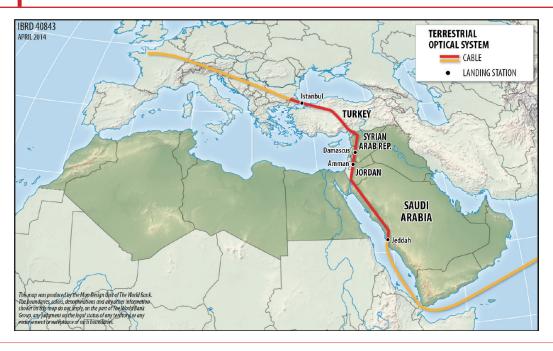
Most of the other countries have a patchwork of regulations and are at different stages of development of their sector regulatory framework. Egypt and Tunisia

Figure 65 | GBI Terrestrial Fiber Optic Cable Link



^{*} Monopsony in the case of the Palestinian Territories: the only buyer of international connectivity is Paltel.

Figure 66 | JADI Terrestrial Fiber Optic Cable Link



are following the path of Turkey and Jordan, introducing, albeit with delay, the key regulations listed above as enabling competition. Iraq has a more restrictive regulatory framework, with the exception of the Kurdish region. In addition, peculiar regulatory issues exist in the Palestinian Territories (due to the regulatory implication of the implementation of the Oslo agreement). Syria has embarked in a serious program of regulatory reform, but this process is being affected by the current political situation. Libya is just now reassessing its regulatory strategy in light of recent political changes.

Limited Development of Ultra-Fast Broadband

The Levant region lags behind other regions of the world, including emerging markets, in the development of Ultra-Fast Broadband, which is a substantial enabler of competitiveness in goods and services trade. The ultra-fast broadband is non-existent in Tunisia, Libya, Syria, the Palestinian Territories, Lebanon, and Iraq (with the exception of KRG). It is limited in Egypt (fiber in new compounds) and Jordan. It is definitely more

developed in Turkey, where a substantial amount of growth in "fiber to the x" (FTTx) has been witnessed in the last few years. FTTx represents technologies used to increase fiber penetration to end-users and enhance their connectivity speeds and experiences.

Regulatory barriers

Most trade regimes in the region have no specific regulations for trade in ICT goods and service unless they are related to services falling within regulated markets (such as banking). For example, in Turkey there are no regulations specifically applicable to business process outsourcing, IT outsourcing, or telecommunications outsourcing. In the Levant, services such as software development, mobile apps, gaming, microwork, and e-contracting are subject to conventional trade regulations which impedes their development. Enhanced regulatory frameworks and harmonization in these areas could help the region benefit from great complementarities in the area of ICT services and greater levels of economic cooperation.

Regulatory barriers to market entry, licensing, and business conduct remain significant in the Levant compared to other regions. This situation is further complicated by the fact that countries have taken very different approaches to international services liberalization in the past, as illustrated by the diverse extent of GATS liberalization commitments among the region's WTO members. In many instances, the extent of commitments reflects the status quo or even less than the prevailing situation, especially for members of the WTO's precursor, the General Agreement on Tariffs and Trade (GATT). These commitments have been assessed to be relatively modest and include several restrictions on the participation of foreigners. While regional ICT service liberalization has begun in some countries (especially Jordan), the process lags behind in the region as a whole.

Recommendations to Improve Connectivity and Promote ICT Services Trade

Based on findings of this report, the following section lists a number of recommendations that can help guide the region towards improved economic cooperation and trade relations both by enhancing physical connectivity and by exploiting trade complementarities in ICT goods and services.

Connectivity: creating a better enabling environment for trade

The key recommendations to develop the connectivity infrastructure needed to support enhanced economic cooperation, trade relations in general and trade in ICT services in specific in the Levant region are the following:

1. Introduce a model of full competition in telecommunications, following the examples of Jordan and Turkey. The removal of existing entry barriers would create a favorable environment for regional and sub-regional investment in broadband infrastructure. This would translate in a rapid decline of

- the price of international communications, a key enabler of cross border trade for all goods and services sectors. In addition, strengthening regulatory measures and the removal of entry barriers will likely stimulate additional investment in local broadband access. Lebanon could take the opportunity to move to 3G and 4G services. The migration to broadband in a liberalized environment will be an essential priority for countries of the Eastern Mediterranean region, but will involve the management of a political and economic transition.
- Increase high capacity broadband network redundancy by stimulating investment in sub-regional infrastructure. Encouragement of the development of terrestrial high capacity backbone networks, such as GBI and JADI, should continue. Additionally efforts to link the grids of other utilities (for example the project of integrated electric grid management, involving Turkey and the neighboring countries) could have a fiber development component, increasing competition and network redundancy. Increased competition and increased network redundancy go hand in hand. If the region implements a policy of increased competition in international communications, this is likely to encourage increased investment in submarine and terrestrial connectivity and enhance the trade profile of the region in general.
- 3. **Promote regulatory harmonization efforts.** The promotion of a harmonized regulatory environment in the area of telecom services should be pursued as a top-level priority. This may involve the approval of common regulatory frameworks for the key regulatory measures enabling competition (interconnection and local loop unbundling), and the provision of enhanced technical assistance to countries in the region, especially for the Palestinian Territories, Iraq, and Libya.
- 4. *Invest in ultra-fast broadband.* The development of ultra-fast broadband will involve: (i) exploring new models of infrastructure supply using passive/ active infrastructure models; (ii) experimenting with

models involving real estate and telecom developers; (iii) allowing ISPs to have their own fiber connections and relax aerial regulations; (iv) awarding licenses and right to use of spectrum to support LTE; and (v) developing and implementing FTTx models.

Non-Connectivity: Promoting direct trade in ICT services

The key recommendations to help better realize and benefit from existing complementarities in the area of trade in ICT services are the following:

- 1. Integrate special industrial zones with domestic industries through IT platforms. Countries in the Levant boast a significant amount of special industrial zones created to enhance foreign investment and offshoring activities, especially in the areas of textile and automobile parts manufacturing. By pursuing clear government policies to encourage the integration of manufacturing activities in these industrial zones with other domestic manufacturers outside these zones, clear cost reduction opportunities can be realized. By better integrating industrial supply chains in countries' industrial zones with domestic supply chains through the use of IT solutions, governments in the region can enhance trade in various manufacturing areas. Outsourcing business activities from industrial zones can serve as a first step in developing an independent and vibrant BPO sector in domestic manufacturing industries and help increase the integration of manufacturing supply chains in the region.
- 2. Developing virtual hubs for software development, mobile apps, and gaming. By pooling together local knowledge from IT service-exporting countries such as Jordan and Lebanon, economies of scale can be realized in the development of various IT solutions, mobile apps, and gaming. Such hubs can benefit from the nature of ICT services that can break geographic barriers and enable cooperation beyond borders. Creating virtual hubs can help stimulate busi-

- ness development in the area of IT services in which IT developers can better pool together their knowledge and technical skills to create the necessary software solutions, mobile apps, and gaming platforms. However, given the current regulatory environment in the Eastern Mediterranean such virtual cooperation is not possible, which forces local developers to be more confined and focused solely on meeting the demand of their domestic markets; for Jordan and Lebanon, this demand is not sufficient to justify large investments in the IT services industry.
- 3. Facilitating the exchange of skilled labor in the area of ICT. One of the key obstacles to enhancing trade in ICT services in the Levant region is the free flow of skilled human capital. ICT industries are human-capital intensive, as they require highly specialized workers in various ICT fields. In this respect, promoting the free movement of skilled human capital is a prerequisite to the enhancement of trade in ICT services in as much as it allows the industry to exchange know-how, technical skills, and experience in various cutting-edge and rapidly developing ICT areas.
- 4. Enhancing cooperation between academic institutions and industry. Countries of the region boast a highly skilled workforce that usually emigrates to the Gulf countries, Europe and the U.S. to find jobs in the ICT sector with decent conditions and pay. Local ICT industries in the region usually rely on the students graduating from second-tier universities, creating a large loss for enhanced business development and innovation on global markets. By increasing the integration of various technical ICT disciplines in universities with the domestic ICT industry, businesses can further develop their ICT products.

Air Transport

Current air passenger traffic levels in the region are low, however higher growth rates have been observed

in recent years in selected regional markets, suggesting that fast growth is possible. Indeed, air passenger markets in the Middle East are changing rapidly. Turkey, which aspires to serve the region as a hub, has seen rapid growth in air passenger traffic, within the region and with the rest of the world. Turkey is in fact already emerging as a de facto hub with strikingly increased in traffic in recent years with all countries in the region, including Iran. This growth has occurred despite the fact that Turkey still has more restrictive bilateral air services agreements with many countries of the region than those countries have with each other. Turkey is not a member of the plurilateral arrangement that governs air passenger traffic among most of the Arab states—the Inter-Arab Freedom of the Air Programme of the Arab Civil Aviation Commission (ACAC). Instead, WTO measures suggest that Turkey's bilateral passenger traffic arrangements with these countries are quite restrictive. Moreover, the ACAC agreement itself seems not to have lived up to its potential and has been less liberal in practice than its formal terms would suggest.

A gravity model was estimated for the purposes of this work analyzing the links between bilateral traffic and policy while controlling for other determinants of traffic. A set of empirical models of air passenger traffic was used in order to better understand the relationship between air transport policy and international traffic. WTO index measures of policy commitments in both bilateral and plurilateral air services agreements were used, and measures were related to ICAO data on air passenger traffic. The findings show that more liberal policies are associated with more passenger traffic, but this relationship is substantially weaker in plurilateral arrangements like the ACAC. The results suggest that there are significant gains, in terms of higher likelihood of direct flights and the magnitude of passenger traffic, from establishing and fully implementing a regional open skies agreement.

The results should nonetheless be understood as preliminary work that scopes out the possibilities associated with further reform in the region. Furthermore, there has been no investigation into the possibility that

policies are being driven by changes in air passenger traffic patterns, an issue for a future work.

Open Skies over the Middle East: Integrating Aviation in Turkey and the Arab World

Turkey, for long a fulcrum between the West and the East, has deepened its economic links with the European Union and is now turning to the Middle East. In this sometimes-turbulent neighborhood, it is beginning to create new dynamic trade links that echo past relationships and reflect a new international order. Even in the age of the Internet, where geography seems passé, physical connectivity matters. Goods must be delivered, businesspersons must meet, and people must travel to create the texture of relationships that forge bonds and catalyze trade. In facilitating each of these links, air transport is critical, especially in a region where terrestrial travel is fraught with difficulty.

However, air transport is tied up by restrictive air service agreements between countries anxious to protect their national airlines from international competition. This section explores the nature of these agreements in the region, studies the impact that they have on bilateral traffic, and estimate the gains from their liberalization. Specifically, a new open skies agreement in the Middle East is proposed, which would deepen the existing Intra-Arab Freedom of the Air Programme of the Arab Civil Aviation Commission (henceforth referred to as the "ACAC") and include Turkey as a full-fledged member. 139

The ACAC agreement on air services that links the Arab countries in the region is in principle quite liberal by world standards. However, the agreement has not been ratified by all of its members, and its implementation may not have lived up to the policy commitments in the agreement. Importantly for this study, Turkey is

¹³⁹ ACAC 2004

not included in the ACAC agreement, even though it is a major participant in regional air passenger travel markets. This study first attempts to quantify the impact of deepening the ACAC agreement by calculating the passenger flows that would occur among existing members if the agreement were as effective as the typical bilateral agreement. This study then estimates the implications of Turkey's inclusion in this more effective agreement.

Findings indicate that plurilateral agreements are, in general, not as effective as bilateral agreements in translating formally liberal policy commitments into increased air traffic. In order to quantify this gap a determination was made of how much more traffic there would be among ACAC members if the gap between plurilateral and bilateral agreements were eliminated. Using country level data, it was calculated that traffic flows would double—and possibly triple. The city-pair estimate suggest that traffic along existing routes would nearly double, but that there would also be a significant increase in the number of city pairs served by direct international flights.

There are quantitative implications of Turkey's potential accession to a fully functional ACAC agreement. This implies very large changes in the openness of the policy commitments, because Turkey's existing agreements with countries in the region are quite restrictive, when such agreements exist at all. The country level analysis suggests that passenger traffic in the region would double and possibly triple. City level analysis suggests that the increase in traffic would occur both through the growth of traffic on existing routes and substantial increases in the number of city pairs served. These large increases reflect both the significant changes in policy that are suggested herein and the low number of city pairs that are currently served by direct flights.

Trends in international air passenger travel

There is a dramatic growth in the activity of carriers registered in several countries in the region during the period 2003–2010.¹⁴⁰ Table 61 summarizes total

Table 61 International Scheduled Air Passenger Traffic (in millions of passenger-km)

	2003	2010	Percent change
Turkey	13,343	51,475	285.8
Egypt	7,517	17,123	127.8
Jordan	4,498	7,789	73.2
Iran	3,761	7,770	106.6
Tunisia	2,459	3,510	42.7
Lebanon	1,905	3,182	67.0
Libya	n.a.	3,111	_
Syria	1,727	1,437	-16.8
World	1,738,510	2,873,806	65.3

Source: ICAO World Total Revenue Traffic 2003–2010. Scheduled services of airlines of ICAO Contracting States.

Note: "World" figures are for all ICAO contracting states (188 in 2003, 190 in 2010).

passenger traffic for select countries, and the world.¹⁴¹ Figures are reported in millions of passenger-kilometers, a measure of activity that combines passenger numbers with distance travelled.¹⁴² Airlines based in Turkey nearly quadrupled the level of international flight activity during the period 2003–2010. Turkish Airlines flies to 99 countries, apparently more than any other carrier in the world, and is reported to be one of the biggest purchasers of commercial aircraft over recent years (Boland 2013). Airlines based in Egypt and Iran more than doubled their activity. This compares with a 65 percent increase in activity across the globe.

Turkey has seen rapid growth, both inbound and outbound, within the region and with the rest-of the world. Table 62 reports passenger traffic for origin and destination countries using the on-flight origin and destination data purchased from the ICAO. These figures

¹⁴⁰ This growth is especially notable, given that the time period under consideration included the global financial crisis, which affected demand for air travel.

 $^{^{141}\,2010}$ is the most recent year for which the ICAO data is available.

¹⁴² Much of the data that follows will indicate figures for passenger numbers alone. But the publicly available figures only report passenger-kilometer statistics, and those are presented in Table 61. One advantage of the publicly available data is that it allows the documentation of changes over a somewhat longer time span.

Table 62 Origin Destination Traffic 2005 and 2010

	Destination	2005		2010		Percent change	
Origin		Passengers	Flights	Passengers	Flights	Passengers	Flights
Mashreq	Mashreq	865.8	49	1647.6	53	90.3	8.2
	Turkey	220.4	7	710.8	19	222.5	171.4
	Iran	92.1	13	49.3	3	-46.5	-76.9
	RoW	5269.9	287	9861.6	376	87.1	31.0
Turkey	Mashreq	222.4	9	709.0	15	218.8	66.7
	Iran	83.4	4	228.3	4	173.8	0.0
	RoW	4656.9	167	9124.6	277	95.9	65.9
Iran	Mashreq	93.8	13	52.0	3	-44.6	-76.9
	Turkey	85.3	4	231.8	5	171.8	25.0
	RoW	1489.1	97	1349.7	62	-9.4	-36.1
RoW	Mashreq	5163.6	288	9939.1	374	92.5	29.9
	Turkey	4646.3	190	9184.8	290	97.7	52.6
	Iran	1506.2	94	1322.2	61	-12.2	-35.1
	RoW	483472.6	13673	563833.7	15181	16.6	11.0

Source: ICAO OFOD dataset

Note: Passenger numbers reported in thousands. "Flights" are a count of the number of city-pairs with the existence of a scheduled (i.e., recurring) direct flight on an ICAO registered airline at some time during the year. "Mashreq" includes Egypt, Jordan, Lebanon, Libya, Syria, and Tunisia.

report total scheduled air passenger traffic, regardless of the nationality of the carrier. There has been particularly fast growth in air passenger travel between Turkey and the Arab countries that are included in this study (labeled here with the imperfect signifier, "Mashreq"). This traffic has tripled, in each direction, over a five-year period. Official decisions to lift visa requirements for many Arab countries and sign free trade agreements with Morocco, Tunisia, Libya, and Jordan have increased the flow of people and goods between Turkey and the Middle East and North Africa (Daragahi 2013). Growth within the Mashreq has also been rapid, nearly doubling over the same period. This growth seems to have been roughly in line with travel to and from the rest of the world (RoW). Iran's travel pattern is interesting, in that it saw decreasing travel to and from the Mashreq countries, and the rest of the world, even as traffic to and from Turkey grew substantially. Note that traffic growth within RoW was considerably less rapid than in many of the pairs that are specific to this study.

Turkey is becoming a regional hub for international air travel, linking this region with others. Traffic growth involving Turkey was much higher than traffic not involving Turkey, and in one case (Iran) traffic fell overall even as traffic with Turkey was growing rapidly. Further exploration of this pattern is shown in country-level detail for traffic involving Turkey; Table 63 reports Turkey's outbound traffic and Table 64 Turkey's inbound traffic. The figures show that, while traffic growth was not uniform, it was rapid in virtually every case. Growth in traffic with Lebanon and Syria was extremely rapid, while traffic involving Iran, Egypt and Jordan grew less rapidly, but nonetheless more than doubled in five years. The data also highlights the regional nature of the traffic growth, with all countries except Libya and Tunisia seeing more traffic growth with Turkey than did the rest of the world.

Patterns of Policy Governing Air Passenger Traffic

Most air traffic is governed by bilateral air service agreements between pairs of countries, and some by

Table 63 Outbound Passenger Traffic from Turkey

	2005		2010		Percent change	
Destination	Passengers	Flights	Passengers	Flights	Passengers	Flights
Egypt	76.8	2	190.7	4	148.2	100.0
Iran	83.4	4	228.2	4	173.8	0.0
Iraq	n.a.	n.a.	35.5	1	n.a.	n.a.
Jordan	47.9	2	108.7	1	127.2	-50.0
Lebanon	14.4	1	140.3	3	872.5	200.0
Libya	13.7	1	23.7	1	72.5	0.0
Syria	23.3	2	133.4	4	471.2	100.0
Tunisia	46.2	1	76.7	1	65.9	0.0
RoW	4656.9	167	9124.6	277	95.9	65.9

Source: ICAO OFOD dataset.

Note: Passenger numbers reported in thousands. "Flights" are a count of the number of city-pairs with the existence of a scheduled (i.e., recurring) direct flight on an ICAO registered airline at some time during the year

Table 64 Inbound Traffic to Turkey

	2005		2010		Percent change	
Origin	Passengers	Flights	Passengers	Flights	Passengers	Flights
Egypt	73.7	1	188.3	5	155.6	400.0
Iran	85.3	4	231.8	5	171.8	25.0
Iraq	n.a.	n.a.	34.8	2	n.a.	n.a.
Jordan	50.0	2	112.2	2	124.4	0.0
Lebanon	13.4	1	140.2	3	950.1	200.0
Libya	14.5	1	20.6	1	42.3	0.0
Syria	22.0	1	131.1	4	496.4	300.0
Tunisia	46.9	1	83.5	2	78.0	100.0
RoW	4646.3	190	9184.8	290	97.7	52.6

Source: ICAO OFOD dataset.

Note: Passenger numbers reported in thousands. "Flights" are a count of the number of city-pairs with the existence of a scheduled (i.e., recurring) direct flight on an ICAO registered airline at some time during the year.

plurilateral agreements between groups of countries.

The focus here is primarily on two sets of agreements: one relating to traffic between the Arab countries, and the other to traffic between Turkey and each of the Arab countries. The Arab Civil Aviation Commission (ACAC) was created in 1999 as part of an agreement to liberalize intra-Arab air services by gradually reducing restrictions for carriers of member states. This resulted first in the signing of 17 bilateral open skies agreements among Commission

states. In December 2004, several Arab League members—Bahrain, Egypt, Iraq, Jordan, Lebanon, Oman, Palestinian Territories, Somalia, Sudan, Syria, Tunisia and the Republic of Yemen—signed a plurilateral agreement referred to as the Arab League Open Skies Agreement. The agreement clearly covers the first four freedoms of the

¹⁴³ The discussion of the Arab League Open Skies Agreement draws upon Schlumberger (2010).

air. 144 The agreement also seems to go beyond these freedoms because it includes traffic "to and from any of the territories of the State parties." As Schlumberger (2010, p 69) argues, "Clearly, fifth freedom rights are included, because any destination within state parties beyond the initial destination is included. The agreement even seems to grant seventh freedom rights, as it does not specify that traffic needs to route back over the departure point in the initial state party. The only freedom that is clearly excluded is cabotage, the eighth freedom."

The open skies agreement has so far been ratified by Syria, Jordan, the Palestinian Territories, Republic of Yemen, the United Arab Emirates, and Lebanon, and been in force since February 18, 2007, when the necessary quorum of five countries was reached. In addition, Bahrain, Egypt, Oman, and Qatar have announced that their ratification processes was under way. Interestingly, none of the African Arab states have so far ratified the open skies agreement.

The bilateral agreements between Turkey and ACAC members have been assessed by the WTO to be comparatively restrictive. The agreements between Turkey with Jordan, Lebanon, and Syria each have scores of 11; the agreements with Iraq and Tunisia have scores of 10; and the agreement with Egypt has a score of only 4. 145 Interestingly, direct air transportation services with several key countries are not covered by bilateral air services agreements as recorded by ICAO in 2005. These include the United Arab Emirates, Iran, Saudi Arabia, Algeria, Libya, Bahrain, Kuwait, Qatar, and Yemen. There is, therefore, no information available on the restrictiveness of these bilateral agreements. Nevertheless, the scores suggest that liberalization of Turkey's relations with the ACAC could have a significant impact on traffic.

Implications for a Deeper Sub-regional Integration

Are there potential impacts of air services liberalization on international air passenger transport? An empirical model was developed for the purposes of this study to better understand the relationship between air transport policy and international traffic and to investigate the likely impact of two policy changes. First, the impact of making the ACAC implementation considerably more robust is considered—in the model, this implies eliminating the negative impacts of plurilateral arrangements. Second, Turkey is added to this hypothetical robust agreement, assigning the same liberal measures to Turkey-ACAC passenger flows that apply to intra-ACAC flows, and assuming they are fully implemented.

A gravity model of trade was developed for the empirical analysis. An aviation market is considered as an origin-destination pair, and the analysis is conducted at two levels of data aggregation: country-pair as well as city-pair levels. The baseline empirical specification can be written as follows:

$$\begin{split} \log Pax_{ij} &= \beta_0 + \beta_1 \text{ALI}_{ij} + \beta_2 \text{ALI}_{ij} * ASAPluri_{ij} + \\ \beta_3 ASAPluri_{ij} + \beta_4 ASAage_{ij} + \beta_5 logDist_{ij} + \beta_6 logDist_{ij}^2 + \\ \beta_7 logPop_{ij} + \beta_8 logPcGDP_i + \beta_9 logPop_j + \\ \beta_{10} logPcGDP_j + \beta_{11} logTrade_{ij} + \beta_{12} Border_{ij} + \\ \beta_{13} Colony_{ij} + \beta_{14} Lang_{ij} + \gamma X_i + \delta X_j + \theta Z_{ij} + \varepsilon_{ij} \end{split}$$

where log denotes the natural logarithm; i and j index the origin, respectively the destination locations (i.e.,

¹⁴⁴ The freedoms of the air are described in ICAO (2004) as the following: 1) The right to fly over a foreign country, without landing there; 2) The right to refuel or carry out maintenance in a foreign country on the way to another country; 3) The right to fly from one's own country to another; 4) The right to fly from another country to one's own; 5) The right to fly between two foreign countries during flights while the flight originates or ends in one's own country; 6) The right to fly from a foreign country to another one while stopping in one's own country for non-technical reasons; 7) The right to fly between two foreign countries while not offering flights to one's own country; 8) The right to fly between two or more airports in a foreign country while continuing service to one's own country; and 9) The right to fly inside a foreign country without continuing service to one's own country.

¹⁴⁵ The primary indicator of policy is the Air Liberalization Index (ALI) produced by the WTO. The standard measure of ALI runs from 0 to 50; agreements that score 50 are the most liberal agreements.

countries or cities); X_i , X_j and Z_{ij} represent vectors of additional control variables that are specific to origin i, to destination j, or to the bilateral pair ij. The dependent variable Pax denotes the number of passengers traveling from *i* to *j* during the year 2005. The aviation liberalization index ALI characterizing the bilateral pair ij is the variable of interest. It is expected that the liberalization of air passenger services would have a positive effect on international passenger flows, such that $\beta 1 > 0$. To capture any differential effects, an indicator variable ASAPluri is constructed to identify the plurilateral air service agreements, and interact it with the ALI index. The age of the air service agreement signed between countries i and j are included in the regression model as a control variable. The remaining variables included in the estimation equation are standard gravity variables that control for demand side characteristics-economic size, income levels, and air travel costs—affecting traffic within an origin-destination ij pair. Distance and distance squared are used as proxies for route-specific operation costs (e.g., related to fuel), which affect airfare and thus the demand for travel. The variables population (Pop) and per-capita income (PcGDP), which are measured both at origin and destination, account for the level of aggregate demand. The remaining gravity variables—border, common colony and common language—are intended to capture proximity, socio-cultural and historical links between the origin and destination locations. Other control variables considered in the estimation, and summarized by the three variable vectors, are: geographic area of countries, membership in free trade agreements and in the World Trade Organization, differences in average annual temperatures, differences in time zones, and trade share in differentiated goods. Finally, a dummy is included for whether countries are democracies in year 2005—these countries are more likely to consider signing a liberal agreement, but also more likely to take advantage of the benefits the Air Service Agreement (ASA) offers. In some specifications, a dummy variable is included for passenger flows inside Europe to capture the high degree of market integration as well as the availability of close

substitutes to air travel in the form of fast rail tracks or well-developed network of highways.

To understand how liberalization affects air services between two countries, the regression equation is estimated by using country-pair aggregate data on air passenger traffic flows. Total bilateral air traffic volumes were examined, and conditional on finding positive effects, the channel through which this outcome is achieved is further investigated, focusing on the aviation routes extensive margin. Ordinary least squares (OLS) method was used to estimate country-level regressions. The results are reported in Annex 30.

Air services liberalization has a positive and significant effect on bilateral air traffic. The findings show that a 10-unit increase in ALI leads to a 15 percent increase in air passengers. The coefficient on plurilateral agreements is negative and significant indicating that, all else equal, countries that are part of plurilateral aviation agreements have 53 percent less passenger traffic on average than similar countries that are part of bilateral aviation agreements (Annex 30). This result is quite large, possibly due to the difficulty in implementing the freedoms granted by plurilateral agreements in a coordinated fashion.

Larger distances between the two countries increase the demand for air traffic reflecting fewer alternative modes of transport. However the effect is increasing at a decreasing rate, with too large distances discouraging air travel because of the increasing travel costs. The economic size of each of the two countries, captured by their population and GDP levels, has a positive effect on air passenger travel, as does the volume of bilateral trade. Sharing a national border, having a common official language and common colonial ties also affect positively air travel between countries. This indicates that cultural, social and institutional similarities reduce travel costs, encouraging the cross-border mobility of people. Furthermore, the regression results suggest that a country's area has negative effect on travel conditional on population and income, which is consistent with the fact that population density matters for the efficiency of an aviation network.

Aviation liberalization has a direct and positive effect on air traffic, however such a policy change is most effective in bilateral settings. An important finding is that bilateral ALIs have positive and significant effects on international air travel across all income groups. However these effects do not transfer to plurilateral agreements. While the interaction terms between ALI and plurilateral ASA tend to be statistically insignificant, their magnitude is large enough to wash out the main ALI effects. The findings show that the positive effects of liberalization are only achieved in the context of bilateral aviation agreements. In fact, countries that enter liberal plurilateral ASAs with ALI = 39 are characterized by 64 percent fewer aviation routes than identical country pairs signing bilateral aviation agreements. This pattern of results does not change when control variables are added to the model.

The counterfactual calculations point to one main policy implication: liberal plurilateral agreements are yet to realize their full potential. The first scenario tests what would intra-ACAC traffic look like if the liberal policy commitments of the Intra-Arab Freedom of the

Air Programme (i.e., ALI = 39) were fully implemented within the ACAC. The figures are calculated by removing the estimated dragging effects of plurilaterals. In the second scenario, it is assumed that Turkey negotiates arrangements with the ACAC that are identical to the arrangements negotiated within the ACAC. It is also assumed that these arrangements are robust, meaning that they operate as effectively as commitments made in bilateral arrangements. In this counterfactual exercise, the ALI score between Turkey and each ACAC member state is raised to 39 (to test a scenario of substantial change in policy commitments), and trade flows are predicted under the new policy regime scenario. The results show that plurilateral agreements with a liberalization index of 39 are associated with 51 percent lower levels of air passenger traffic than the average country pair in the sample. Air traffic should be expected to grow significantly had the plurilateral ASAs operated at the same level of effectiveness as bilateral ones. All the estimates suggest that the international aviation markets in the region fall below the expected level of operations given their degree of market liberalization.

8

RECOVERING AND REFORMING THE TOURISM SECTOR IN THE LEVANT

he Levant countries have major assets for success in the tourism sector, including a favorable climate and attractive coastline, a large pool of human resources, a variety of historical and cultural sites, and geographical proximity to Europe. Tourism is a major source of income and economic growth, bringing significant value-added employment, foreign currency earnings, and investment to the region. Egypt, Lebanon, Jordan, Turkey, and the Palestinian Territories counted 49.6 million tourist arrivals in 2011. Egypt, followed by Turkey, remains the largest recipient of international tourists in the Levant. Travel and tourism sectors are significant sources of economic growth for some countries; for example, the tourism sector contribution to GDP is around 10 percent for Lebanon. Furthermore, travel and tourism significantly contribute to employment in the Levant.

The region suffers, however, from political instability and security problems that affect the regularity of tourist flows. The Arab Spring and resulting political turmoil, as well as the economic crisis that hit Europe and the rest of the world, have reversed the tourism industry's fast-growing trend, and amplified the needs for structural reforms in a number of countries. The political turmoil of the Arab Spring had an effect on tourism. In some of the best performing countries where there was marked political unrest (i.e., Syria), fast tourism growth stopped. In others, where structural reforms were needed (i.e., Tunisia), the decline of tourism accelerated. Others

that were politically stable (i.e., Gulf countries, Morocco, Turkey) experienced a boost in tourism, benefitting from the trade diversion effect of the revolution.

Although the Arab Spring accelerated the gap between "old-model" and "new-model" tourist destinations, current dynamics can create potential benefits from complementarities in the sub-region for deeper integration. Before the Arab Spring, and attributable to changes in technology (i.e., individual internet access), transport (i.e., low cost airlines), and European consumers' tastes, there had been a shift away from the traditional "sun, sand, and sea" mass tourism model, to custom-tailored

packages that combine beaches with other offerings (i.e., visits to historical or natural sites, duty-free or handcraft shopping, artistic or culinary attractions). This resulted in the emergence of Gulf countries as major actors of the tourism industry in the region. Turkey also emerged as a winner from this process. There is a potential for facilitating links between countries with complementary tourism infrastructure and attractions. "Old-model" countries could learn from the success of "new-model" countries and benefit from their experience to reform the tourism sector. Best performing countries could transfer know-how and capital to declining countries that are in need of reforms and foreign investment. Furthermore, the emergence of transport hubs could benefit the region at large through open skies policies to promote complementarities.

The facilitation and growth of the tourism sector in the region requires the removal of obstacles to trade that affect both goods and services. This includes tourism services, but also a range of other services critical to tourism, such as transport, energy, ICT, or financial services. While most countries have unilaterally removed obstacles to trade in the tourism sector, there remain a number of restrictions on all modes of tourism services supply. Domestic reforms alone will not suffice to increase the countries' competitiveness in the tourism sector. Tourism sector issues could be addressed by deeper regional integration. Tourism should be part of the regional trade agreements' priorities for action and adequate instances should be put in place to promote it. A regional tourism cluster could be useful to make use of the tourism complementarities and promote tourism in the region.

The Importance of Tourism for the Levant

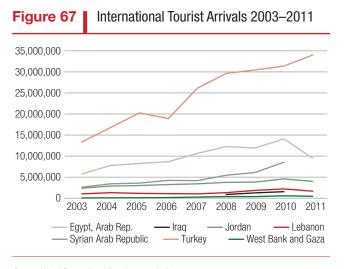
Tourism is an important source of income and economic growth for most of the countries in the Levant, bringing significant value added, employment, foreign currency earnings, and investment to the region. Egypt, Lebanon, Jordan, Turkey, and the Palestinian Territories counted 49.6 million tourist arrivals in 2011, a

decrease of 8.5 percent and 4.6 million visitors compared to 2010 (Figure 67). In 2010, the same countries (plus Iraq, 1.5 million visitors, and Syria, 8.5 million visitors) counted 54.2 million visitors.

Turkey distinguishes itself by its exceptional growth in tourist arrivals. Turkey's international tourist arrivals almost tripled over the decade, with 34 million visitors in 2011 compared to 13 million in 2003. In Spring 2013, however, popular protests expanded to Turkey, with effects that cannot yet be measured.

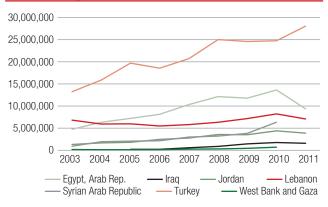
Followed by Turkey, Egypt remained the largest recipient of international tourists in the Levant, with 9.5 million visitors in 2011. However, there is a 32.4 percent decline from 14 million tourist arrivals in 2010 (Figure 67). Prior to the Arab Spring, Egypt and Syria were fast growing tourist destinations.

International tourism receipts largely reflect the evolution of tourist arrivals although receipts per tourists may not show a proportional growth. For instance, in Turkey, the receipts per tourist dropped from US\$993 in 2003 to US\$825 in 2011. Lebanon distinguishes itself by an extremely high level of receipts per tourist—five times the level reached in Turkey, and eight times the level reached in Tunisia, for example. Egypt has suffered the biggest loss of international tourism receipts in 2011, with a drop in receipts of over 30 percent. In



Source: World Bank, World Development Indicators.

Figure 68 International Tourism Receipts (current US\$)



Source: World Bank, World Development Indicators 2013.

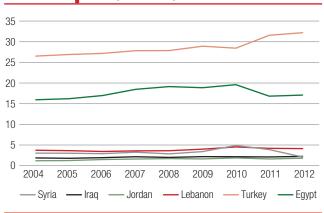
Tunisia, international tourism receipts started to decline in 2008, prior to the revolution, suggesting a deeper crisis of the tourism sector that has only been accelerated by the Arab Spring. This data is summarized in Figure 68.

Travel and tourism sectors are significant sources of economic growth. In 2012, the direct contribution of travel and tourism to the GDP of Egypt, Lebanon, Jordan, Turkey, Iraq, and Syria, in total, amounted to US\$59.5 billion (Figure 69). However, between 2010 and 2012, contribution to GDP decreased by US\$2.5 billion for Egypt and US\$2.8 billion for Syria while it increased by US\$3.7 billion for Turkey. On average, tourism contributes to five to six percent of GDP in the Levant with some countries performing well above the average. For example, the tourism sector contribution to GDP is around 10 percent for Lebanon.

The Levant countries remain dependent on travel services that represented more than half of their services exports in 2010. Between 2008 and 2010, travel and transport together represented around two-thirds of the services exports, in average, for the Levant countries (Figure 70). However, the Arab Spring has contributed to the reduction of this share over the past few years.

Travel and tourism significantly contribute to employment in the Levant. In 2012, the total number of employment was 6.1 million for Egypt, Turkey, Lebanon, Jordan, Iraq and Syria. Egypt alone employed 3.1 million

Figure 69 Travel and Tourism Direct Contribution to GDP (US\$ billion)



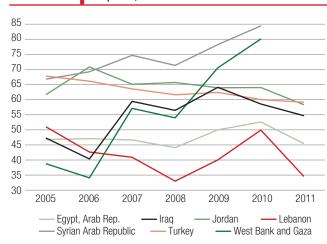
Source: World Travel and Tourism Council 2013.

persons in its travel and tourism industry in 2012—however, there is a decline compared to 3.7 million employed in the sector in 2010, as shown in Figure 71.

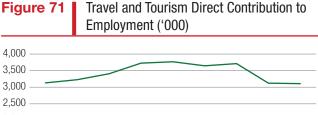
The Impact of Arab Spring on the Tourism Sector

The Arab Spring has had three types of impact on the tourism industry in MENA. First, in some of the best performing countries where there was marked political

Figure 70 Travel Services as a Share of Services Exports, 2005–2011



Source: World Bank, World Development Indicators 2013.



2,000 1,500 1,000 500 2006 2008 2009 2010 2011 2012 2004 2005 2007 – Svria - Jordan Lebanon — Iraq — Turkey

Source: World Travel and Tourism Council 2013.

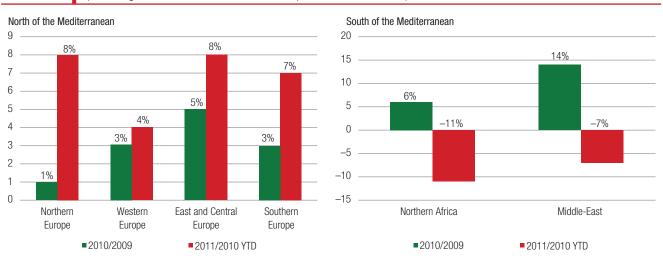
unrest (i.e., Syria), fast tourism growth stopped. Secondly, in others, where structural reforms were needed (i.e., Tunisia), the decline of tourism accelerated. And thirdly, others that were politically stable (i.e., (Gulf countries, Morocco, Turkey) experienced a boost in tourism, benefitting from the trade diversion effect of the revolution.

As a result of the Arab Spring, the tourist arrivals declined in the Middle East and the Northern Africa region. In the Middle East region, the annual growth rate of tourist arrivals declined from +14 percent in

2009–10 to –7 percent in 2010–11. Similarly, in the Northern Africa region the annual growth rate of tourist arrivals declined from +6 percent in 2009–10 to –11 percent in 2010–11. In parallel, countries on the Northern shore of the Mediterranean benefited from the trade diversion effects of the Arab Spring, and their tourism growth rates were significantly boosted (Figure 72).

For most countries, the Arab Spring did not reverse but accelerated existing trends in tourism flows. Before the Arab Spring, due to changes in technology (i.e., individual Internet access), transports (i.e., low cost airlines) and European consumers' tastes, there had been a shift away from the traditional "sun, sand, and sea" mass tourism model, to custom-tailored packages that combine beaches with other offerings (i.e., visits to historical or natural sites, duty-free or handcraft shopping, artistic or culinary attractions). This resulted in the emergence of Gulf countries as major actors of the tourism industry in the region. Turkey also emerged as a winner from this process, spared from the political turmoil of the Arab Spring, and capable of developing its tourism infrastructure (i.e., a competitive airline) and attractive packages (combining beach, culture, and arts) for European tourists.

Figure 72 Impact of the Arab Spring on Tourism Flows
(Annual growth rate of tourist arrivals, in percent, 2009–2011)



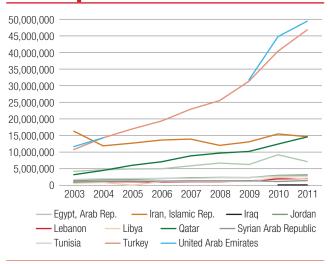
Source: Roland Berger 2012.

Tunisia is the best example of a declining tourism destination. Tunisia's international tourist arrivals and tourism receipts started to decline in 2008 when such receipts were still growing in competing countries. Tunisia has had a much slower rebound than its competitors that were equally affected by the Arab Spring. In other terms, the Tunisian problems are structural and not only related to the revolution. In the 1980's and 1990's, Tunisia heavily invested in the "sun, sand, and sea" model that was prevailing at the time. However, Tunisia missed the turn when markets shifted to a different model with the emergence of custom-made vacations. The Tunisian market remained in the hands of a few operators offering "all-inclusive" packages when consumers now prefer to individually book their travel and hotel online. The Tunisian tourism value chain does not best serve the interests of Tunisia: foreign tour operators capture 40-45 percent of the receipts (compared to 10-14 percent in a performing country (World Bank 2012). Moreover, Tunisia missed the turn of the "low-cost" travel by preserving the national airline from competition when competitors moved to open skies. The race to the bottom of the "all-inclusive" model resulted in a drop in return on investment and an increase of the sector's debt (to TND 3.8 billion in September 2011) (World Bank 2012).

By contrast, some of the countries in the region, such as Turkey, the UAE, or Qatar, have, in recent years, been the fastest growing tourist destinations in the world. Over the past decade, Turkey, Qatar and the UAE have multiplied by five the number of passengers carried by air transport (Figure 73). During the same period, the number of passengers carried in Egypt doubled, with a 20–30 percent drop between 2010 and 2011. Aviation alone now contributes to more than 6 percent of the GDP in the UAE. Beyond tourism receipts, the development of air transport contributed to open foreign markets to UAE exports, lower long-distance transportation costs, and an increase in the flexibility of the labor supply (World Economic Forum 2013).

This growth in Turkey and the Gulf has been both quantitative (number of tourists) and qualitative

Figure 73 Air Transport, Passengers Carried 2003–2011



Source: World Bank, World Development Indicators 2013.

(tourism receipts). For instance, receipts per tourist are 60 percent higher in Turkey than in Tunisia. International tourism receipts grew more than 10 and 6 fold, respectively in Qatar and the UAE, in the last decade, resulting in a contribution to GDP that was multiplied by five (World Travel and Tourism Council 2013).

There are a number of explanations to this success. The fastest growing tourism destinations all have in common high quality transport infrastructures (Emirates, Etihad, Qatar Airways, Turkish Airlines), a safe and stable political environment, and attractive cultural, architectural, and natural sites. In addition, Turkey and the Gulf offer a variety of tourism offerings such as shopping, sports events, major conferences, and exhibitions. The width of tourist offerings makes these destinations attractive to tourists.

Current dynamics can create potential benefits from complementarities in the sub-region for deeper integration. Not all countries can offer full tourism packages that include the variety of experiences now required by tourists. There is a potential for facilitating links between countries with complementary tourism infrastructure and attractions. "Old-model" countries could learn from the success of "new-model" countries and benefit from their experience to reform their own tourism sectors. Best

performing countries could transfer know-how and capital to declining countries that are in need of reforms and foreign investment. Furthermore, the rapid growth of air passenger traffic in Turkey and the Middle East, and the emergence of transport hubs could benefit the region at large. The objective should be to promote complementarity through open skies policies rather than to maintain barriers to trade to protect non-profitable domestic airlines.

Sub-Regional Integration in the Levant: Removing Obstacles to Trade in the Tourism Sector

Complementarity of tourism offerings across the sub-region calls for deeper regional integration. Of first importance is removing obstacles to tourism through deeper trade liberalization and integration. The next priority is improving the competitiveness of individual countries and the region as a whole through regulatory cooperation, and the pooling of infrastructure, human, cultural, and natural resources together.

Facilitating the development and growth of travel and tourism requires the removal of various obstacles to trade that affect both goods and services. While tourism is a sector per se (identified in the GATS sectoral classification list as including hotels and restaurants, travel agencies and tour operator services, and tourist guide services), a country's competitiveness in the tourism sector depends on the performance of many other sectors, including transport, energy, telecommunications, and financial services. Thus, tourism development and facilitation should be based on a holistic approach that includes liberalization of trade and improvement of infrastructure in a wide range of sectors. The objective is to provide higher quality goods and services at lower prices for tourists.

Beyond unilateral reforms, liberalization could take place through commitments made in multilateral or bilateral/regional agreements. Multilateral agreements, such as commitments made in the GATS, have

not been the main drivers of liberalization and reform in the tourism sector. Provided that among the Levant countries, only Egypt, Jordan and Turkey are members of the WTO, multilateral commitments are of limited interest. Even among the WTO members, GATS commitments contain a number of restrictions and remain incomplete (Table 65). GATS also overlooks a number of tourism services that have become very important in recent years, such as the Computer Reservation Systems (CRS), World Distribution Systems (WDS), car rental, travel assistance, congress and cruise services (OAS/ALA-DI 1998). It is in those ancillary services not covered by the GATS that the main restrictions remain.

Bilateral/regional trade agreements are the most efficient way to promote the liberalization of tourism services in the region. Table 66 shows that the countries in the region are already largely intertwined by plurilateral and bilateral trade agreements. Turkey is linked to the other Levant countries through bilateral agreements only.

A number of these plurilateral and bilateral agreements include provisions on services liberalization; however, little liberalization or integration has been achieved so far. Signatories of these agreements mainly committed to further cooperate on services trade, however nothing concrete has materialized yet under the Agadir Agreement or PAFTA. An explicit reference to tourism is rare, despite the revealed importance of tourism for many countries in the MENA region. Bilateral investment treaties could have an incidence on service trade and overlap with some commitments made in the

 Table 65
 GATS Commitments in the Tourism Sector

Country	Hotels and restaurants	Travel agencies and tour operator services	Tourist guide services	Other
Egypt	Х	Х	Χ	Χ
Jordan	Χ	Χ		
Turkey	Χ	Χ		

Source: WTO 2013.

	Egypt	Iraq	Jordan	Lebanon	Syria	Turkey	Palestinian Territories
Egypt		P + B	Р	Р	P + B*	В	Р
Iraq	P + B		P + B	P + B	P + B		Р
Jordan	Р	Р		Р	P + B	В	Р
Lebanon	Р	P + B	P + B		Р	B**	Р
Syria	P + B*	P + B	P + B	Р		B**	Р
Turkey	В		В	B**	B**		B****
Palestinian Territories	Р	Р	Р	Р	Р	B****	

 Table 66
 Plurilateral (P) and Bilateral (B) Trade Agreements

Source: Authors based on various websites.

Notes: P = Plurilateral FTA; B = Bilateral FTA; B* = trade agreement; B** = not in force; B*** = in negotiation; B**** = temporary agreement.

GATS or FTAs (Mode 3). According to the ICSID database on bilateral investment treaties (as of June 2013), Egypt concluded 91 of such treaties, Iran 48, Jordan 42, Lebanon 48, Libya 14, Tunisia 54, Turkey 73; Iraq, Syria, and Palestinian Territories had none.

Given its importance for the region, tourism should be restored as a priority sector in regional trade agreements, and benefit from adequate structures to promote it. In many regions, countries with tourism complementarities have created regional tourism clusters that aim to promote the region as a tourist destination and to increase cooperation among their members (from marketing to regulatory convergence or harmonization). The cluster also ensures cooperation of all the actors of the tourism value-chain and promotes public-private dialogue and partnerships.

Improving Tourism Competitiveness through Integration

Considering the limits of trade agreements to promote regional tourism integration, other types of agreements and cooperation should be explored. Tourism, by nature, is a cross-border issue. Domestic reforms should be accompanied by an increased cooperation among countries in the region and with the main countries of origin

of the tourists. This cooperation should include both a "hard" (i.e., regional infrastructure for telecommunications, energy, and transports) and a "soft" (i.e., strengthening the cooperation among services regulatory agencies and potentially create joint agencies) dimension.

Egypt, Jordan, and Lebanon reveal a relatively poor performance in travel and tourism competitiveness. According to the WEF Travel and Tourism Competitiveness Report (2013), Jordan ranks 60th in the world (with 140 countries featured). ¹⁴⁶ Lebanon, which highly depends on travel exports, only ranks 69th, and Egypt, which is a largest ranks 85th. By contrast, the UAE rank 28th worldwide, and ranks 9th position for infrastructure.

Coordination among the Levant countries can improve competitiveness. Deeper regional integration could help improve competitiveness of individual countries in the sub-region. It could help increasing the attractiveness of the region by offering a wider range of tourism offerings and packages and contribute to boosting tourism receipts by increasing the amount of spending per tourist, and diversifying the origin of the tourists. It could also lengthen the regional tourism value chain

¹⁴⁶ The WEF has developed an index that details the different factors of competitiveness in travel and tourism. This index has three main pillars: (i) regulatory framework; (ii) business environment and infrastructure; and (iii) human, cultural, and natural resources.

by increasing the value-added captured by tourism operators in the region.

Regulatory framework

Regulatory reforms needed to increase competitiveness in the tourism sector are primarily domestic. Regional cooperation may magnify the effects of such reforms. This is the case, for instance, of bilateral/regional agreements on the liberalization of air transport or visa policies. Regulatory cooperation and harmonization is also necessary to increase the efficiency of "hard" infrastructure, such as telecoms or air transport.

Regulation of air transport

The performance of the tourism sector will largely depend on the performance of transport services, and air transport in particular. Liberalization of air transport has proven to have a significant impact on travel and economic activity at large. Levant countries could explore possibilities liberalizing traffic among themselves (i.e., Arab League Open Skies Agreement), with Europe (the prime market for tourism in the region, with two-thirds of the traffic), with African countries (Yamoussoukro Decision), and other individual countries. This could be achieved through bilateral or regional agreements called "open-skies" that would mostly deal with the removal of traffic restrictions (i.e., free access, free fares, liberty in capacity, free designation of carrier), but could also include ownership and control liberalization.

Open skies agreements potentially have a positive impact on the liberalizing markets and important spillover effects on other sectors' activities and employment (tourism and beyond). Traffic growth subsequent to liberalization of air services agreements between countries typically averaged between 12 percent and 35 percent, significantly greater than during years preceding liberalization. In a number of situations, growth exceeded 50 percent, and in some cases reached almost 100 percent of the pre-liberalization rates. The creation of the Single European Aviation Market in 1993 led to an average annual growth rate in traffic between 1995 and

2004 that was almost double the rate of growth in the years 1990 to 1994. This produced about 1.4 million new jobs (InterVISTAS 2009). Similarly, the EU-Morocco open skies agreement, implemented in 2006, created significant impact providing a MAD1.5 billion contribution to GDP. As a result, 24,000 jobs were created, and fares declined by 7 percent. The average growth rate of air traffic in Morocco between 2005 and 2010 has been almost three times larger than the one for Tunisia. In Lebanon, the open skies policy implemented in 2002 translated into the doubling of passenger traffic between 2002 and 2009.

There is a strong case for an expansion of regional open skies agreements in the Levant to benefit from the growth of passengers' traffic allowed by the emergence of air transport hubs. In the region, many countries have already moved to open skies policies including Jordan and Lebanon. The UAE has signed more than 60 bilateral agreements; 17 open skies agreements have been concluded among the Arab League members, and a plurilateral Arab League Open Skies Agreement was concluded in 2004 (Schlumberger 2010). By contrast, some countries in MENA, such as Tunisia, remain largely closed to competition, trying to preserve their domestic flagship carrier from international competition.

Regulation of the movement of tourists (visas)

Despite progress made, many countries in the MENA region maintain inadequate and inefficient visa policies that are an obstacle to tourism growth. According to the WEF (2013), the MENA region has one of the lowest visa openness score in the world. Visa exemptions apply to only one percent of the world population in the Middle East region, and only 20 percent of the world population can obtain a visa on arrival. EVisas are applicable to 10 percent of the world population in the Middle East. The Middle East region remains strongly opposed to visa exemptions.

Given the complementarity of the tourist resources in the Levant, there is a strong case for visa facilitation

for further integration. This can be done either through further differentiation of treatment to facilitate tourist travel, or the establishment of eVisa or visa exemption programs. A regional approach to visa policies could facilitate the free movement of tourists between countries once admitted by one of the countries in the region. This could apply to tourists originating from the region or from other parts of the world.

Travel and tourism infrastructure

Infrastructure is underdeveloped in the Levant compared with the Maghreb. World Bank studies (2010a, b, c) explored the integration of the MENA region through the lens of infrastructure. In the Maghreb, the studies concluded that most countries had made good progress in investing in and reforming infrastructure, but more investment and reforms were needed to better integrate the region. This confirms the diagnostic of a lack of openness and integration in key backbone services such as transports and telecommunications (World Bank 2011). The Maghreb performs relatively well, however, in terms of integration in the fields of energy, water supply, and sanitation services. In the Levant, progress was noticed in the sector of telecommunications, but underdeveloped transport infrastructure constrains the ability of Levant countries to trade more with each other. Lebanon and Syria interconnected their power grids, and there are links between Iraq, Syria, and Turkey, but the system is not well synchronized (World Bank 2010b).

Transport infrastructure is the key to tourism development. For the region, air transport connectivity remains low, with most airports underserved in terms of

international network and flights. The negative impact of this on sector growth includes a "capped" growth potential for traffic from source markets, generally higher fares on routes with limited flight options, more difficulty in attracting tour operators and creating tour packages, and a reliance on charter flights, which are focused on limited peak seasons (Booz & Company 2007). The limited use of complementarities in the air transport sector and the reliance on charter options also limit the value-added captured by the countries in the region.

Turkey and the UAE could compete to become regional (or even global) hubs. Both destinations have the highest number of passengers carried. Egypt, Qatar, Saudi Arabia, Iran, and Bahrain also have important traffic, although would not necessarily compete to become a hub: for instance, Iran and Saudi Arabia are more destination airports. To reach the target of deeper sub-regional integration, planned capacity expansions will require airports to find the right strategic positioning.

The regional dimension of ICT infrastructure is essential for a sub-regional integration. Across the region, technology is still underleveraged in the travel and tourism industry, in part due to the low level of ICT or credit card penetration or the absence of legal framework for online payments. This explains, for instance, the slow introduction of e-ticketing or the remaining low level of online ticket sales. Number of fixed broadband Internet subscribers and secure Internet servers are low in the Levant. The ICT gap in the region affects the competitiveness of the Levant countries in the tourism sector that increasingly rely on direct sales of the hospitality sector to consumers through the Internet.



BARRIERS TO DEEPER REGIONAL INTEGRATION IN THE LEVANT

Ithough non-tariff measures are policy measures and do not have necessarily a trade protectionist intent, they may have the potential to create market access barriers especially for companies from developing markets. The pattern of non-tariff measures (NTMs) shows that most of the NTMs in MENA are in the form of sanitary and phytosanitary standards measures (SPS) and technical barriers to trade (TBT), depending on the sector. MENA's exports to the European Union are mostly affected by TBT. Among other trading partners, NTMs are particularly high in China. Almost all of sub-region's exports to China are subject to many forms of NTMs, including SPS, TBT, price and quantitative controls, and anti-competitive regulations. This chapter discusses the pattern and structure of NTMs by country of destination, and analyzes the extent to which MENA's exports are exposed to the impact of NTMs. NTMs tend to affect regional trade more than bilateral trade.

Firm-level surveys in nine MENA countries shows that costs associated with administrative red tape and weaknesses in transport-related infrastructure services are ranked as the most important constraints to intra-regional trade (Hoekman and Zarrouk 2009). Frequently, companies in developing countries cite the lack of capacity of the current standard infrastructure (testing laboratories and other agencies involved in the process of safety control at the national level) to deliver the required services. In addition, time delays and ambiguity of the information concerning implementation of new

regulations created confusion among companies and increased administration costs. Finally, the private sector claims that some technical regulations have been developed without taking into account the industry structure and capacity of local companies, and may have negative impact on the development of these sectors.

Trade facilitation and logistics issues constitute important barriers to deeper integration of countries at a sub-regional level. Levant countries typically are not taking full advantage of the relatively good shipping connectivity in the Mediterranean, nor the proximity to the

European markets. These factors affect competitiveness. Overall, the Levant countries exhibit higher trade costs, especially between themselves, which can be explained partly by a deficit in logistics performance and facilitation bottlenecks. Infrastructure is a less significant issue in the region compared with constraints related to trade processes and the low quality of some logistics services. Markets for logistics services are typically small (domestic), confined to traditional activities (trucking brokerage), protected, and do not offer high quality domestic services to traders, even in Egypt, which hosts world-class shipping hubs. Logistics skills are limited in the region, with limited externalization and value-added in logistics.

Apart from the GCC, which is already a single market, little has been done to facilitate cross-border trade between neighbors and along trade corridors. Border-crossing procedures in the Levant still contribute significant hurdles to trade. It is generally recognized that in addition to national capacity building, multi-country initiatives should be undertaken within consistent sub-regional groupings.

For a deeper integration, the goal is to make more efficient the supply chains linking domestic producers and buyers to their international partners, whether in the sub-region or in distant markets. The ease of moving goods internationally, which is not just about transportation, is critical to national and sub-regional competiveness. The trade facilitation and logistics agenda is broad and aims to address the links between investments in hard infrastructure and the policy actions to facilitate trade flows. This chapter analyzes the current understanding of issues affecting the Levant countries, when trading within the region or with the rest of the world. It also discusses bottlenecks and weaknesses that limit current trade connectivity of the sub-region.

Impact of Non-Tariff Measures on Sub-Regional Trade

With global economic liberalization and reduction of tariff protection, the potential for non-tariff measures

to act as trade barriers has increased in the last decade

(Kukenova and Malouche 2013). NTMs are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices, or both (UNCTAD 2012). As such, NTMs do not have necessarily a trade protectionist intent and can be introduced to achieve other policy objectives such as to preserve human health or the environment. NTMs can promote trade by providing consumers with information, limiting transaction costs, facilitating comparison and reducing uncertainty. Thus, NTMs can eliminate a market failure by reducing the cost of determining the quality of a product (Cadot et al. 2012). Not all NTMs are barriers, and the challenge with NTMs is to make them the least trade restrictive while achieving other important policy objectives. This is particularly the case for SPS and TBTs. These measures are actually rising across countries and are likely to further increase given societal demand for more traceability and food security.

NTMs may have the potential to create market access barriers especially for companies from developing markets. For instance, compliance with the technical requirement of destination countries can necessitate investment in production facilities, and in design and packaging of the final product. Demonstration of compliance with the technical requirements often calls for certification either because exporting countries do not have internationally recognized certification bodies and laboratories or because the destination countries do not recognize international certificates. The pre-shipment inspection and other formalities are frequently associated with time delays that can be substantial in the developing countries due to lack of infrastructure and qualified personnel. The private sector often complains about the related procedures, delays, cost, and corruption. Suppliers of fresh vegetables and fruits are particular vulnerable since the shelf life of their product is very limited.

NTMs are broadly distinguished into technical measures (SPS and TBT), and non-technical barriers. The latter are generally distinguished into quantitative

controls, pre-shipment inspection, and price control measures. The large incidence of SPS measures and TBT raise concerns for developing countries' exports. The costs of compliance of these types of regulations are higher for low-income countries, and can erode the competitive advantage that these nations have in terms of low labor costs and preferential access (Cadot et al. 2012). Only a small proportion of the NTMs are still in the form of quotas and export restrictions, since most quantitative restrictions are illegal under WTO rules. In the cases where quantitative measures are allowed, they materialize in the form of non-automatic licensing, often necessary to administer the importation of goods where SPS- and TBT-related issues are of particular importance. Pre-shipment inspections are, in many cases, necessary to assure the quality and quantity of shipments, thus facilitating trade. However, such inspections do add to the costs of trading. Price control measures are one of the least used forms of NTMs. These barriers affect only a small share of goods, and are largely related to anti-dumping and countervailing duties.

This section examines the NTMs for a number of countries in the sub-region, including the Levant. The first part presents information on the structure of NTMs by country of destination, and the second part explores the extent to which MENA's exports are exposed to the impact of NTMs. The question is addressed for the following set of countries: Egypt, Turkey, Iraq, Syria, Jordan, Lebanon, Tunisia, Iran, and Libya. The selection of countries responds to the availability of NTM data, as well as the relevance of the trading partner or potential trading partner (China, EU, and Indonesia).

The Pattern and Structure of NTMs by Country of Destination

Methodology and Data. ¹⁴⁸ For the purposes of this study, the pattern of NTMs across trading partners is analyzed. In doing so, the measures constructed by Gourdoun and Nicita (2012) are employed. The analysis relies

on two indicators: the frequency index, and the coverage ratio of NTMs. The frequency index accounts only for the presence or absence of an NTM, and summarizes the percentage of products to which one or more NTMs are applied. In more formal terms, the index for country j is calculated as follows:

$$F_{j} = \left[\frac{\sum D_{i} M_{i}}{\sum M_{i}}\right] 100,$$

where D is a dummy variable reflecting the presence of one or more NTMs affecting product i, and M indicates whether there are imports of good i in country j (also a dummy variable). To capture the relative value of the affected products, we use the coverage ratio, which in formal terms, can be written as follows:

$$C_{j} = \left[\frac{\sum V_{i}D_{i}}{\sum V_{i}}\right]100,$$

where D is defined as before, V_i and is the value of imports of product i.

The set of NTMs explored includes: A: Sanitary and phytosanitary standards measures (SPS); B: Technical barriers to trade (TBT); C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; and N: intellectual property.

Measures have been calculated by the World Bank with data from the World Integrated Trade System.

 $^{^{147}}$ The Palestinian Territories are not included in the analysis due to lack of data.

¹⁴⁸ Until recently the data on NTMs was scarce, moreover, there were not unique definitions of NTMs, which significantly complicated the analysis. Several international organizations including the WTO, UNCTAD, ITC and World Bank have pooled their efforts in developing the NTM classification and collection of NTM data worldwide. NTM data is currently available for 40 developing countries as well as for the European Union and Japan. Data collection requires the classification of legal documents (regulations, directives, and rules) to appropriate pre-defined NTMs codes.

Findings: What is the pattern of NTMs by Country of Destination?

Most of the NTMs in MENA (average of the region) materialize in the form of SPS or TBT depending on the sector. The first type of regulation is important in the food sector, affecting 60.5 percent of the product lines that belong to this category. The impact of TBT ranges from 15.1 percent of the product lines in the food industry, and 49 percent in the chemical sector. In addition, pre-shipment inspection is important in the food sector affecting 30 percent of the product lines in this sector. Egypt's NTM pattern resembles the average of the region. SPS measures affect 72.1 percent of the product lines in the food category. However, the relevance of TBT is higher in Egypt than the average of MENA, oscillating between 54.7 percent of the product lines in the food industry, and 99.1 percent in the base metal category. Syria's NTM structure reveals high regulations in food and chemicals. SPS is important in Syria's food sector affecting 78.2 percent of the product lines; while TBT is relevant in the chemicals sector corresponding to 73.1 percent of the product lines. Most of the regulations in Tunisia affect the food industry, and materialize in the form of SPS and pre-shipment inspection. They affect 81.4 percent and 81.5 percent, respectively, of the products in this category. The impact of NTMs in Lebanon is very low. The effect of SPS in Lebanon's food sector is below the average of the region, as it is applied on 11.7 percent of the products in the sector. TBT is mainly imposed in chemicals (24.4 percent of product lines), and textiles and footwear (30.9 percent of product lines). See Figure 74.

Among the trading partners, NTMs are particularly high in China. China imposes SPS, TBT, price controls, and quantity controls on 100 percent of the products associated to sectors such as food, chemicals, rubber, plastics, wood and paper, textile and footwear, base metal, and machine and equipment.

Trade with the European Union is mostly affected by SPS or TBT. In particular, 86.7 percent of the product

lines associated with food are affected by SPS measures, while 85.4 percent of them have at least one TBT. For the rest of the sectors, TBT is the most common form of NTM. More than 90 percent of the product lines corresponding to chemicals, textile and footwear, and machine and equipment, have at least one TBT. Inspections are relatively important in the base metal and textile and footwear sectors, affecting 15.9 percent of the products lines associated to these categories.

NTMs affect more than 85 percent of imports in Egypt and Syria. The frequency index is high for both Syria (89.3 percent), and Egypt (86.1 percent). In contrast, it is low in Lebanon (16 percent). The lowest effects are recorded in Lebanon and Tunisia. See Figure 75.

Another trading partner, Indonesia, applies different NTMs depending on the sector. Contrary to what is observed in the case of the EU, there is not a particular type of NTM that predominates in Indonesia. Most of the NTMs in the food sector are SPS, TBT, and inspections, which affect 67.9 percent, 33.5 percent, and 12.8 percent of product lines, respectively. The textile and footwear sector has 63.4 percent of its products affected by pre-shipment inspection, and 65.8 percent by quantity controls. Machine and equipment, and base metal are the categories with the lowest barriers. In both cases, quantity controls are the type of NTM most commonly applied, affecting 14.3 percent and 26.3 percent, respectively, of the products corresponding to these sectors.

Impact of NTMs on MENA's Exports

Methodology and Data. To analyze the impact of NTMs on MENA's exports, the export structure (products and destinations) of MENA countries was constructed to capture the level of exposure to NTMs. In order to conduct the analysis, the non-discrimination criterion was employed, which states that if a country applies an NTM to the imports of a product from a particular country; it will do the same to the imports of the same product from the rest of its trading partners. Thus,

the indicators measure the potential exposure of exports to the effect of NTMs.

Formally, the frequency index can be written as follows:

$$F_{j}^{c,d} = \left[\frac{\sum_{i} D_{i}^{c,d} X_{ji}^{d}}{\sum_{i} X_{ji}^{d}} \right] 100,$$

Figure 74 NTMs By Country and Sector

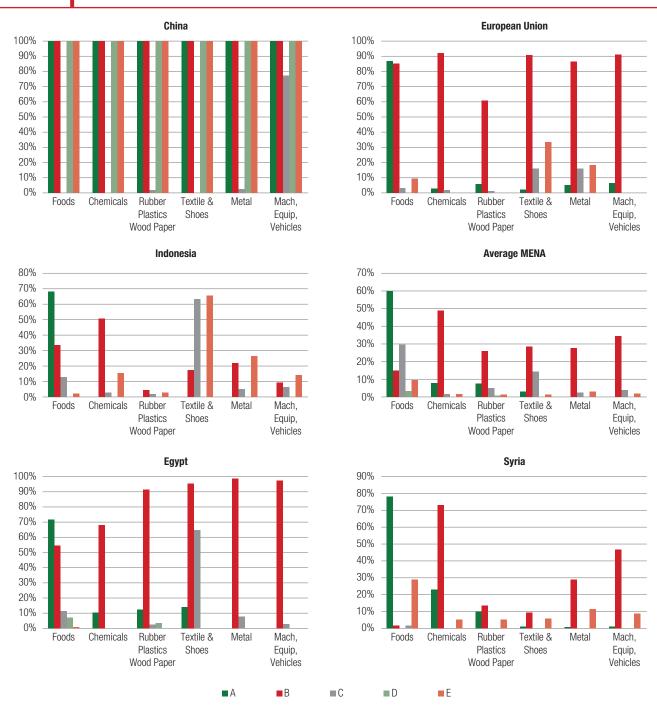
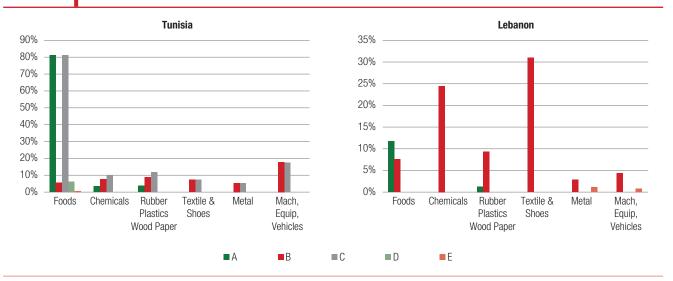


Figure 74 NTMs By Country and Sector (continued)



Source: Gourdon and Nicita (2012)

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT); C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

where $D_i^{c,d}$ is a dummy variable that takes value 1 if destination d imposes an NTM in category c; X_{ji}^d is a dummy variable that takes value 1 if country j exports product i to destination d. Thus, the frequency index measures the percentage of products exported to country d that are subject to at least one NTM in category c.

The coverage ratio can be expressed as follows:

Figure 75 Frequency Index and Coverage Ratio of NTMs Tunisia Syria Lebanon Indonesia EU Egypt China 20% 40% 60% 100% 0% 80%

Frequency ratio

Source: Authors' elaboration with data from Gourdoun and Nicita (2012).

Coverage ratio

$$C_{j}^{c,d} = \left[\frac{\sum D_{i}^{c,d} V_{ji}^{d}}{\sum V_{ji}^{d}} \right] 100,$$

where $D_i^{c,d}$ is a dummy variable reflecting the presence of one or more NTM in category c affecting product i in destination d, and V_{ji}^d is the value of exports of product i from country j to destination d. Thus, the measure captures the percentage of exports from country j to country d affected by the imposition of an NTM in category. 149

Measures have been calculated by the World Bank with data from the World Integrated Trade System.

Findings: To what extent sub-region's exports are exposed to the impact of NTMs?

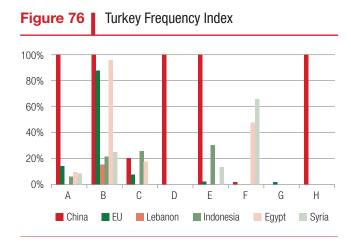
Several regularities can be identified in the sub-region in terms of exposure to the impact of NTMs. MENA's exports to the European Union are mostly affected by TBT.

¹⁴⁹ Trade data for 2011 from UN COMTRADE database was used to conduct the analysis.

The coverage ratio ranges from 77.1 percent of exports from Jordan to almost 100 percent of exports from Iraq, Syria, Egypt, Libya, and Iran. Among the trading partners, almost all of sub-region's exports to China are subject to many forms of NTMs. 100 percent of the exports from Turkey to China are affected by regulations such as SPS, TBT, price and quantitative controls, and anti-competitive regulations. The exposure of Turkish exports to TBT in Europe is also high accounting for 87 percent of the exported products. The impact of NTMs on Egypt's exports to Lebanon is negligible, however, TBTs have a large effect on Egypt's trade with the EU. Charges, taxes, and other para-tariff regulations, as well as pre-shipment inspection in Tunisia affect 43 percent of Egypt's trade flows. More than 90 percent of Syria's exports flowing into the EU, Egypt and China are vulnerable to TBT regulations. Charges, taxes, and para-tariff measures impact 46 percent of Jordan's exports to Egypt. The impact of NTMs on exports is analyzed below country by country.

Impact of NTMs on Turkey's Exports

Turkey's exports are subject to many forms of NTMs (Annex 31 and Figures 76 and 77). ¹⁵⁰ Almost 100 percent of the



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures.

Turkey Coverage Ratio

Turkey Coverage Ratio

D

Indonesia

Lebanon

В

China

G

Egypt

Н

Syria

Source: Author's elaboration with data from UN COMTRADE Database.

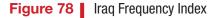
Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures.

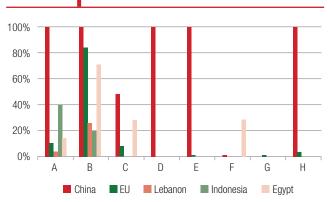
exports from Turkey to China are affected by regulations such as SPS, TBT, price and quantitative controls, and anti-competitive regulations. The exposure to TBT in Europe is high: 87 percent of the exported products, and 91 percent of the trade flow. SPS and TBT are the most important categories in Indonesia, with coverage ratios of 36 percent and 33 percent, respectively. They impact five percent and 21 percent of the exported products, respectively. Most of the Turkish exports to Egypt are vulnerable to TBT. Charges, taxes, and other para-tariff barriers in Syria cover 44 percent of total exports (66 percent of the products).

Impact of NTMs on Iraq's Exports

Iraq's exports to the EU, China Lebanon, and Egypt are subject to TBT (Annex 32 and Figures 78 and 79). The impact ranges from 17.2 percent in Lebanon (26 percent of product codes) to 100 percent in China. All exports to China are also exposed to SPS, price and quantitative controls, and anti-competitive measures. Barriers in Indonesia are related to SPS, affecting

¹⁵⁰ Tunisia is not included in the graph as less than 0.02 percent of the exports are affected by NTMs such as A, C, and F.





Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

40 percent of exported products. This type of regulations is also important in Egypt, as it affects 77 percent of the trade flow, and 14 percent of the exported products.

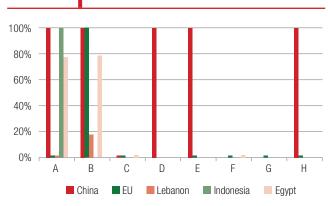
Impact of NTMs on Jordan's Exports

Jordan's exports are subject to TBT in all destinations (Annex 33 and Figures 80 and 81). The percentage of exports flows exposed to this type of regulations ranges from 12 percent in Lebanon to 100 percent in China. This represents between 19 percent and 100 percent of the exported products, respectively. TBT is the most important category in Europe. Jordan's trade with China is subject to many forms of NTMs. SPS and quantitative controls are important in Syria, affecting 60 percent of Jordan's total exports, and 23 percent of the exported products, approximately. Charges, taxes, and para-tariff measures are relevant in Syria and Egypt. They impact 36 percent and 46 percent of Jordan's exports, respectively.

Impact of NTMs on Lebanon's Exports

Lebanon's trade barriers in Europe and Egypt are mainly related to TBT (Annex 34 and Figures 82 and 83).

Figure 79 | Iraq Coverage Ratio

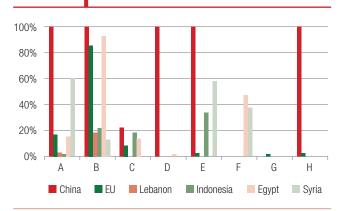


Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

Furthermore, most of Lebanon's exports to China are vulnerable to many types of NTMs. Regulations in Indonesia are associated with pre-shipment inspection and quantity controls. They affect 80 percent of the trade flows, and 37 percent of the exported products. Trade regulations in Syria are mainly in the form of SPS, quantitative controls, and charges, taxes, and other para-tariff measures. They impact 35 percent, 27 percent, and 38 percent of the trade flow.

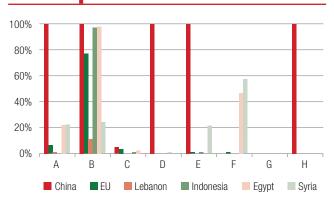
Figure 80 | Jordan Frequency Index



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

Figure 81 Jordan Coverage Ratio



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

Lebanon Frequency Index Figure 82 100% 80% 60% 40% 20% 0% В G Н Α C D F China Syria FU Indonesia Egypt

Source: Author's elaboration with data from UN COMTRADE Database.

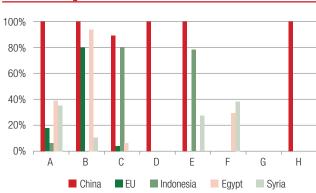
Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property. Some countries are not reported due to NTM data constraints or no trade flow.

Impact of NTMs on Syria's Exports

More than 90 percent of Syria's exports flowing into the EU, Egypt and China are vulnerable to TBT regulations (Annex 35 and Figures 84 and 85). China is the country with the highest barriers, affecting 100 percent of the export flows in most of the NTM categories.

Almost 100 percent of the exports going to Indonesia are subject to SPS. NTMs in Tunisia affect no more than 11 percent of Syria's total exports, while the maximum impact in Lebanon is seven percent. SPS, pre-shipment inspection, and charges, taxes, and other para-tariff measures are important in Egypt, although the coverage ratios do not exceed 50 percent.

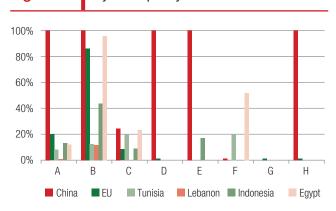
Figure 83 Lebanon Coverage Ratio



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property. Some countries are not reported due to NTM data constraints or no trade flow.

Figure 84 | Syria Frequency Index

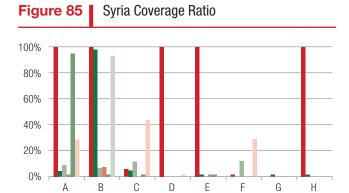


Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

China

EU



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

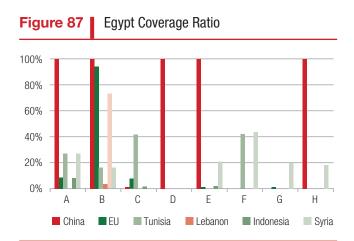
Lebanon Indonesia

Egypt

Impact of NTMs on Egypt's Exports

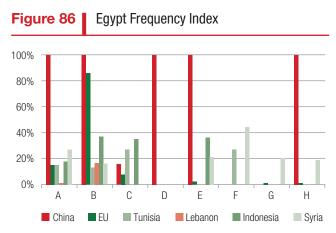
Tunisia

The impact of NTMs on Egypt's exports to Lebanon is negligible. TBT have a large effect on Egypt's trade with China, the EU, and Indonesia (Annex 36 and Figures 86 and 87). More than 74 percent of the trade flows going to these countries are affected by TBT regulations. Exports to China are exposed to SPS, price and quantitative controls, and anti-competitive measures. Charges, taxes,



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

and other para-tariff regulations, as well as pre-shipment inspection in Tunisia affect 43 percent of the trade flow, and 27 percent of the exported products.

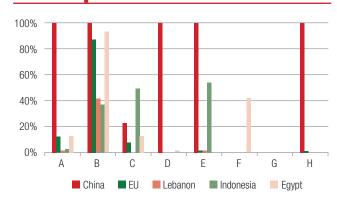
Impact of NTMs on Tunisia's Exports

TBT are the most common type of NTMs affecting Tunisia's exports to the E.U, Egypt, and Lebanon. TBTs also affect between 31 percent of trade with Indonesia, and 100 percent of trade with China (Annex 37 and Figures 88 and 89). Exports to China are also subject to other categories of NTMs. SPS are important in Indonesia, as they impact on 43 percent of the export flows, and two percent of the exported products. Charges, taxes, and other para-tariff measures affect 20 percent of the trade flow to Egypt, and 42 percent of the exported goods.

Impact of NTMs on Libya's Exports

Most of Libya's exports to the EU, Lebanon, Egypt and China are highly exposed to the impact of TBT. Exports to China are also subject to SPS, price and quantitative controls, and anti-competitive measures. Pre-shipment inspection is important in Egypt, as it affects 29 percent of

Figure 88 Tunisia Frequency Index



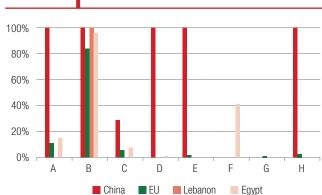
Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

Libya's exports. Charges, taxes, and other para-tariff measures impact on 12 percent of trade, and 41 percent of the exported products (Annex 38 and Figures 90 and 91).

Impact of NTMs on Iran's Exports

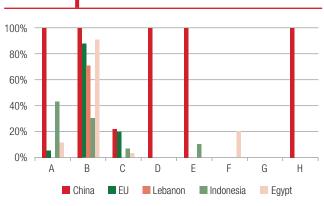
The most common form of NTM on Iran's exports is TBT. This type of regulation affects from 6 percent of



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

Figure 89 | Tunisia Coverage Ratio

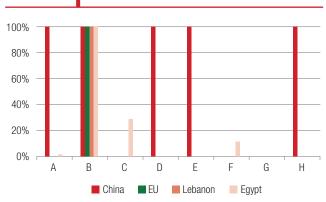


Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.

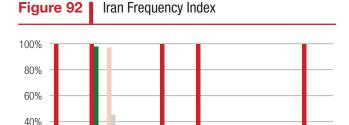
trade with Lebanon to almost 100 percent of trade with China, the European Union, and Egypt (Annex 39 and Figures 92 and 93). Exports to China are also vulnerable to SPS, price and quantitative controls, and anti-competitive regulations. NTMs in Lebanon and Indonesia have a minor effect. The most important NTM in Iran's exports to Syria is TBT, as it affects 46 percent of the trade flow, followed by licenses, quotas, and other quantitative measures.

Figure 91 | Libya Coverage Ratio



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property.



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property. "N" category in China is omitted as the impact on the trade flow is around 0 percent.

D

Lebanon

F

Indonesia

G

Egypt

Н

Syria

С

B



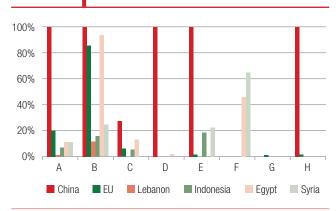
20%

A way to assess the integration of countries is to refer to trade costs. Trade costs represent the price wedge between domestic consumption and trade with another country. Bilateral trade costs capture the obvious impact of distance but also the effect of thickness of the border of each of the countries: trade facilitation, trade policy, connectivity, and logistics.

The region suffers from high trade costs. There are differences in trade and logistics patterns of the countries in the sub-region. The difference in size of the economies is not the only explanation for this difference of almost two orders of magnitude. Rather, supply side constraints and inefficiencies in the economies play a large role. One effective way to look at the question is to estimate bilateral trade costs between countries in the region. The trade cost is the price equivalent of the reduction of international trade as compared with the potential implied by domestic production and consumption in the origin and destination markets. Higher bilateral trade costs result in smaller bilateral trade flows.¹⁵¹

The cost of trade between neighbors is typically twice as high among MENA countries as compared

Figure 93 | Iran Coverage Ratio



Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT);
C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; N: intellectual property. "N" category in China is omitted as the impact on the trade flow is around 0 percent.

with those in Western Europe. Annex 43 presents computed bilateral trade costs. This table shows that trade costs are high in MENA, especially for regional trade. Trade costs are consistently higher for agricultural products, reflecting a combination of higher transportation costs (per unit value) and time sensitiveness for perishables, but also potentially the impact of more control at the borders and NTMs.

Turkey has its lowest costs with the EU countries, and Israel. Turkey has had a trend of declining trade costs with its main partners, reflecting the increased competitiveness of the Turkish economy. Trade costs have decreased, in a slow but steady way with European countries, and quite importantly with China. Turkey is

¹⁵¹ Bilateral trade costs capture the impact of: (i) distance between the partners; (ii) logistics performance (cost, delay, reliability) and facilitation bottlenecks at origin and destination (irrespective of origin and destination); (iii) international connectivity of the countries: i.e., existence of regular maritime or terrestrial services, notably in view of the hubs and spoke organization of international transportation (shipping, air); (iv) facilitation at the border (customs and other procedures) for contiguous countries; (v) tariffs; and non-tariff barriers and restrictions to trade (quotas and standards)

¹⁵² Data are from the UNESCAP-World Bank Trade Costs Database. Trade costs are express in ad valorem equivalent.

among the few countries with a marked trend toward reduction of trade costs with most of its partners. Turkey's trade costs with Israel are much lower than with Arab countries in the Middle East. Despite the larger geographical separation, Turkey's trade costs with Maghreb are not larger than with Mashreq. Jordan-Turkey trade costs are higher than with Morocco. Trade costs with Maghreb have decreased too, and with Algeria, they have gone below 100 percent. For agricultural products, however, Turkey's trade costs are increasing with a fair amount of MENA countries when they are decreasing or stable with European partners and China.

In the past decade, Turkey's trade volume with the MENA region has increased considerably. However, trade costs between Turkey and Arab countries remain high compared to that of even more distant trade partners, including those in Europe. Trade costs with Arab countries, even adjusting for distance are typically 80-100 percent higher, including with the nearby Arab countries in Western Asia. This difference is primarily due to supply side constraints in Arab countries, and weak trade facilitation frameworks, including transport services and customs procedures. Before the uprisings, there were some active trade corridors southward from Turkey through Syria and Jordan. More than the infrastructure, these flows were handicapped by the lack of reforms in trade and transport facilitation, most notably in Syria and Iraq. These countries have been lagging in key areas such as customs reforms as compared with Maghreb or Gulf Counties. Cross border cooperation to facilitate trade has been typically overridden by security concerns. Turkey's trade costs with Oman have been volatile, but since 2004, they have, in general terms, decreased considerably. Trade costs with Iran, Qatar and Egypt have consistently decreased. Trends with Jordan, Kuwait and Lebanon have been less clear, but it appears that they have generally slightly decreased or remained constant. On the other hand, trade costs with Bahrain have increased.

These results confirm the seriousness of trade facilitation issues in the Levant, even in comparison with the Maghreb countries. Trade costs are partly endogenous, and reflect supply chain inefficiencies and bottlenecks with one of the other trade partners. The comparison with Israel, which is in the same geographical area, is even a clearer benchmark. The fact that agriculture products have an even more negative trend is evidence that the land corridors, especially important for those products, are having constraints as well. Several countries in the sub-region—especially Egypt, Turkey, Jordan, and Tunisia—have invested in robust reforms, notably in customs. Other countries should catch up. Reforms should be expanded to include other border agencies and promote authorized operators to address risk management and integrity issues.

Supply Chain Bottlenecks: Logistics Performance and Maritime Connectivity

Mashreq corridors are primarily road corridors. The rail infrastructure is rather old and has no more an important role for freight. Mashreq corridors are essentially: (i) the corridor through Aleppo, Damascus, Amman and Gulf countries. This corridor links Turkey to Dubai, and had been very active until uprisings (500 trucks a day in each direction); and (ii) corridors from Eastern Turkey to Iraq and Eastern Syria (Euphrates region). Currently the first route is no longer available and has been partially substituted with the third option, which is the development of Ro-Ro services, where trucks or trailers are loaded on ferry or Ro-Ro ships, from Turkey to Egypt and beyond through the Suez Canal to Jeddah. Turkey trades predominantly with the European Union, but also with Russia and Ukraine. In parallel, the trade with MENA countries has been growing very fast and currently accounts for one fourth of Turkey's export. This trade happens by maritime transport (container shipping and bulk) with North Africa and the Gulf countries, mostly through transshipments in one of the major ports in the Mediterranean. In the context of shipping, the efficiency of ports in the MENA partner countries is the primary supply chain bottleneck. With regards to rail transport, the domestic surveys show that inadequate

rail transport is a problem in most countries in the region, and this is one area of infrastructure investment that would improve trade outcomes.

The ease of moving goods internationally is not just about transportation and physical infrastructure. Bottlenecks come also from customs and other control procedures, or from the quality and availability of services such as trucking, freight forwarding or warehousing. The three pillars of logistics performance include: (i) availability and quality of trade-related infrastructures: ports, airports, roads, railroads; (ii) friendliness and transparency of trade procedures implemented by customs and other border control agencies; and (iii) development and quality of logistics services such as trucking, warehousing, freight, forwarders, shipping and customs agents, and value-added logistics services (third and fourth party logistics providers).

The Levant countries are weak in logistics performance. An empirical investigation of World Bank indicators of logistics performance suggests that countries in the region have sub-par logistics systems, but they do not lag too far behind expected levels of performance. As presented in Table 67, a simple cross-country model of logistics performance suggests that in 2010, countries in the region lagged expected logistics performance by 0.25 points on a five-point scale. 153 This average level of underperformance obscures some important heterogeneity, however. Iraq has logistics performance measures that lie well below the model prediction. Egypt also lags significantly, but not to the same degree. Egypt and Iraq underperform across most all areas of logistics performance. Lebanon is unusual in that it scores well above the model prediction in one sub-category, at least, logistics competence. More broadly it appears that Lebanon outperforms its peer countries elsewhere in the category of logistics competence. While the countries' costs of trading measures from Doing Business are slightly above the expected values (suggesting worse-than-expected performance), these estimates are not statistically significant.

The sub-region is demonstrating low performance in customs, infrastructure, and the ability to track and trace consignments. The application of this model to the

Table 67 Conditional Logistics Performance

VARIABLES	(1)	(2)	(3)
	LPI	DB Export costs	DB Import costs
In GDP	0.30***	-0.08***	-0.10***
	(0.016)	(0.021)	(0.026)
In population	-0.20***	0.09***	0.11***
	(0.021)	(0.028)	(0.031)
Landlocked	0.01	0.67***	0.57***
	(0.063)	(0.083)	(0.098)
Levant region	-0.25**	0.04	0.16
	(0.103)	(0.142)	(0.147)
Constant	-1.25***	7.47***	7.78***
	(0.308)	(0.402)	(0.493)
Observations	148	144	117
R-squared	0.724	0.410	0.371

Source: Independent variables are the World Bank's Logistics Performance Index (2010); and costs of trading measures from the World Banks 2010 *Doing Business* report.

individual components of the Logistics Performance Index¹⁵⁴ indicates that regional logistics systems are relatively weakest in infrastructure, customs, and, especially, the ability to track and trace shipments. Table 68 reports that, on average, track and trace scores in the region average a full half point below what regional characteristics alone would predict.

Countries fare comparatively better in terms of connectivity than in terms of facilitation and logistics. Two sets of coarse-grained indicators are available to

^{***} indicates statistical significance at the 0.01 level

^{**} indicates statistical significance at the 0.05 level

¹⁵³ The variables included are (logged) gross domestic product, population, and a dummy variable indicating whether or not the country is landlocked. A dummy variable indicating that the country is in the Levant region captures the degree to which these countries' performance in the area of logistics and trading costs differs from their expected performance.

¹⁵⁴ The logistics performance index (LPI) is the weighted average of the country scores on the six key dimensions: 1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; 2) Quality of trade and transport related infrastructure (i.e., ports, railroads, roads, information technology); 3) Ease of arranging competitively priced shipments; 4) Competence and quality of logistics services (i.e., transport operators, customs brokers); 5) Ability to track and trace consignments; and 6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

Table 68 Relative Performance of the Levant Countries in Six Components of the LPI

	(1) Customs	(2) Infrastructure	(3) International shipments	(4) Logistics competence	(5) Tracking and Tracing	(6) Timeliness
In GDP	0.31***	0.40***	0.19***	0.34***	0.32***	0.27***
	(0.021)	(0.021)	(0.018)	(0.019)	(0.021)	(0.019)
In POP	-0.24***	-0.28***	-0.12***	-0.22***	-0.20***	-0.17***
	(0.027)	(0.026)	(0.024)	(0.024)	(0.026)	(0.025)
Landlocked	0.01	0.01	0.02	-0.00	-0.00	0.01
	(0.079)	(0.079)	(0.071)	(0.073)	(0.079)	(0.074)
Levant region	-0.27**	-0.29**	-0.15	-0.17	-0.52***	-0.15
	(0.131)	(0.130)	(0.117)	(0.120)	(0.130)	(0.122)
Constant	-1.23***	-2.81***	0.05	-1.94***	-1.66***	-0.42
	(0.388)	(0.387)	(0.347)	(0.357)	(0.387)	(0.362)
Observations	148	148	148	148	148	148
R-squared	0.636	0.748	0.465	0.709	0.664	0.606

Notes: Outcomes variables are components of the logistics performance index.

assess sources of trade costs at the country level, connectivity on the one hand and logistics/facilitation performance on the other hand: (i) The Logistics Performance Index (LPI), which was developed by the World Bank and is based on a survey of logistics professional scoring countries on several dimensions including infrastructure,

services or procedures; and (ii) The Liner Shipping Connectivity Index (LSCI), which assesses how well a country is served by container shipping (countries with high activity or hosting shipping hubs have a high score). Table 69 shows that a geographical advantage is hampered by the lack of logistics performance and facilitation

Table 69 Logistics Performance and Shipping Connectivity

	LSCI 2010 (0-100)	LSCI Rank 2010 (out of 183)	LPI 2007 (1-5)	LPI Rank 2007 (155)	LPI 2010 (1–5)	LPI Rank 2010 (155)	LPI 2012 (1–5)	LPI Rank 2012 (155)
France	75	11	3.8	18	3.8	17	3.9	12
Spain	74	12	3.5	26	3.6	25	3.7	20
Italy	60	16	3.6	22	3.6	22	3.7	24
Greece	34	30	3.4	29	3.0	54	2.8	69
Turkey	36	29	3.2	34	3.2	39	3.5	27
Cyprus	16	64	2.9	49	3.1	46	3.2	35
Morocco	49	18	2.4	94	n.a.	n.a.	3.0	50
Algeria	31	35	2.1	140	2.4	130	2.4	125
Tunisia	6	105	2.8	60	2.8	61	3.2	41
Egypt	48	20	2.4	97	2.6	92	3.0	57
Lebanon	30	39	2.4	98	3.3	33	2.6	96
UAE	63	15	3.7	20	3.6	24	3.8	17
Saudi Arabia	50	17	3.0	41	3.2	40	3.2	37

Source: World Bank LPI 2012 and UNCTAD LSCI 2010.

^{***} indicates statistical significance at the 0.01 level

^{**} indicates statistical significance at the 0.05 level.

bottlenecks. There is a large port and shipping density in the Mediterranean and around the Arabic Peninsula, which provides a connectivity advantage for the region. Morocco and Egypt have invested in major and successful transshipment activities, such as the Tanger Med Port, which put them near the top of the global LSCI ranking. Hub ports in the south (none between Tangier in Port Said), intra-MENA connectivity is de facto lower than the global rankings suggest. For example, connecting Maghreb to Mashreq or Turkey may mean two trans-shipment stops and significant shipping leadtime (ten days or more within the Mediterranean). This contributes to intra-MENA trade costs, but reflects primarily a lack of economies of scale. 155 Turkey and Egypt's logistics performances are better compared with other Levant countries. At the other extreme lie Jordan, Lebanon, and Iraq. In the absence of sufficient demand for intra-regional shipping there is no policy fix.

Compared with countries of similar income level in Asia or Latin America, most Levant countries show lower performance in logistics. The mutual suspicion of fraud is widespread, especially on the point of PAFTA rules of origin, which stipulate a PAFTA content of 40 percent. As a result, regional trade tends to be less streamlined and subject to more controls by border agencies than established trade flows with major European partners. Only the UAE appears in the top quintile of logistics performance with OECD countries and emerging economies, acknowledging the success of Dubai as a logistics hub for other MENA or African countries (World Bank 2012a).

Logistics performance and the ability of countries to connect to international markets are dependent upon a range of policy interventions that can be implemented at the national or, increasingly, at the regional level. Priority areas include topics such as:

- Regional integration and development of trade corridors: border crossings, transit regimes;
- Customs reform and trade facilitation;
- Border management extending beyond customs;

- Port reform;
- Regulations and development of logistics services (such as trucking, third party logistics, freight forwarding, and warehousing);
- Development of performance metrics; and
- Building public-private coalitions for reforms.

Trade and Transportation Facilitation Reforms in MENA before the Uprisings

MENA countries have typically followed idiosyncratic path to reforms in trade and transport facilitation.

Trade and transportation has not been constrained by the availability of port and road infrastructure, however, countries in the sub-region, especially Syria and Iraq, typically lagged behind major trade facilitation reforms. The transit traffic has been especially affected by absence of active cross-border cooperation, resulting in very heavy and delay-prone control systems at borders between Arab states. On the positive side, Jordan has been the most active in reform, and the GCC countries are naturally more advanced.

Infrastructure is not a major concern in the Levant. Most countries have invested in key road or toll road infrastructure, port, and airport capacities. Key trade infrastructure exists and is concentrated along relatively narrow corridors. Jordan has invested in road infrastructure on its major corridors linking the Amman region to the neighboring countries and the Red Sea (Aqaba), including infrastructure to avoid congestion in the city (ring road) and to make truck traffic in Aqaba more fluid. Jordan has also started a major effort to develop its railroad network. The road network in Syria was in relatively good condition and could accommodate the Turkey-Mashreq transit traffic on N-S routes, as well as W-E traffic from the ports in Latakia and Tartus to

¹⁵⁵ A tentative effort to create a permanent coastal line between Maghreb countries was not sustainable until it was extended to also serve ports in Italy and Spain.

inland cities in Syria as well as the transit traffic towards Iraq. The connection between Lebanon and Syria was in a poorer state. Ports in the region improved quite a lot over the last decade; Aqaba developed as a transit ports for Iraq and greatly improved the truck turnaround. Syria did introduce concessions with CMA-CGM in Latakia.

Although countries in the sub-region have a relatively good road infrastructure, trucking services are unsatisfactory because of the continued use of outdated vehicles, excess capacity, and an inappropriate industrial structure of the road freight industry. Road transport has the potential to be the least cost alternative and the fastest time mode for most freight movements between Mashreq countries. Yet, significant restructuring of the road freight industry is needed for this potential to be realized. Improvement in trucking services has a greater potential to better facilitate trade than most other proposed measures, and therefore merits most attention. Some efforts to improve trucking services have been initiated, such as combining regulatory reforms with financial incentives. Jordan has been the most successful, in this regard, and has achieved significant modernization of its fleet and provision of better services for international trade. In addition, Syria has recently signed a memorandum of understanding with the International Road Transport Union to review its international trucking services.

Together with inefficient trucking industries, the associated transit regime is probably the most important impediment to sub-regional integration and to the improvement of trade competitiveness. The Turkish trucking company uses the global system TIR. This system, partially computerized, is also used in Jordan and Syria to facilitate transit procedures, however, these two countries tend to impose their own additional rules to the TIR system making transit less efficient with additional documentation or operation of convoys.

Differences in customs reform targets might create a problem for cross-border harmonization in the Levant. Despite common WCO-sanctioned principles, there are differences in customs management (higher

emphasis on security in Jordan, for example) and control or implementation techniques between the countries in the east and countries influenced by EU practices like Turkey or the Maghreb countries, the first one being in a customs with the EU, and the others in deep association agreements. This may not be a practical problem for most trade operations, but could become a problem for cross-border cooperation and harmonization that is sought between MENA countries. For instance, Jordan has adopted idiosyncratic special regimes, including a "golden list" of traders with simplified procedures and a GPS-based transit system, both of which are very different from the European techniques and internationally recommended practices implemented in Turkey and the rest of the ECA region. The customs system in Syria was very antiquated with heavy reliance of customs brokers, and lack of harmonization within the country. The customs system in Iraq is being slowly reconstructed.

Libya engaged in an ambitious infrastructure program and reformed some logistics-related activities. Tunisia assisted with these efforts, resulting in an effective and consistent cross-border arrangement to facilitate the fast-growing movement of goods and vehicles at the crossing of Raz Djair. The process of Libyan reform in customs and border management was more chaotic, despite Tunisian help on some aspects such as the design of automation. Modernization suffered from multiple interventions and non-transparent contracting of services with third countries. Libya, along with other Arab countries, adopted liberal policies in air transportation.

Despite a simplification of customs procedures and reduced clearance times, the efficiency of the sub-regional cross border procedures is falling behind. Border crossing with Turkey used to be relatively streamlined. In comparison, intra-MENA crossings are extremely complex with a lot of check on each side of the border. Coordination between border agencies within countries is still in its early stages and behind that of competing countries. A World Bank Mission counted about 10 stops to cross between Syria and Jordan in 2009. Even the idea of "one-stop border agencies" is still largely limited to

 Table 70
 Selected Indicators and World Rankings 2012

	E	Egypt		dan	Leba	anon	Turkey	
	Score (1–100)	World Rank (1–141)	Score (1-100)	Score (1-100)	World Rank (1–141)	World Rank (1–141)	Score (1–100)	World Rank (1–141)
Government effectiveness	29.6	91	43.0	64	31.9	86	50.2	49
Regulatory environment	44.5	126	77.9	39	70.1	56	56.4	101
Business environment	43.3	86	55.1	60	47.4	73	47.7	72
Infrastructure	33.6	70	27.5	97	33.5	72	34.0	67
Investment protection	46.7	71	22.3	100	35.9	76	58.2	48
Intensity of local competition	52.3	110	72.7	32	73.9	26	78.2	12

Source: WIPO (2012), Global Innovation Report 2012, Geneva: World Intellectual Property Organization.

concentration of customs procedures in a single location rather than a similar concentration of all border agencies in the same location.

The Gulf countries stand apart from the developing MENA countries in having higher performance in facilitation, infrastructure and logistics. 156 The Emirates have developed a world-class logistics hub in Dubai. Furthermore, the Gulf Cooperation Council (GCC) is the most advanced model of sub-regional integration in the broader MENA region. To accelerate integration, the member states signed an economic agreement in December 2001, which brought renewed focus on trade and investment. Regional security threats, the proliferation of regional trading agreements worldwide, and the rising forces of globalization have hastened integration efforts in recent years. The GCC Customs Union Agreement was signed in 2003.¹⁵⁷ The GCC declared common market status in 2008. The GCC Common Market aims to create a single environment where citizens of member countries enjoy equal rights and privileges, including the rights to move, settle, work, receive social protection, retirement, health, education and social services, and engage in various economic activities and services. It also calls for unrestricted rights of ownership of property and equity, movement of capital, and similar tax treatment. The planned establishment of the GCC single currency in 2010 has been put on hold following the decision of two members (Oman and the UAE) to opt out.

Weak Regulations and Governance as Barriers to Trade

The Levant region will face challenges to become an optimal regulatory convergence club. Global Innovation Report surveys a range of indicators of economic, institutional, regulatory and innovation-related performance among the 141 countries. Regulatory performance indicators for the Levant reveal that most countries score weakly, generally in the last or next to last quartile, highlighting some of the challenges the sub-region faces in embracing a more service centric development model, as shown in Table 70. Excluding Turkey, whose own rankings across several indicator categories somewhat belie an OECD member country and would-be member of the European Union, the sample group displays a very high level of regulatory heterogeneity, characterized by generally weak institutions of regulatory governance, poor tertiary education performance; an inadequate supply of knowledge workers needed to nurture the growth of higher value-added employment in manufacturing and

¹⁵⁶ This sub-section is based on World Bank 2010b.

¹⁵⁷ The agreement aimed to remove restrictions on internal trade and establish common external tariffs. It succeeded in instituting a common external tariff of five percent on most imported merchandise and zero percent on essential goods (some 400 items). Free trade applies to goods of GCC origin, defined as having a minimum of 40 percent local value.

services; infrastructural weaknesses likely to inhibit integration into regional or global supply chains, as well as a generally low propensity to innovate. The Levant governments should turn their attention to supplying the regulatory frameworks, institutions and the types of human capital able to sustain service sector growth.

A further, if more indirect, proxy of overall regulatory quality and governance can be derived from corruption perceptions. On the Corruption Perception Index (CPI), developed by Transparency International, none of the countries rank among the 50 least corrupt in the world, with only Turkey (54th) and Jordan (58th) ranking in the top 60 (see Table 71). The performance in the sub-region ranges from weak to desultory, suggesting the prevalence of institutions of governance and regulatory frameworks that are likely to be opaque, capricious in the way regulatory decisions are made, with a propensity

Table 71 Corruption Perception Index 2012

	Ranking (out of 174 countries)
Egypt	118
Jordan	58
Iraq	169
Lebanon	128
Turkey	54

Source: Transparency International 2013.

to favor incumbents over new entrants (domestic or foreign), inadequately open to civil society voices (including the media), and weakly geared towards supplying the range of public services best attuned to reducing poverty, empowering greater female participation in the labor force, and enhancing overall development prospects.

10

REGIONAL TRADE AGREEMENTS AND THE SUGGESTED DESIGN OF THE LEVANT ECONOMIC ZONE

n addition to their bilateral FTAs, the countries in the sub-region participated in a number of regional integration arrangements. Turkey joined the EU Customs Union in 1996. Egypt, Jordan, and Lebanon concluded Association Agreements (AA) with the EU in 2001, 2002, and 2006, respectively, as part of the Euro-Mediterranean (Euro-Med) Partnership. Syria initiated an AA with the EU in 2008, but has not yet ratified it. With 12 other Arab countries Jordan, Lebanon, Egypt, and Iraq participate in the Pan-Arab Free Trade Area (PAFTA), entered into force in 1998. Jordan, with Egypt, Algeria, and Morocco established the Agadir Free Trade Area as part of the Euro-Med Partnership, which became effective in 2007. Also, Turkey, Syria, Jordan, and Lebanon initiated negotiations to establish the Levant Free Trade Zone (LFTZ) in 2010. The negotiations were suspended after political disruption in Syria.

The sub-region has yet to reap the full benefits of existing regional arrangements. Despite steady advances made in liberalization of trade in goods, the achievements remain significantly below potential. Apart from Turkey, the Levant countries have failed to take full advantage of the network of trade agreements with the EU and among themselves. In some cases this is due to the design of the agreements (shallow agreements). Others are explained by the weak implementation capacity of the

signatories or lack of enforcement and implementation mechanisms accompanying the agreements. In particular, with the exception of PAFTA and Agadir, existing regional agreements cover essentially trade in industrial goods and target elimination of tariffs as binding legal commitments.¹⁵⁸ As a result, the agreements have led to

¹⁵⁸ AAs, PAFTA, and Agadir include additional negotiations on elimination of NTM pertaining to technical standards, SPS, trade

"shallow" integration. Exclusion of services and agriculture from integration undermined the trade promotion effects of tariff reductions. Furthermore, the complementary behind-the-border reforms regarding the business environment and investment climate were not included in the agreements as legally binding constraints—an important design flaw that adversely affected improvement of competitiveness, particularly in the less developed countries.

Ongoing efforts of integration must take account not only of the current levels of trade barriers between countries in the sub-region—and the scope for the additional reduction of such barriers—but it must also recognize the adjustments, and lessons learned from the integration process that has already been taking place. This chapter reviews the current regional agreements, identifies the weaknesses and proposes recommendations for a possible economic zone so all countries in the sub-region benefit from deeper integration.

Preferential Trade Agreements in the Euro-Med Area

Countries in the sub-region have pursued regional integration for years and their earliest efforts to integrate pre-date those of other developing regions. In the course of 50 years, Arab states concluded numerous agreements to reduce trade barriers on a preferential basis as shown in Table 72. Many of them overlapped and were eventually superseded with the formation of the Pan-Arab Free Trade Area (PAFTA), which resulted in the removal of barriers to trade in manufactured and agricultural products among MENA economies and Turkey. The EuroMed Association Agreements (AAs) and the bilateral Free Trade Agreements (FTAs) with Turkey aimed to extend the free trade area in the MENA region to the

facilitation as well as gradual liberalization of agriculture and services, competition policy, government procurement, investment, and capacity building. However, progress on these negotiations has been very limited.

North by including two major markets—the European Union (EU) and Turkey. Many of the MENA countries have already negotiated the terms of a free trade agreement with Turkey and are now at various stages of the process of implementing it. While Israel has completed its liberalization, the other economies with agreed-upon FTAs will not have fully phased in their tariff reductions toward Turkey's exporters until 2018 (Jordan), 2020 (Egypt), 2014 (Tunisia), or 2015 (Morocco).

As a result of Turkey's Customs Union with the EU, zero tariffs are applied on imports and exports, and each economy applies a common external tariff on imports deriving from third countries. This implies that on imports from non-FTA, non-EU partner countries, Turkey applies the same import tariff as the European Union applies. However, there are some exceptions to the Turkey-EU Customs Union, and these include agricultural products, which are not covered, as well as special treatment for trade in steel products and textiles. Under the EU-Turkey Customs Union, Turkey is required to conclude preferential trade agreements with the non-EU members of the Euro-Med, including Syria, Jordan and Lebanon.

The first milestone of the nearly decade long PAFTA process was the removal of tariffs on intra-PAFTA merchandise trade in January 2005, but reforms intended to liberalize services have been lagging (Hoekman and Sekkat 2010). The preferential trade agreements (PTAs) with the EU and Turkey have been more limited in scope than PAFTA as they targeted mainly trade in manufactured products, while leaving protection on agriculture and processed foods (Table 73). Still, the agreements aspired to gradual liberalization of agriculture and services and improvements in competition policy, government procurement, investment, and capacity building, but progress on these dimensions has been limited. As a next step, PAFTA members are considering opening up their services sectors to trade and investment.

Despite slow progress in implementation, trade agreements generated some positive impacts for re-

Table 72 Preferential Trade Agreements in MENA*

	EU-MENA AAs	US-MENA PTAs	Agadir	PAFTA	Turkey-MENA FTAs	LFTZ
Turkey	1996 (CU)					Planned
Syrian Arab Rep.				2005	2007	Planned
Jordan	2002	2001	2007	2005	2011	Planned
Lebanon	2006			2005	2010	Planned
Iraq				2005		Planned
Egypt, Arab Rep.	2004	Via Jordan	2004	2005	2007	
Tunisia	1998		2004	2005	2005	
Morocco	2000	2006	2004	2005	2006	
Algeria	2005			2009		
Libya				2005		
Yemen, Rep.				2005		
GCC economies				2005		
Palestinian Territories		1985 (via Jordan and Israel)		2005	2005	

Note: PAFTA was originally known as Greater Arab Free Trade Area (GAFTA).

 Table 73
 Trade Policy under PAFTA, Turkey-MENA FTAs and Potential Goals of a Levant Economic Zone

PAFTA/GAFTA	Turkey – MNA FTAs	EU – MNA FTAs	Goals of a Possible Levant Economic Zone
■ Zero tariffs and other charges on all industrial and agricultural goods (by Jan 1, 2011 for Yemen and earlier for other countries)	■ Low tariffs on industrial goods.	Zero tariffs and charges on manufactured goods by 2010.	Further concessions on trade in industrial products are not possible independent of talks with the EU because Turkey's membership in a Customs Union with the EU.
■ Gradual reduction in NTMs	 Tariffs on agricultural goods and agro processing services remain. Gradual reduction in NTMs. 	 NTMs on industrial products remain although these have become less restrictive. Tariffs and NTMs on agricultural products and services remain to be negotiated. 	 Tariffs cuts on agricultural goods and agro processing services can be negotiated. Reductions in NTMs can be negotiated and can serve to open further trade in agricultural and non-agricultural products.
■ High logistics costs	■ High logistics costs	■ High logistics costs	Gradual reduction in logistics costsServices liberalization

gional trade. Most of the PTAs within MENA included negotiations to reduce the restrictive impact of NTMs on trade. Some MENA countries have made considerable progress towards this goal. The decline in NTMs has been most dramatic for agricultural products. Considering the great dependence of MENA countries on imported food and the increase in food prices over the past decade, this is a positive development. Yet, these are aggregations of AVEs at the HS6 product level that hide substantial heterogeneity across products.

In the case of the Euro-Med Partnership, initiatives have been launched to move forward to gradually replace the "shallow" integration that characterizes the AAs toward "deep and comprehensive" FTAs (DCFTAs). In particular, the EU and its Mediterranean partners agreed in 2009 on the Euro-Mediterranean Trade Roadmap beyond 2010 which aims to go beyond reduction of tariffs to include measures to tackle elimination of the remaining NTMs and greater harmonization of regulatory policies as well as firmer legal commitment

^{*}Shows the years when agreements were ratified, except for Lebanon which signed the FTA with Turkey in 2010 and Algeria signed PAFTA in 2009, but these have not been ratified yet.

in phased liberalization of agriculture and services. The ultimate objective of the Roadmap, which is the main goal of the Barcelona Process (See Box 2), is to turn the AAs (North-South agreements) and the FTAs among the Mediterranean members (South-South agreements) into a deep and comprehensive Euro-Mediterranean Free Trade Area. In this context, in 2011, the EU and the Agadir members decided to start negotiations for a DCFTA. A successful conclusion of these negotiations would be a major step towards revitalizing regional integration and realizing the objective of creating a Euro-Mediterranean Free Trade Area.

The EU and the Agadir members decided to start negotiations for a DCFTA, which would replace the AAs between the EU and the Agadir members. The Agadir Agreement has not resulted in marked improvement in trade among the members because tariffs both on industrial and agricultural products were already eliminated under PAFTA and the integration remained shallow. The planned DCFTA will go beyond removing only tariffs to cover all regulatory areas of mutual interests and behind-the-border policies. A successful conclusion is considered to be a major step toward the objective of creating a deep and comprehensive EuroMed FTA. Moving towards a deeper integration with the four Agadir countries, rather than all Mediterranean countries with an AA with the EU, indicates that the Parties have chosen a variable geometry approach in strengthening regional integration, which allows sub-groups to move faster than the whole group or move to a deeper form depending on country-specific conditions. Establishing a successful core DCFTA would make it easier for the other partners to participate later when they are ready.

The Euro-Med experience has implications for PAFTA and a possible Levant Economic Zone. Because of PAFTA's large size, diversity, and weak political mandate and administrative capacity, the degree of depth it can achieve in regional integration is limited. For PAFTA, a reasonable way to move forward would be to maintain the variable geometry approach towards a deeper trade integration (a la Euro-Med DCFTA) with

the priority given to elimination of the remaining NTMs and improvement in complementary behind-the-border policies pertaining to the broader investment and business environment. The Levant Economic Zone should be considered as a sub-group of the Euro-Mediterranean Partnership and negotiated in parallel with the DCFTAs as a deeper integration agreement. It would also replace the shallow bilateral FTAs between the trading partners.

Impacts of Preferential Trade Agreements in the Euro-Med Area

There is a consensus in the literature that the benefits of free trade in goods for PAFTA members have been limited (Testas 1998, 2002; Al-Atrash and Yousef 2000, Freund and Portugal-Perez 2012). Ex-post assessments by Testas (1998, 2002), which are relatively dated and consider mainly inter-industry trade in the Maghreb, suggest that the Association of South-East Asian Nations (ASEAN) had a much more profound economic impact on its members than the Arab Maghreb Union (AMU). Another assessment by Al-Atrash and Yousef (2000) concludes that intra-Arab merchandise trade was lower than what would be predicted by gravity models. The Agreement has not contributed in a significant way to the trade flows within the Arab world. Specific standards, lengthy bureaucratic and administrative procedures at the borders, and high transit fees, are still reported as costly/lengthy procedures.¹⁵⁹ Lack of trust in the certificates of standards and rules of origin prepared in member states are also considered important barriers to intra-PAFTA trade.

The recent ex-post assessment by Freund and Portugal-Perez (2012) also suggests that the effects of preferential trade agreements signed by MENA countries between 1994 and 2009 on merchandise trade have been small. They examine the effects of GAFTA, Agadir, EU Association Agreements, and the MENA bilateral

¹⁵⁹ For a detailed assessment see Hoekman and Zarrouk 2009.

Box 2: Euro-Mediterranean Partnership

Barcelona Process

The Euro-Med Agreements. The Euro-Med Partnership, a cooperation agreement between the EU and 12 Mediterranean non-member countries (Med12), was established in 1995 with the Barcelona Declaration. The Med12 countries are: Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestinian Territories, Syria, Tunisia, and Turkey. Euro-Med aimed at creating an area of shared prosperity in the Mediterranean. A key policy instrument to achieve this objective was to progressively establish AAs between the EU and the Med12 (North-South agreements) and FTAs among the Med12 countries (South-South agreements). The EU agreed to support the Barcelona Process with substantially increased financial assistance. The bilateral agreements would later be merged to establish the Euro-Med FTA by 2010, which would involve elimination of tariffs and NTMs affecting trade in manufactured products. Trade in agricultural products and services would be liberalized later in stages. The work program developed for implementation of the Barcelona Process also included harmonization of the customs rules and procedures, standards and certification procedures, and rules of origin. The progress would be monitored through periodic meetings of the Ministers of Foreign Affairs of all members.

The Barcelona Process has been implemented through a set of AAs between the Med12 and EU and FTAs among Med12 partners. So far, the EU has concluded seven AAs. An AA was initialed with Syria in 2008, but not yet ratified by Syria. An interim AA was signed with Palestinian Authority in 1997. Libya has an observer status since 1999. Turkey joined the EU Customs Union in 1996. Regarding the FTAs among the Med12, the Agadir Agreement between Jordan, Egypt, Morocco, and Tunisia is the main regional FTA arrangement, which is open to other Med12 countries. It was signed in 2004 and came into force in 2007.

Association Agreements. The AAs have a similar structure. The key components are the following:

- Tariffs and other charges having equivalent effect as well as all NTMs applicable on goods traded between the EU and the Med12 partners will be eliminated. The schedule of tariff liberalization is asymmetrical. The EU reduces its import duties and other charges on goods imported from the AA partners on the date the agreement takes effect, while the AA partners commit to phase out their import duties and other charges on goods imported from the EU gradually over a maximum period of 12 years according to an agreed upon schedule.
- Liberalization is limited to industrial goods with some exceptions in the case of the Med12 partners, which are listed in the annexes. In the case of agricultural, processed agricultural, and fisheries products, the AAs include detailed rules of trade in separate protocols, and provisions for periodic review of these rules with a view for further liberalization. Negotiations for further liberalization in these areas have been slow.
- The need for liberalization of trade in services beyond their commitment to the GATS is recognized, and will be considered in future in the context of Euro-Med Partnership process. With some Med12 partners the process of further liberalization of services has already started.
- The AAs also have an asymmetric "infant industry" clause. Under this, if some Med12 partners' industries have difficulty in adjusting to the new trade regime, the Med12 partners will have the right to reinstate the original import duties for a maximum period of five years. This derogation may be used only in the case of infant industries, or certain sectors undergoing restructuring or facing serious difficulties, particularly where these difficulties cause major social stress.
- The Pan-Euro-Med rules of origin are applied to trade under the AAs, which allow for diagonal cumulation of origin among member countries.* Evidence of the originating status of products is furnished by the EUR.1 and Euro-Med movement certificate.
- National treatment will apply to foreign capital without restrictions on transfer of proceeds with periodic review with a perspective of elimination
 of remaining sectoral restriction.
- Other provisions include cooperation in areas such as political, social and cultural matters, intellectual property rights, competition policy, implementation of standards and conformity assessments, education, tourism, environment, approximation of legislation, transport, customs administration, energy, capacity building, and technical assistance from the EU.

The Agadir Agreement. The Agadir Agreement is an initiative towards realizing the final objective of the Euro-Med Partnership, a FTA between the EU and the Med12. It is an FTA between Egypt, Jordan, Morocco, and Tunisia, which entered into force in 2007. The four signatories are members of the Med12 and the PAFTA, and also have AAs with the EU. The Agreement is open to further membership by the Med12 countries. If implemented effectively, the Agadir may serve as the core group that would gradually evolve into the planned broader Euro-Med FTA as other Med12 partners participate.

The Agreement commits the parties to removing all tariffs and other charges on trade between them within a five-year period. Most of the tariffs are to be eliminated with the Agreement's entry into force. An "infant industry" clause, a la AAs, is also included. The Agreement covers both industrial and agricultural products. With regard to services, the member countries agreed to implement their commitments to the GATS and review these commitments periodically with a view for further liberalization. It adopts the Pan-Euro Med rules of origin, which allow for diagonal cumulation of origin among its member countries. In addition, the Agreement provides for close cooperation in a number of economic areas including intellectual property right, standards, government procurement, financial services, contingency measures, and dispute settlement.

Box 2: Euro-Mediterranean Partnership (continued)

Union for the Mediterranean

The Barcelona Process was re-launched in 2008 as the Union for the Mediterranean (UOM) to revitalize implementation and raise the political level of strategic relationship between the EU and the partner countries. The UOM includes 27 EU member states and 16 Mediterranean countries (Med16). The UOM aims to supplement the Barcelona Process and the AAs with (i) enhancing the sense of co-ownership by partner states, (ii) correcting the bias in favor of the EU in the management of the Barcelona Process, (iii) increasing the visibility and perception by citizens that the initiatives are taken to address their pressing needs, and (iv) ensuring a commitment to tangible, regional and transnational projects. A key objective is to place the trade and integration issues into the broader domestic policy agenda, and to implement a short list of regional projects to promote regional cohesion and economic integration, and to develop infrastructural interconnections.

European Neighborhood Policy

The Barcelona Process runs parallel with the broader EU initiative of European Neighborhood Policy (ENP), which aims at achieving deeper economic integration between the EU and its neighbors. The ENP was launched in 2004 with an action plan to indicate how the new approach would work in practice. The ENP initiative goes beyond trade issues. It also covers social, political, and legal aspects of cooperation, including approximation of the legal and regulatory structure of the neighbors to the EU's, intellectual property rights, public procurement, governance, and political and social reforms. The ENP replaced Mediterranean Assembly (MEDA) program through which EU provided financial and technical assistance to the partner states. Most Mediterranean and East European members are included in this program. The participating countries are: Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestinian Territories, Syria, Tunisia, and Ukraine. It is implemented through bilateral ENP Action Plans that are agreed between the EU and each partner. The medium-term objective of these Action Plans is to prepare the ground for deeper Association Agreements with the EU and the Mediterranean partners.

Pan-Arab Free Trade Area

The Pan-Arab Free Trade Area (PAFTA)—originally known as the Greater Arab Free Trade Area (GAFTA)—was signed in 1997 by 17 Arab countries and came into force on January 1, 1998. The signatory countries are: Algeria, Bahrain, Egypt, Iraq, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. Under the Agreement, import duties and other charges with an equivalent effect on all industrial and agricultural goods were eliminated by January 1, 2005 according to an agreed upon schedule (January 1, 2011, in the case of Sudan and Yemen). A large number of PAFTA members have bilateral agreements with the EU, EFTA, U.S., and Turkey. Eight PAFTA countries are members of the Med12.

The Agreement provides for negotiations for elimination of NTMs and liberalization of trade in services. These negotiations have not yet been launched. The agreed preferential rules of origin criteria are based on the principle of local Arab content, whereby the added value of any product must not be less than 40 percent of its value when produced in a member country. These rules are provisional; specific rules of origin are under discussion. The agreement also provides for cooperation in other economic areas. The principal entity responsible for implementing the Agreement is the Economic and Social Council of the League of Arab States (LAS).

*Note: Inputs originating in any of Med12, in EC countries or in EFTA countries may be used for the purpose of duty-free exports to EU markets under their Association Agreements with the EC. This should be contrasted with the bilateral rules of origin included in the FTAs Jordan and Morocco signed with the U.S.

FTAs with Turkey and the U.S. on the merchandise imports of signatories of these treaties. Most of these agreements had no significant impact on MENA's exports. A notable exception is the bilateral agreement between Jordan and the U.S. The surge in Jordanian exports to the U.S. started before the implementation of the bilateral PTA between the two countries and is likely due to preferences granted to firms in Jordanian Qualifying Industrial Zones. These zones extend the market access privileges of the U.S.-Israel FTA to approved zones in Jordan where firms produce goods in collaboration with Israeli firms. ¹⁶⁰ According to their analysis, EU-MENA and Turkey-MENA agreements had negative effects on

MENA's merchandise exports to the EU and Turkey, respectively, and the effect on EU exports and Turkey's exports of goods to MENA was not significantly different from that of standard PTAs. Furthermore, the effects of intra-MENA agreements and EU-MENA agreements were much smaller than those of similar agreements negotiated by EU members at the time of EU accession.

¹⁶⁰ Goods produced in these zones have to comply with rules of origin in order to be eligible for free access to the U.S. market. At least 12 percent of the good's value must be added in Jordanian zone, eight percent by Israeli firms, 15 percent can come from Jordan, Israel, the Palestinian Territories, or the U.S. and the remaining 65 percent can come from any other country.

Freund and Portugal-Perez (2012) explain the latter difference with the fact that the EU *accession* agreements granted greater access than the EU *association* agreements and in anticipation triggered large foreign direct investment flows. Another reason for the weak and even negative effects of the bilateral agreements with Europe and Turkey is the fact that the supply response in MENA has been weak. There has been no boost to exports from MENA countries to Turkey and Europe.

A third reason for the small trade impacts of these agreements is the fact that most of them have been shallow. They have resulted in the removal of border protection in the form of tariffs, and even more recently in the form of NTMs, but other costs associated with transport and logistics have not declined, while fees and markups due to monopolistic domestic structures might have increased and kept domestic prices of imported goods at elevated levels. This suggests that any successful PTA between MENA and its partners to the North must contain deep liberalization measures that effectively open markets and reduce trade-related costs.

The literature on ex-ante evaluations of PAFTA is not sizable, but findings from these evaluations are consistent with the idea that preferential agreements must be deep in order to result in sizable gains for member countries. Most of these studies focused on specific MENA countries. One such example is Konan (2003) who employed CGE models for Tunisia and Egypt to assess the impact of shallow integration, involving only reductions in tariffs on goods for PAFTA, Euro-med initiatives and MFN liberalization and several deeper scenarios. The latter included (i) removal of NTMs and (ii) services liberalization, consisting of tariff cuts on cross-border trade as well as the removal of barriers to FDI in the service sector. Konan (2003) finds that the benefits of trade liberalization increase with deepening of the commitments. Her results capture the effects of trade diversion.

It is important to include services in trade agreements. MENA countries have been relatively successful in expanding exports of services during the 2000s.

Between 1998 and 2008, MENA's share in world exports of services increased at twice the rate registered by mid-dle-income countries, excluding China (World Bank 2011a). By contrast, MENA's share in world exports of non-oil goods expanded at the same pace as that of middle-income countries other than China. However, estimates suggest that countries such as Lebanon, Syria, Egypt, Yemen, Iran, and Algeria under traded relative to their non-oil export potential, even when services are included and natural resources and other factors are controlled for (Ianchovichina et al. 2011).

The opening of MENA's service sectors has the potential to generate a productivity boost and much larger welfare benefits than those associated with improved market access for merchandise goods. Konan (2003) found that while the benefits of border liberalization were positive, reforms facilitating FDI induced substantial additional gains in Egypt and Tunisia. Bchir et al. (2006) observed similar increases in the size of the gains in the case of a move from a simple PTA to a Custom Union among Maghreb countries. Walmsley et al. (2006) found that China's benefits from acceding to the WTO would stem mainly from a boost to investment and productivity in services.

These findings are not surprising. Hoekman and Messerlin (2001) point out that services are a critical determinant of a firm's competitiveness and policies that result in high cost, low quality services implicitly tax the industries that buy services inputs. Policies designed to open the service sectors to investment and competition could lower trade costs by reducing prices of transport services and improve the variety and quality of finance, telecommunications, logistics, and professional services. Such reforms in turn could boost the productivity and profitability of manufacturing, and stimulate employment creation. Foreign direct investment is an important venue to access best practices and new services, given their limited tradability.

Since many service activities are subject to investment restrictions, service sector reform is closely linked to privatization reform, the removal of licensing,

operating, and entry restrictions. Services trade and investment policies in MENA are on average more restrictive than policies in countries with similar incomes in other parts of the world (Hoekman and Sekkat 2010). Reforms aimed at bringing down these restrictions will be beneficial at the national level, but there will be opposition to such reforms because of the dominance of monopolies in some sectors. Furthermore, the state continues to play a large role in many Arab economies. Deeper reforms will require privatization and the abolition of entry and exit restrictions for new firms, reduction in red tape at the border and government offices, and improvements in financial and intermediation services. Government employees, especially those responsible for enforcement of regulatory policies and procedures at the border, and specific services industries, will be crucially important to achieving improvements in these areas. Hoekman and Messerlin (2001) insist that according to cross-country evidence, sectoral regulators can be a serious constraint to the adoption of more pro-competitive policies in services because they might be concerned with supporting domestic incumbent firms and maintaining the status quo as they have little incentive to encourage new entry and greater competition.

The relative importance of transport and logistics costs as obstacles to trade in the Euro-Med area has increased. In the late 1990s, the literature began to identify the negative impact of public monopolies in ports and poor infrastructure for loading and storing goods on the costs for handling and shipping containers in the developing MENA countries. The situation was similar in air transportation, professional services, fixed line telecommunications, and utilities. 161 Prohibitions on drivers originating in certain countries, arbitrary changes in documentation requirements, surcharges and discriminatory taxes, and prohibitions on obtaining cargo in the country of destination to take back to the country of origin imposed severe costs on intra-Arab trade. Using a survey of firms in eight Arab countries, Zarrouk (2003) estimated that in 2000 the cost of getting goods across borders was on average 10 percent of the value of transported cargo.

Antidumping import restrictions have significant impact in the region. Exporters that are targeted by the application of a new antidumping measure or a safeguard measure are expected to have their exports subsequently fall, especially relative to exports from non-targeted suppliers. In many instances this export reduction can be quite dramatic, since the new import restrictions are frequently applied at prohibitive levels. On the other hand, exporters of a competing product that are not targeted by the application of TTBs-because they were either excluded from the antidumping import restriction or they were exempted from the application of a safeguard—may sometimes have their exports increase substantially. Exemption implies that the structure of the new import restriction has resulted in them receiving an additional tariff preference relative to the targeted exporting countries. Legally under the WTO Agreement's Article 9.1, those countries that have less than three percent of the import market and collectively less than nine percent of the market are supposed to be exempted from the application of the safeguard and thus provided this preference. In a number of cases, these exemptions and/ or the exclusion from antidumping import restrictions can lead to substantial increases in exports—often with unintended consequences.

The Proposed Levant Economic Zone: the "New Levant"

"The Levant Quartet" FTA negotiations have been suspended because of political disruptions, but the members are determined to resume negotiations as soon as the situation normalizes. In 2010, Turkey, Syria, Jordan, and Lebanon decided to consolidate their bilateral FTAs into the Levant Free Trade Zone (LFTZ) among the Four (The Levant Quartet). Private sector representatives from Turkey, Jordan, Lebanon, and Syria discussed

¹⁶¹ See, for example, studies by Hoekman and Zarrouk (2009) and Rosotto et al. (2005).

the modalities of strengthening economic cooperation and integration among the four countries. The participants set up the Levant Business Forum (LBF) and issued a declaration (Istanbul Declaration) describing, in broad terms, the objectives of the Forum and the scope of the economic cooperation among the Quartet.

According to the Declaration, the short-term objective of the LBF is to establish free circulation of goods and people among the Four. This includes establishment of the LFTZ with visa-free travel arrangements, the political decision on which was made during a meeting of the Foreign Ministers in Istanbul in June 2010. The possibility of deepening and widening of the LFTZ is envisioned in the Declaration in a wide range of areas including investment, agriculture, some services, energy, and institutional capacity building.¹⁶² The Declaration also defines a longer-term objective: formation of a "wide prosperity and stability zone through economic cooperation" in an area encompassing the Mediterranean, the Red Sea, and the Arabian Gulf. This objective, which is called "The Three-Seas Vision," opens the possibility of expanding the planned LFTZ to include other countries in the region.¹⁶³ The responsibilities of the LBF include undertaking detailed preparatory studies for the establishment of the LFTZ and other areas of cooperation in addition to maintaining the economic dialogue among the business communities of the Quartet. The Secretariat of the LBF was set up in Beirut, housed at the International Chamber of Commerce of Lebanon.

Egypt and Iraq are natural partners of any economic and trade integration in the Levant Zone because of their markets and trading patterns. A potential economic integration area, including Turkey, Jordan, Lebanon, Syria, Egypt, and Iraq could play an important role in stimulating economic growth in the region. All countries (except for Iraq) are members of the Med12. Therefore, the Levant initiative could be part of the Barcelona process. It is important to find a solution to include Iraq in this potential zone as a preferential partner to increase the benefits of deeper economic integration in the sub-region. Currently, the EU Customs Union

membership does not allow Turkey/Iraq FTA because Iraq is not a Euro-Med member.

A Levant Economic Zone will consolidate the bilateral FTAs that Egypt, Lebanon, Jordan, and Syria have with Turkey, and improve market access for Turkey and Iraq to each other's economies. Political and security considerations surely are major objectives behind the idea for the Levant Economic Zone. Egypt, Lebanon, Jordan, and Syria already have bilateral FTAs with Turkey and, as members of PAFTA, benefit from free trade in goods amongst MENA countries. If political commitment is strong, opportunities exist to realize economic benefits by moving from "shallow" bilateral FTAs to "deep and comprehensive" integration within a common economic zone. If it is designed well and implemented effectively, the "New Levant" could play an important role in realizing the Euro-Med objective of a deep and comprehensive FTA between the EU and the Med12. It would also replace the bilateral FTAs between the Levant partners.

The Levant countries should take unilateral measures to remove barriers to trade. Deepening and widening of integration will require improvement in the trade regime and trade facilitation in each country. The countries will need to undertake reforms unilaterally on a most favored nation or on a preferential basis. Policies, discussed in this report, should be put in place to remove

¹⁶² The Declaration lists the possible areas of cooperation under 14 headings: free circulation of goods and people, logistics and communication, entrepreneurship, finance, intra-zone investment, agriculture, energy, tourism, infrastructure projects and their funding, social relations, establishing and improving institutional capacity, education and R&D, cultural interactions, and trade cooperation with the third parties.

Turkey has increased its economic, political, and cultural engagement significantly in recent years with its neighbors in the Middle East, the Mediterranean, the Balkans, the Caucasus, and the Black Sea regions to rebalance its international ties, which were heavily tilted towards the West during the Cold War years. Some commentators interpreted this as an attempt to revive the Ottoman Commonwealth. The objective of the geographic rebalancing, according to the Turkish Government, is to reintegrate Turkey into its immediate neighborhood, while maintaining strong relations with the West.

barriers to trade, especially customs procedures and NTMs. Estimates of NTMs' AVEs suggest that, in general, MENA countries' NTMs do not appear to be more restrictive for Turkey compared to other countries. 164 Still, in a few sectors, NTMs are significantly more restrictive on imports from Turkey than on imports from other sources. This is especially the case for Turkey's exports of petroleum and coal products to Tunisia, primary agriculture to Jordan and Syria, other manufactures to Egypt, and resource-based manufactures to Egypt, Morocco, Syria, and Algeria (Table 74). In most other cases, the AVEs of NTMs on MENA countries' imports from Turkey are comparable or lower than those applicable to other countries. Thus, deepening of trade ties by lowering the restrictiveness of NTMs on Turkey's exports to Egypt, Jordan, Lebanon, Iraq, and Syria has the potential to benefit Turkey's petroleum, resource-based, and other manufacturing industries, as well as its agricultural sector.

The Levant Economic Zone negotiations will be constrained by pre-existing agreements. Turkey will not be able to make further concessions on tariffs levied on manufactured goods independent of the EU because of its Customs Union with the EU. Under these circumstances, it is unlikely that the other members of the Levant Economic Zone will make unilateral concessions to open up their markets for manufactured goods from Turkey. However, because the Customs Union with the EU excludes agricultural and food products, Turkey and the other Levant Economic Zone members will be able to liberalize trade in agricultural commodities and food products. Tariffs on Turkey's imports of agricultural goods and processed food from other Levant countries are much higher than tariffs on manufactured imports from these countries. Turkey may also open up its manufacturing sector by reducing the restrictiveness of existing NTMs on imports from Egypt, Lebanon, Jordan, Iraq, and Syria, and rules that inhibit trade in services.

Regional trade agreements differ in content and form, and in large part, reflect sharp differences in the objectives of the countries seeking them. In some cases,

countries have multiple objectives that drive participation in regional trade blocks; in others, one or two objectives dominate the rationale for membership. Frequently, special interests in certain sectors might be driving the process forward. The most conventional reason for a regional trade agreement is the notion that there will be improvements in market access from mutual exchanges of concessions on trade barriers. However, the gains from improved market access may be diminished because trade may be diverted to higher-cost suppliers within the integrating area and trade-diversion losses may outweigh trade-creating gains. In the case of large-small country trade negotiations, countries might want to use a regional trade agreement to make access to the large country more secure for the small country. Countries might also use regional negotiation to get an edge in multilateral negotiations and vice versa.

A major reason for seeking regional trade agreements is the belief that a regional trade treaty may drive and support domestic policy reform and make any reversals more difficult to implement once an international trade treaty binds a country. Using a negotiation on a regional trade agreement for nontrade purposes makes it more likely that the negotiating outcome is asymmetric. Importantly, a regional trade agreement might help countries underpin security arrangements among the countries seeking membership. This was a central theme in early European integration after World War II and the political commitment to it was so strong that enabled a move to deeper integration.

The reforms associated with the formation of the Levant Economic Zone could stoke domestic reform.

The Levant countries should review a wide-range of policy weaknesses in member economies that could obstruct a strong supply response. For example, countries will need to improve national and cross-country infrastructure,

¹⁶⁴ The calculations assume that NTMs at the most detailed level are applied in a uniform manner across countries. Thus, the difference between the AVEs of NTMs on imports from Turkey and another source is due to variations in import patterns at the most detailed tariff line.

Table 74 Weighted Average AVE Estimates of NTMs by Country and Product

	Leba	anon	Tun	isia	- ,	Arab ep.		, Arab ep.	Jord	dan	Lib	ya	More	оссо	Alg	eria	lra	aq
	Turkey	World	Turkey	World	Turkey	World	Turkey	World	Turkey	World	Turkey	World	Turkey	World	Turkey	World	Turkey	World
Primary agriculture	5	2	1	5	46	9	10	7	14	7	10	8	7	10	18	8	6	5
Food processing	0	2	2	6	5	9	11	7	4	8	8	10	11	9	4	15	8	6
Gas extraction & distribution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil extraction	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Other manual resources	0	1	0	0	8	8	4	2	1	2	2	0	4	1	9	10	3	2
Petroleum and coal	58	55	62	38	53	47	3	30	1	1	2	1	2	1	2	1	1	1
Electricity generation & distribution	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	2
Chemical industry	1	1	1	4	11	8	6	5	7	7	7	9	7	8	8	24	10	11
Textiles and apparel	2	2	0	0	2	3	2	4	3	3	2	3	2	2	10	8	2	2
Resource based manufacturers	1	4	9	4	28	13	13	6	7	9	16	13	29	14	23	14	14	12
Equipment, vehicles and machinery	1	2	7	5	15	11	7	8	7	13	6	9	8	7	17	26	7	11
Metal products	0	0	4	5	20	21	13	9	7	7	3	5	4	9	13	24	4	6
Other manufactures	0	0	0	11	9	24	61	20	6	11	13	12	10	12	13	25	13	11
Average across products	5	5	7	6	15	12	10	8	4	5	5	5	6	6	9	12	5	5

Source: Authors calculations based on estimates at the HS6 product level by lanchovichina and Kee (2012).

implementation capacity in partner countries, as well as harmonize business and investment climate rules and regulations. Particular emphasis should be placed on advancing private sector development in the sub-region.

To be consistent with the Euro-Med partnership objectives and to have a lasting effect on regional development, "the New Levant" should have the following features:

Balance between political and economic objectives. Most of the regional integration arrangements are motivated by political and security considerations. In many cases, the trade and economic components of the agreements are not well worked out, and the impact on the member states' economies is not carefully considered. As a result, the agreements usually run into trouble and become inactive. PAFTA is a good case in point. Regional politics clearly plays an

- important role in envisioning the sub-regional integration, but trade objective is equally important and should receive due attention in setting up an economic zone.
- Scope of liberalization. Sectoral coverage of the FTAs signed by Syria, Jordan, and Lebanon with Turkey is limited to the manufacturing sub-sectors. Agriculture, agro-processing, fisheries, and services are excluded from liberalization. However, the EU and some Med12 partners have started (and in some cases concluded) negotiating liberalization of these sectors. For a potential Levant Economic Zone, it is

Negotiations regarding further liberalization of trade in basic and processed agricultural products have been concluded with Egypt (2008), Israel (2008), and Jordan (2006) and are in progress with Morocco. Negotiations on services had been initiated with Morocco, Algeria, Egypt, and Israel.

- advisable to include the excluded sectors and the regulatory issues in the LFTZ and progressively liberalize them to be consistent with the Barcelona Process. The scope of liberalization should go beyond only removing tariffs to cover all regulatory areas of mutual interest including trade facilitation, standards and conformity assessment, investment protection, government procurement, and competition policy.
- Complementary behind-the-border reforms. A deeper economic zone in the Levant will improve access of the signatories to each other's market. However, this may not be sufficient to expand trade, diversify production, and accelerate growth in the member states. A wide-range of policy weaknesses and supply-side constraints in the member economies inhibit competitiveness and a strong supply response to improved market access. Substantial improvement in the complementary behind-the-border policies and harmonization of the business and investment climate will be necessary to take full advantage of better market access. Closer collaboration in these areas in the context of the broader Barcelona Process is essential. Improvement of behind-the-border policies is particularly important for Syria, Jordan, and Lebanon to be able to raise their competitiveness.
- Concomitant private sector development. There are strong complementarities between trade promotion and private sector development (PSD). While effective trade promotion requires a dynamic private sector, a dynamic and competitive private sector cannot flourish if it produces only for a small domestic market. Particular emphasis on advancing the private sector in the signatory countries should be an integral part of the regional integration effort. Technical assistance from Turkey in the context of South-South exchange should be included in the arrangements.
- Potential negative effects. Granting preferential access to each other's market without lowering the high MFN tariffs would induce costly trade diversion in

- the free trade zone. This cost would not arise in the case of possible Levant Economic Zone for some countries because Turkey is a member of the EU customs union and Jordan and Lebanon have Association Agreements with the EU. Also, Jordan has a FTA with the U.S. In fact, the Levant Zone would offset part of the trade diversion created by the AAs and the FTA with the U.S. However, the risk of trade diversion is relatively high for Syria and Iraq. Syria's tariffs on imports from East Asia are on average above 10 percent, and due to its failure to ratify its AA with the EU, its tariffs on imports from the EU are just below 10 percent. Therefore, trade diversion costs may not be negligible in the case of Syria. Similarly, if Iraq joins the Levant Economic Zone, it too might be at risk for trade diversion because of relatively high MFN tariff rates. However, for both countries, the risk will be minimized because only the agricultural liberalization scenario involves tariff reductions. 166 Another negative effect is the potential loss of tariff revenue in the signatory countries as a result of tariff phase down particularly in the agricultural sector. This possibility will need to be analyzed and offsetting measures recommended.
- Overlapping agreements. Under the Levant Economic Zone, Syria, Jordan, Lebanon, and Iraq will have overlapping free trade arrangements—they are members of PAFTA and Jordan has FTAs with the U.S. and Israel. This would tangle administrative procedures such as customs administration, standards and conformity assessment, rules of origin. The implications of the overlapping commitments will need to

likely to suffer from trade diversion when they give preferences to resource-poor countries. At the same time, there is little scope for the resource-poor country to suffer from trade diversion if the resource-rich country is specialized in the natural-resource good. The introduction of preferences allows the resource-poor country to sell more of its products in the resource-rich country, while the resource-rich country substitutes imports from the relatively more efficient world towards the regional partner.

- be analyzed and recommendations made to streamline these commitments. The "New Levant" zone would provide strong stimulus to make the necessary adjustments in PAFTA.
- Implementation mechanism. Formulating clear rules and putting in place an effective implementation mechanism are essential for a successful regional integration arrangement. This would require creation of supranational institutions that have the mandate to monitor and implement the integration provisions. An independent dispute settlement mechanism is particularly important to oversee enforcement and ensure compliance. The EU's success in regionalism reflects largely its ability to create an efficient supranational political and administrative system. The dif-
- ficulty in creating supranational institutions is that the member states are reluctant to transfer sovereignty to these institutions. It is necessary to consider the implementation issues and explore options for setting up an effective mechanism and institutional structure for implementing the Levant Economic Zone in the context of the Barcelona Process.
- Technical assistance for local capacity building: Substantial technical assistance will be needed for most of the members of the group to enhance the local institutional and skill capacity to formulate and effectively implement the proposed policies. EU's Neighborhood Policy and the Deauville Partnership program provide useful channels for financing these technical assistance programs.

ANNEXES

ANNEX 1: METHODOLOGY FOR GRAVITY TRADE MODEL

The cross-country gravity model allows assessing the level of bilateral trade between pairs of countries relative to their trade potential. The empirical framework allows the categorization of bilateral export relationships as over-traders or under-traders, depending on the comparison between realized bilateral export values and the model's prediction of bilateral flows. The computation of bilateral trade potentials underlies a regression of average bilateral exports for 181 countries (using mirror data from UN COMTRADE Database)167 on the following bilateral trade determinants: geographical distance, contiguity, common language, colony, common colonial power, as well as log of GDP, log of GDP per capita. The structural determinants for each pair of countries together with the estimated regression coefficients are used to compute the bilateral trade potentials. The applied model incorporates three innovations to the standard gravity model. First, a measure of remoteness is computed by summing distances weighted by the share of GDP of the destination in world GDP. This is to take note of the fact that relative distances matter greatly, alongside absolute distances. Second, we control for zero trade flows with the use of Heckman sample selection correction method. When observations with non-existent bilateral trade are dropped, as OLS does, our dependent variable is not really measuring bilateral trade, but one contingent on a relationship existing. An important variable left out of the model therefore is the probability of being included in the sample, i.e., having a non-zero trade flow. To the extent that the probability of selection is correlated with GDP or distance, this has the potential to bias OLS estimates. Third, we address

heterogeneity of firms, following Helpman, Melitz and Rubinstein (2008), by controlling for firm heterogeneity without using firm-level data utilizing the fact that the features of marginal exporters can be inferred from the export destinations reached. This methodology controls not only for zero trade flows but also for self-selection of firms into export markets.

The equation we estimate is:

$$\begin{split} \ln \left(X_{ij} \right) &= \beta_0 + \beta_1 \ln \left(D_{ij} \right) + \beta_2 \text{cont}_{ij} + \beta_3 \text{lang}_{ij} + \\ \beta_3 \text{lang}_{ij} + \beta_4 \text{col}_{ij} + \beta_5 \text{comcol}_{ij} + \beta_6 \frac{\hat{\lambda}_{ij}^*}{\hat{\lambda}_{ij}^*} + \beta_7 \frac{\hat{Z}_{ij}^*}{\hat{Z}_{ij}^*} + \\ \beta_7 \frac{\hat{Z}_{ij}^*}{\hat{Z}_{ij}^*} + \beta_8 9 \frac{\hat{Z}_{ij}^{*2}}{\hat{Z}_{ij}^*} + \beta_9 \frac{\hat{Z}_{ij}^{*3}}{\hat{Z}_{ij}^*} + \gamma_i + \gamma_j + \mu_{ij} \end{split}$$

where X_{ij} is the average export value of country to country between 2009 and 2011. Importer and exporter countries are the complete set of world economies (182 countries). D_{ij} is the "great circle" distance between the capital of the exporter and the capital of the respective importer. $Cont_{ij}$, $lang_{ij}$, col_{ij} , and $comcol_{ij}$, are dummy variables that are equal to 1 if the countries shares a border, have a common language, have ever had colonial ties, and had a common colonizer after 1945, respectively. $lang_{ij}$ is the standard inverse mills ratio that

¹⁶⁷ This technique infers export data by using partner-import data. That is, rather than requesting export data as being reported by country i one requests import data reported from each country in the World as being imported from country i. This technique is commonly used to minimize the risk of underreporting due to the fact that customs agencies usually monitor imports more closely than exports.

¹⁶⁸ The source of the bilateral covariates is the French research center in international economics (CEPII). We modify the colonial ties dummy to take into account the fact that Turkey, Syria, Iraq, Jordan, Lebanon, Egypt, Libya, Tunisia, and Algeria were part of the Ottoman Empire and therefore should receive a value of 1.

takes into account the possible selection bias given that we only observed bilateral flows with positive exports. ¹⁶⁹ The last cubic polynomial controls for the underlying unobserved firm-level heterogeneity. ¹⁷⁰ Finally, are sets of exporter and importer fixed effects. They take into account the multilateral resistance terms as suggested by Anderson and Van Wincoop (2003).

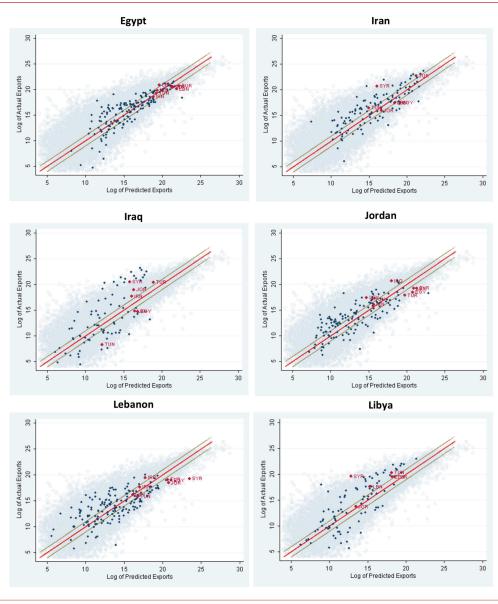
The inverse mills ratio $(\hat{\lambda}_{ijt}^*)$ is obtained from the selection equation, or the first stage estimation. This is a probit model where we regress the probability of observing bilateral exports between country pairs on the same set of covariates used in the second stage (\mathcal{Z}_{ijt}^*) . Our exclusion restriction is a dummy variable that equals 1 if countries were the same country at some point of time, since this information should explain the existence of historical bilateral trade ties but, arguably, not the level of exports. $\hat{\lambda}_{ij}^*$ is defined as $\phi(z^*)$

$$rac{\phiig(z_{ijt}^*ig)}{\phiig(z_{ijt}^*ig)}$$
 .

¹⁷⁰ It controls for the potential important effects of trade barriers and country characteristics on the share of exporting firms (see Helpman et al. 2008). \hat{z}_{ijt} is defined as $\hat{z}_{ijt} + \hat{\lambda}_{ijt}$, where is the error from the first stage.

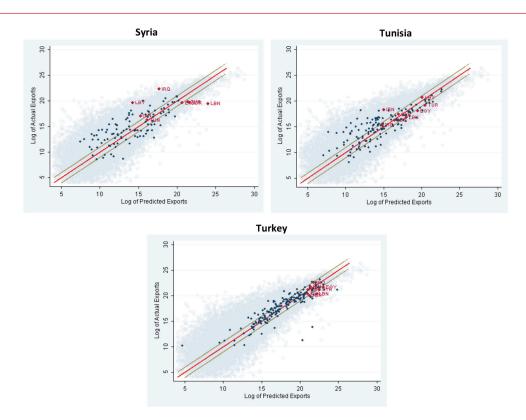
Gravity Model: Actual Bilateral Exports versus Potential Outcomes

(Averages, 2009–2011)



(continued on next page)

(continued)



Note: The results are based on all bilateral trade relationships with annual exports exceeding US\$50,000 in the sample of 181 countries (light grey dots). If the observation is outside the confidence interval (band parallel to the 45-degree line), the exporter is said to be significantly over-trading or under-trading. The confidence interval is constructed at the 10 percent of significance level.

ANNEX 3: METHODOLOGIES FOR REVEALED COMPARATIVE ADVANTAGES, EXPORT SOPHISTICATION, AND PRODUCT SPACE

Revealed Comparative Advantage. The measure of revealed comparative advantage (RCA) quantifies the export performance of products. RCAs measure a product's export share in a country relative to the product's world export share. Hence, for a given product p in country c

$$RCA_{pc} = \frac{x_{pc} / \sum_{P} x_{pc}}{\sum_{L} x_{pl} / \sum_{L} \sum_{P} x_{pl}}$$
(1)

where $l \in L$ are the countries that export p. A value larger than one indicates that the share of a product in a country's export basket exceeds its share in world exports; in this case (RCA > 1), the country has a revealed comparative advantage in this product.

Export sophistication. The methodology of Hausmann et al. (2007) who derive an indicator that ranks traded goods in terms of their implied productivity content. That is, a given product line p can be classified by:

$$PRODY_{p} = \sum_{L} \frac{x_{pc} / \sum_{p} x_{pc}}{\sum_{L} x_{pl} / \sum_{L} \sum_{p} x_{pl}} GDP_{l} = (2)$$

$$\sum_{l} RCA_{pl} GDP_{l}$$

where GDP_l is the GDP per capita of country l. Hence, PRODY is a weighted average of the per-capita GDPs of the countries exporting the product whereby the weights consist of the revealed comparative advantage of each country exporting the product.¹⁷¹ Aggregating across the

PRODYs of all products that a country exports, weighted by their respective export shares yields the embodied productivity level associated with the export basket of country c:¹⁷²

$$EXPY_{c} = \sum_{p} \frac{x_{pc}}{\sum_{p} x_{pc}} PRODY_{p} \cdot$$

Product space. Hausmann and Klinger (2007) suggest a methodology to measure the relatedness between products. The concept is based on the assumption that production processes for different products can be related. That is, production process of two (seemingly unrelated) different products might involve similar factor intensities of labor or (human) capital, similar levels of technological sophistication, vertically integrated value chains of production, or require similar product-specific institutions (i.e., quality standards, research) and infrastructure (i.e., cooling and storage facilities, transportation, or ICT). Thus, countries that are already successful in producing product A (i.e., milk and cream or sugar) might

¹⁷¹ Hence, the weighted average GDP per capita of countries exporting a product is applied as a measure of the products productivity content.

¹⁷² In order to minimize the impact of outliers three year rolling windows are used to compute average *PRODYs*. Hence, *PRODY* changes relatively slowly over time so that the yearly fluctuations in *EXPY* are mainly driven by changes in the export shares of products in the country's export basket. The underlying export data are obtained from the UN COMTRADE database and are based on SITC 4-digit product classifications.

also be successful in producing a new but related product B (i.e., cheese and curd or chocolate, packaging). More formally, Hausmann and Klinger (2007) suggest the following measure of similarity between any two products p and k which is

$$\phi_{pk} = min \Big\{ Pr \Big(\rho_p = 1 \, \big| \, \rho_k = 1 \Big), Pr \Big(\rho_k = 1 \, \big| \, \rho_p = 1 \Big) \Big\} (3)$$

by

$$\rho_{pc} = \begin{cases} 1 & \text{if } RCA_{pc} > 1 \\ 0 & \text{otherwise} \end{cases}$$

Hence, ϕ_{pk} is the minimum of the pairwise conditional probability of having RCA of a given good p or not (RCA<1), given that the country has RCA in good k, and vice versa. In other words, the product distances for any pair of products ϕ_{pk} are calculated using the minimum of two conditional probabilities: the probability that a country has RCA in making product p, given that it has RCA in k, and vice versa.

To generate the product space for each country, exports at the 4-digit product level (based on the SITC Rev. 2 classification) from the UN COMTRADE database are used to compute these probabilities. We use three year averages to minimize the impact of outliers, i.e., due to temporary re-exports. The data provide the exported value to all other countries for 775 products. A (775x775) matrix of revealed similarities between every pair of products as defined in (3) is thus computed. The product space is a graphical representation of this matrix whereby distances between two products represent the relatedness (similarity or proximity) between these products. We compute the product space based on average exports for the periods 1992–1994, 2000–2002, and 2007–2009.¹⁷³

PATH or product distance is a measure of the distance between any two products within the product

space matrix. Calculating PATH gives an indication where any given product is located in the product space: if the PATH is short (densely connected part of the product space), factors of production, skills or technologies can be more easily deployed from one product to another. The product distances are calculated as above. A product's PATH is then calculated as a measure of the likelihood that countries exporting any given product p are likely to export any other products and thus can be seen as a notional value of the potential for future export diversification associated with any particular product p. A product's PATH is defined as

$$PATH_{p} = \sum_{k} \phi_{pk} \tag{4}$$

Another useful measure to capture the relatedness of a product to a country's existing production structure (i.e., location in the product space) is the density. It measures the ease with which a country's factors and skills can be adapted to the new product; hence, in contrast to the PATH it is country-product specific. In particular, the density is the ratio of the RCA-weighted path to the total path of each product in a given country c:

$$density_{pc} = \frac{\sum_{k} \rho_{kc} \phi_{pk}}{\sum_{k} \phi_{pk}}$$
 (5)

The density varies from 0 to 1, with higher values indicating that the country has a comparative advantage in many goods close to a specific product p. Thus, the higher the density, the more likely is country c to export product p in the future.

Export data are not available for some countries and years before 2000. Therefore, we use the periods 1994–1996 for Bahrain and 1995–1997 for Syria and Yemen, respectively. Likewise export data for Lebanon in the early 1990s are not available.

ANNEX 4: METHODOLOGY FOR PRODUCT SPACE ANALYSIS

The product space is a graphical representation of the relatedness between products and hence production technologies. The analysis is based on export data at the 4-digit product level from the UN COMTRADE database. The product space illustrates the relatedness between every pair of the 775 4-digit SITC products whereby distances between two products represent the similarity between their production structures. It focuses on manufactured goods, however, production and service structures are often related (i.e., ICT manufacturing and ICT services).

The product space analysis can help identify industries with high growth or diversification potential. However, these evidence-based results should be interpreted with caution. As Lederman and Maloney (2012) highlight, detailed sector case studies or value chain analysis are necessary to supplement and validate the findings. Therefore, the analysis is supplemented with firm- and industry-specific information for each country to verify or challenge the quantitative findings. Moreover, the product space analysis is based on past export performances (i.e., measured by RCAs). The dependence on past outcomes must be taken into account when interpreting the results. That is, the presence of producer subsidies or other market distortions can divert production specialization away from countries' comparative advantages given their endowment structures, i.e., through energy or agricultural subsidies. Nevertheless, production specializations based on distorted market incentives still determine countries' technology and knowledge structure (endowment) which in turn influences their comparative advantages for future diversification.

Countries that manufacture more "connected" industrial goods are better positioned to specialize in

new products. There are several factors causing production processes between different products to be related. For instance, production processes of two different products might (i) be vertically integrated in production value chains, (ii) require similar intermediate inputs or machinery, (iii) involve similar factor intensities of physical or human capital, (iv) demand similar levels of technological sophistication, or (v) require similar product-specific institutions (i.e., quality standards, research) and infrastructure (i.e., cooling and storage facilities, transportation, or ICT). Thus, countries that are already successful in producing product A (i.e., milk and cream or refined sugar) might also be successful in producing a new but related product B (i.e., chocolate or boxes and packages). However, the degree of relatedness in production processes and technologies can differ substantially among different products. Hausmann and Klinger (2006) show empirically that countries tend to diversify into products close to those they are already specialized in (exporting). It follows that countries specialized in more "connected" goods are able to expand their exports basket more quickly.

A country has a better potential to diversify into higher value added products if it already hosts export successes in several products close to the densely connected core or electronics cluster. Products with high technology content are typically located in the core of the product space (i.e., vehicles, machinery, or chemicals) or the electronics cluster. If a countries' export basket is specialized in many products close to the core or electronics cluster, it is better positioned to gain market shares in products with higher technology content.

Technology Classifications and Export Shares of Different Product Categories

	Total	Ь	RB1	RB2	E	LT2	2 MT1 MT2 MT3 HT1	IT2 №	IT3		HT2	Average Prody	Average Path	00–02 (in US\$ millions)	snare 00-02 (in percent)	n 07–09 (in US\$ millions)	snare 07-09 (in percent)
CLASSICS	(RCAC)002>=	1, RCAG	-<602	=1, filte	ered wi	th export	ts>US	3 1 mil	lion in	(RCA0002>=1, RCA0709>=1, filtered with exports>US\$ 1 million in 2007-09)						
Egypt	94	35	=	10	16	13	1	7	-		1	10,555	124	20,405	83.2	11,823	9.79
Jordan	75	17	10	œ	13	6	-	12	က	ı	-	12,548	135	11,445	67.8	4,344	83.2
Lebanon	103	20	22	6	7	18		10	12	-		12,652	137	899	76.0	2,472	77.0
Syria	48	22	7	-	14	-	1	2		ı		8,416	118	3,521.80	86.8	1228,55	62.15
Tunisia	102	14	10	7	42	10	_	9	8	4	I	11,061	128	5,418	82.8	12,283	78.8
Turkey	177	32	56	Ξ	51	21	2	15	16	2	-	12,164	134	23,195	75.4	69,954	65.2
Croatia	139	22	25	12	24	20	-	12	16	4	က	14,422	141	3,204	74.0	7,697	68.9
Thailand	136	14	28	12	20	14	2		13	14	-	13,907	128	44,566	69.5	96,196	63.1
EMERGING													٦	RCA0002<1, RCA07	09>=1, filtered wi	(RCA0002<1, RCA0709>=1, filtered with exports>US\$ 1 million in 2007-09)	Illion in 2007–09)
Egypt	74	10	15	10	=	=	-	10	4		1	13,756	138	85	3.0	4,118	23.6
Jordan	22	4	2	ı	4	က		က	-	ı		13,440	137	147	6.0	471	0.6
Lebanon	33	4	2	4	က	4	-	9	4	2	1	15,217.4	135.8	19.03	2.16	307.39	9.55
Syria	78	Ξ	16	4	56	∞		10	က	ı		12,763	134	94	2.3	3,391	30.8
Tunisia	33	2	∞	က	က	9		-	-	2		15,104	136	86	1.6	1,046	6.7
Turkey	49	2	2	2	2	12	4	9	6	ı	l	16,695	148	2,617	8.5	21,120	19.7
Croatia	22	4	∞	2	4	7		4	16	4	-	17,117	137	249	5.8	1,566	14.0
Thailand	54	က	10	3	4	4	3	7	12	3	2	16,101	137	3,406	5.3	22,472	14.7
MARGINALS								æ	CA000;	2<1 01	RCA0002	=., 0.5 <rc< td=""><td>A0709<1 an</td><td>d RCAgrowth> 10 p</td><td>ercent, filtered wi</td><td>RCA0002<1 or RCA0002=. , 0.5<rca0709<1 and="" rcagrowth=""> 10 percent, filtered with exports>US\$ 1 million in 2007-09)</rca0709<1></td><td>Illion in 2007–09,</td></rc<>	A0709<1 an	d RCAgrowth> 10 p	ercent, filtered wi	RCA0002<1 or RCA0002=. , 0.5 <rca0709<1 and="" rcagrowth=""> 10 percent, filtered with exports>US\$ 1 million in 2007-09)</rca0709<1>	Illion in 2007–09,
Egypt	24	5	4	က	2	2	1	5	က			15,160	127	∞	0.3	336	1.9
Jordan	∞	-	2	-	1	က		ı	-	ı		20,942	141	15	0.1	42	0.8
Lebanon	13	2	4	-	က	1		2	_	1		14,087	129	9	0.7	64	2.0
Syria	24	က	က	-	4	9	1	2	က	-	-	15,330	152	15	0.4	427	3.9
Tunisia	30	-	2	2	2	7	_	-	7	2	2	18,392	141	91	1.4	694	4.5
Turkey	24	က	2	-	2	က	3	10				18,731	130	121	0.4	666	6.0
Croatia	16	4		2		1		က	9		-	19,681	131	14	0.3	122	1.1
Thailand	28	7		4	2	က	-	က	2	-	2	17,740	128	938	1.5	7,654	2.0
DISAPPEARING	ניז													(RCA0002>1, RCA0	709<1, filtered wi	(RCA0002>1, RCA0709<1, filtered with exports>US\$ 1 million in 2000–02)	Illion in 2000–02,
Egypt	29	-	4	2	6	4		2		-	-	13,220	129	193	6.7	150	6:0
Jordan	41	က	က	4	12	9	2	7	4	ı		13,073	134	3,852	22.8	113	2.2
Lebanon	21	2	က	2	6	1	-		2		-	12,199	130	75	8.5	22	1.7
Syria	15	_	-	4	2	1		·	ı	I	I	11,063	79	394	9.7	11	0.1
Tunisia	22	2	4	-	2	4	-	က	4	-		17,205	145	202	3.2	144	0.9
Turkey	40	Ξ	9	∞	Ŋ	က	1	4	-	I	-	11,627	119	1,424	4.6	1,567	1.5
Croatia	36	1	2	2	16	10			_	-		12,453	135	297	6.9	187	1.7
Thailand	ÜÜ	•															

Turkey: 749 Products Exported in Total (left); Syria: 621 Products Exported in Total (middle); Jordan: 512 Products Exported in Total (right)

sand 21 products = 4.3 1 1.0 2.0 soft of the products = 6.7 4 percent of exports 1.3 5320 Percloide and crude 5.0.3 A 4		Product	Share (in percent)	BCA0709	BCA ar 0709		Product	Export Share (in percent)	RCA0709 RCA010709	3CAur0709		Product	Share (in percent)	BCA0709	Export Share (in percent) RCA0709 RCAgr0709
Pessenger motor cans, 6.34 1.13 1.15 3.330 PereJudie and orde 35.03 4.4 -0.6 5620 Mineal or chemical for transport of the sand ordinary and confinuous synth 1 1.10 Non-abrilled and confinuous synth 1 2.51 8.25 Mineal or chemical 8.68 metal or chemical 8.69 1.10 Non-abrilled and confinuous synth 1 2.51 8.25 Mineal or chemical 8.69 1.20 Mineal or chemical 8.60 1.20 Mineal or chemical 8.72 1.20 1.20 1.20 1.20 Mineal or chemical 8.72 1.20 1.20 1.20 1.20 Mineal or chemical 8.72 1.20 Mineal or chemical 8.72 1.20 1.		226 RCAs and 21 pro	oducts = 43.	1 percent of	Ψ	ľ	131 RCAs and 18 prod	ucts = 67.4 p	ercent of ex	ports	+	06 RCAs and 19 produ	rcts = 70.6 p	ercent of ex	xports
States from crist of innoversion from crists of inno	810			ن ن	1.5	3330		35.03	4.4	9.0-	5623	Mineral or chemical fertilizers, pot	96.6	102.6	19.5
Mode of section of the parts of th	732			14.8	0.1	1110	Non alcoholic beverages, n.e.	4.44	32.7	62.3	8459	Other outer garments and clothing, kni	9.50	23.9	22.3
Color norm content Color n	821	Motor vehicles for transport of goo	3.60	4.2	2.3	6531	Fabrics, woven of continuous synth.t	3.39	20.7	2.6	5417	Medicaments (including veterinary me	8.68	3.4	-0.3
Public gaments, base, see	710		2.87	3.7	14.6	6513		2.91	37.5	1.6	2713	Natural calcium phosphat., natur. alu	6.94	282.7	-0.2
Other parts and other parts and other services and other parts and other parts and other services and and services are always and and and services are always and and sheet bases or services byte and services byte and sheet bases or services byte and services byte and sheet bases or services byte and se	162		2.42	8.5	-0.4	7731	Insulated, elect. wire, cable, bars, str	2.55	4.0	0.0	5621	Mineral or chemical fertilizers, nit	5.72	37.2	-0.1
Pelevision receivers, 1.92 2.6 -0.6 1.2 Siveep and goats, live 1.91 211.1 -0.3 54.4 Tomatoes, fresh or color c	349		2.30	1.0	0.4	5542			10.6	25.0	545	Other fresh or chilled vegetables	3.61	20.1	0.1
Ships, boats and other vessels 1.76 1.9 1.1 2713 Netural calcium 1.70 1.3 5222 Inorganic acides and 2 70 neture	511		1.92	2.6	9.0-	12			211.1	-0.3	544	Tomatoes, fresh or chilled	3.43	58.8	0.2
Other outer garments 1.62 4.1 -0.4 5.44 Tomatoes, fresh or chilled 1.68 2.87 0.0 77731 Insulated, electr, wire, cable, brans, str 2.40 and oldning, Mri 1.57 2.4 0.0 5.47 Medicaments 1.63 0.6 1.56 6924 Casks, drums, boxes of 2.39 2.39 cable, bars, str me (moldning veterinary) 1.6 9.2 1.5 6924 Casks, drums, boxes of 2.39 2.39 Other outer garments 1.54 4.7 -0.5 4235 Olive oil 1.46 29.1 10.2 8973 Metallery of gold, silver 2.31 Other outer garments 1.39 4.7 -0.3 8510 Footwear 1.37 2.2 1.3 62.3 Metallery of gold, silver 2.31 1.33 1.33 1.37 2.2 1.3 5.2 1.3 6.1 6.0 1.37 2.2 1.3 6.2 1.38 6.1 6.0 1.37 2.2 1.3 6.2 1.38 6.0 6.0 1.38 6.0 6.0 1.37 8.2	332			1.9	-	2713		1.74	71.0	. .	5222	Inorganic acids and oxygen compound	2.70	34.0	-0.3
Insulated, elect, wire, 1.57 2.4 0.0 5417 Medicaments 1.63 0.6 15.6 6924 Casks, drums, boxes of cable, bars, str cable,	159			4.1	4.0-	544		1.68	28.7	0.0	7731	Insulated, elect. wire, cable, bars, str	2.40	3.7	4.8
Other outer garments 1.54 4.7 -0.5 4235 Olive oil 1.46 29.1 10.2 8973 Jevellery of gold, silver 2.31 of textile fab or platinu of textile fab or platinu of the sand 1.39 4.7 -0.3 8510 Footwear 1.37 2.2 1.3 522 Metallic salts and 1.93 2 peroxysalts of i peroxysa	731			2.4	0.0	5417		1.63	9.0	15.6	6924	Casks, drums, boxes o' iron/steel for		21.5	2.1
Other tubes and pies, of iron or st pies, of iron or platinu silver or platinu stale linen, table linen, tabl	139			4.7	-0.5	4235		1.46	29.1	10.2	8973	Jewellery of gold, silver or platinu		5.9	9.0
Jewellery of gold, silver or platinu 1.36 3.5 -0.2 7752 Household type 1.35 9.1 72.7 8451 Jerseys, pull-overs, and food silver or platinu 1.37 1.39 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.90 1.71 1.90 1.71 1.90 1.71 1.70 1.71 1.72 8.11 0.0 8463 Under garments, Under garments, Independent of cutum 1.18 48.6 0.0 8485 Under garments, Independent of cutum 1.18 48.6 0.0 84.8 1.68	783		1.39	4.7	-0.3	8510		1.37	2.2	6.	5232	Metallic salts and peroxysalts of i	1.93	21.3	1.8
Bed linen, table line	73		1.36	3.5	-0.2	7752			9.1	72.7	8451	Jerseys, pull-overs, twinsets, cardiga	1.90	6.1	37.8
Blooms, billets, slabs 1.22 3.9 -0.4 2.24 Milk and cream, 1.22 8.1 0.0 8463 Under garments, 1.69 Analyse bars o and sheet bars of an	984			7.6	4.0-	6732			3.6	0.0	8439	Other outer garments of textile fab	1.71	5.2	2.7
Public-service type 1.16 9.8 0.0 251 Eggs in shell 1.18 48.6 31.7 8462 Under garments, and pine of cotton 1.68 Jerseys, pull-overs, pull-overs, pull-overs, pull-overs, pull-overs, and pine of piston engines of a strain of control. 1.11 3.6 -0.6 752 Spices (except pepper and pine pipe) 1.01 8.0 5.0 8434 Skirts, women's, of the pipe pipe pipe pipe pipe pipe pipe pi	725			3.9	4.0-	224			8.1	0.0	8463	Under garments, knitted, of synthetic	1.69	13.3	6.7
Jerselys, pull-overs, pull-overs, twinsets, cardiga 1.11 3.6 -0.6 752 Spices (except pepper and pinments) 1.08 48.6 -0.2 8434 Skirts, women's, of 1.54 1.54 Parts of int. comb. 1.10 2.5 0.1 8463 Under garments, of synthetic 1.01 8.0 5.0 5622 Mineral or chemical o	331		1.16	9.8	0.0	251		1.18	48.6	31.7	8462	Under garments, knitted of cotton	1.68	5.9	0.0
Parts of int. comb. 1.10 2.5 0.1 8463 biston ending. 1.01 biston ending. 1.01 biston ending. 8.0 5.0 56.2 biston ending. Mineral or chemical ending. 1.40 biston ending. piston engines of etc. of textile statile factor of extractile statiles, shapes and 1.03 5.6 0.6 545 Other fresh or chilled ending, kni ending. 0.97 2.4 0.5 2882 Other non-ferrous base 1.14 and clothing, kni ending, kni ending, kni ending, kni ending. 1.03 5.6 0.6 545 Other fresh or chilled ending. 0.87 4.8 0.7 980 Edible products and 0.91 ending. 0.91 ending.	151		1.1 T.	3.6	9.0-	752			48.6	-0.2	8434	Skirts, women's, of textile fabrics	1.54	37.2	38.6
Trousers, breeches 1.03 5.2 —0.1 8459 Other outer garments 0.97 2.4 0.5 2882 Other non-ferrous base 1.14 etc. of textile fa and clothing, kni and clothing, kni metal waste metal waste Angles, shapes and 1.03 5.6 0.6 545 Other fresh or chilled 0.87 4.8 0.7 980 Edible products and one of the products are products an	39		1.10	2.5	0.1	8463		1.01	8.0	5.0	5622	Mineral or chemical fertilizers, pho	1.40	75.6	54.6
Angles, shapes and 1.03 5.6 0.6 545 Other fresh or chilled 0.87 4.8 0.7 980 Edible products and sections and sheet pi reparations n.	123		1.03	5.2	1.0-	8459			2.4	0.5	2882	Other non-ferrous base metal waste		4.7	-0.2
	733			2.6	9.0	545		0.87	4.8	0.7	980	Edible products and preparations n.	0.91	2.5	1.2

Egypt: 723 Products Exported in Total (left); Lebanon: 711 Products Exported in Total (middle); Tunisia: 671 Products Exported in Total (right)

		Export Share					Export Share					Export Share		
	Product	(in percent)	RCA0709	RCAgr0709	_	Product	ent)	RCA0709 RCAgr0709	RCAgr0709		Product	(in percent) RCA0709 RCAgr0709	RCA0709	RCAgr07
	10 RCAs and 20 products = 56.8 percent of exports	ducts = 56.8	percent of ex	xports	-	166 RCAs and 17 products = 53.7 percent of exports	cts = 53.7 pt	ercent of ex	ports	_	140 RCAs and 22 products = 66 percent of exports	lucts = 66 pe	ercent of ex	ports
3413	Petroleum gases and other gaseous h	18.03	20.3	9.8	9710	Gold, non-monetary	15.28	19.7	-0.2	3330	Petrol. oils and crude oils obt. from b	13.35	1.7	0.2
3330	Petrol.oils and crude oils obt. from b	9.18	1.2	-0.4	2820	Waste and scrap metal of iron or st	4.85	14.0	0.3	7731	Insulated, elect. wire, cable, bars, str	5.46	8.5	0.2
5621	Mineral or chemical fertilizers, nit	2.96	19.3	-0.1	7162	Elect. motors and generation	4.02	11.1	0.3	7721	Elect. app. such as switches, relays, f	4.88	4.4	0.7
6822	Copper and copper alloys, worked	2.31	5.7	109.7	5622	Mineral or chemical fertilizers, pho	3.84	207.4	0.3	8423	Trousers, breeches, etc.of textile fa	4.79	24.3	-0.3
6727	Iron or steel coils for re-rolling	2.28	6.3	-0.4	6672	Diamonds, unwork.cut/ otherwise work.	3.46	5.5	5.4	8429	Other outer garments of textile fab	4.73	36.8	-0.2
422	Rice semi-milled or wholly milled,	1.99	14.6	9.0-	2882	Other non-ferrous base metal waste	3.12	12.9	-0.2	5629	Fertilizers, n.e.s.	3.53	26.4	-0.4
9710	Gold, non-monetary	1.94	2.5	2.5	8973	Jewellery of gold, silver or platinum	3.10	7.9 –	0.7	4235	Olive oil	3.49	69.5	0.5
7731	Insulated, elect. wire, cable, bars, str	1.91	3.0	32.5	6612	Portland cement, ciment fondu, slag c	2.70	31.6	6.3	8439	Other outer garments of textile fab	3.49	10.6	-0.4
571	Oranges, mandarins, clementines and o	1.89	31.4	0.3	8219	Other furniture and parts	2.23	4.1	0.4	5222	Inorganic acids and oxygen compound	2.79	35.1	-0.1
5981	Wood-and resin-based chemical prod	1.60	0.79	453.2	5222	Inorganic acids and oxygen compound	1.80	22.6	-0.7	5622	Mineral or chemical fertilizers, pho	2.56	138.4	-0.2
5831	Polyethylene	1.48	3.0	2.8	8921	Books, pamphlets, maps and globes, pri	1.64	11.3	4.0-	8510	Footwear	2.48	4.0	0.0
240	Cheese and curd	1.44	7.0	8.5	7731	Insulated, elect.wire, cable, bars, str	1.48	2.3	0.1	8462	Under garments, knitted of cotton	2.09	7.3	0.1
2731	Building and monumental stone not f	1.43	50.4	0.4	5530	Perfumery, cosmetics and toilet prep	1.42	2.8	0.3	7849	Other parts and accessories of motor	1.53	0.7	1.2
8462	Under garments, knitted of cotton	1.31	4.6	-0.5	6428	Art.of paper pulp, paper, paperboard,	1.35	7.6	9.0	8451	Jerseys, pull-overs, twinsets, cardiga	1.49	4.8	-0.3
8219	Other fumiture and parts	1.31	2.4	1.6	6842	Aluminium and aluminium alloys, work	1.23	5.6	6.3	5232	Metallic salts and peroxysalts of i	1.39	15.4	0.3
6842	Aluminium and alu- minium alloys, work	1.25	2.6	0.5	265	Vegetables, prepared or preserved, n.	1.09	9.3	-0.2	629	Fruit, fresh or dried, n.e.s.	1.26	7.3	0.1
6584	Bed linen, table linen, toilet and kitc	1.18	7.1	-0.7	7752	Household type refrigerators & food	1.07	7.3	د .	8939	Miscellaneous art. of materials of d	1.17	2.0	0.8
545	Other fresh or chilled vegetables	1.15	6.4	0.5	8939	Miscellaneous art.of materials of d	0.99	1.7	0.0	6123	Parts of footwear	1.15	22.2	-0.2
6624	Non-refract. ceramic bricks, tiles, pi		7.9	1.5	7131	Internal combustion piston engines	0.95	39.6	11.3	7788	Other elect. machinery and equipment	1.12	1.9	1.5
2669	Articles of iron or steel, n.e.s.	el, 1.02	3.9	3.5	5831	Polyethylene	0.92	1.8	3.5	8465	Corsets, brassieres, suspendres and t	1.08	16.7	-0.4

Iran: 740 Products Exported in Total (left); Iraq: 453 Products Exported in Total (middle); Libya: 595 Products Exported in Total (right)

		Share	0	9			Share	0000	0.00			Share		2000
	Product (II	(in percent)	RCAU/09	US KCAGRU/US	n	Product (I	(in percent) KcAU/U9 KcAgru/U9	KCAU/09	KCAgru/U		Product ((in percent)	RCAU/09	RCAU/U9 RCAGIU/U9
	45 RCAs and 4 products $= 88$ percent of exports	cts = 88 pt	ercent of ex	ports		7 RCAs and 1 products = 98.8 percent of exports	= 98.8 perc	ent of exp	orts		14 RCAs and 3 products $= 95.6$ percent of exports	.s = 95.6 pe	rcent of ey	tports
3330	Petrol. oils and crude oils obt. from b	83.60	10.6	-0.2	3330	Petrol. oils and crude oils obt. from b	98.83	12.5	-0.3	3330	Petrol. oils and crude oils obt. from b	91.11	11.5	-0.3
3413	Petroleum gases and other gaseous h	2.11	2.4	-0.1	9710	Gold, non-monetary	0.56	0.7	0.0	3414	Petroleum gases and other gaseous h	2.50	2.1	388.5
5121	Acyclic alcohols and their halogenate	1.30	5.6	1.6	579	Fruit, fresh or dried, n.e.s.	0.18	1.0	13.7	3413	Petroleum gases and other gaseous h	1.98	2.2	-0.4
5112	Cyclic hydrocarbons	1.04	3.4	0.5	2741	Sulphur of all kinds	0.11	4.7	17.2	9710	Gold, non-monetary	0.99	1.3	2.4
2815	Iron ore and concentrates, not agglo	0.92	2.7	2.0	5241	Fissile chemical elements and isoto	0.07	0.7	0.0	5111	Acyclic hydrocarbons	0.70	4.8	9.0-
211	Edible nuts (excl. nuts used for the	0.84	9.7	9.0-	5989	Chemical products and preparations,	0.03	0.0	3.7	5121	Acyclic alcohols and their halogenate	0.42	8.	9.0-
6821	Copper and copper alloys, refined or	0.67	1.4	0.2	6821	Copper and copper alloys, refined or	0.03	0.1	243.7	6727	Iron or steel coils for re-rolling	0.41		-0.4
5111	Acyclic hydrocarbons	0.54	3.7	1.8	5112	Cyclic hydrocarbons	0.02	0.1	0.0	5621	Mineral or chemical fertilizers, nit	0.39	2.5	-0.7
5831	Polyethylene	0.54	1.1	2.9	3222	Other coal, whether/ not pulverized, n	0.02	0.0	0.0	3352	Mineral tars and products of their	0.26	2.4	9.0-
2871	Copper ores and concentrates; copper m	0.53	1.9	-0.1	542	Beans, peas, lentils and other legumino	0.01	0.2	4.0	5831	Polyethylene	0.23	0.5	-0.5
2741	Sulphur of all kinds	0.36	16.0	-0.3	5121	Acyclic alcohols and their halogenate	0.01	0.0	28.6	6713	Iron or steel powders, shot or spong	0.19	9.4	-0.3
5225	Oth. inorg. bases and metallic oxid., hy	0.33	2.8	0.7	7861	Trailers and specially designed conta	0.01	0.0	337.6	5225	Oth. inorg. bases and metallic oxid., hy	0.12	1.0	9.0-
6592	Carpets, carpeting and rugs, knotted	0.33	29.8	9.0-	2117	Sheep and lamb skins without the wool	0.01	2.7	40.7	2741	Sulphur of all kinds	90.0	2.5	0.0
6841	Aluminium and aluminium alloys, unwr	0.25	2.0	0.1	2929	Other materials of vegetable origin	0.00	0.2	20.7	7924	Aircraft exceeding an unladen weigh	0.03	0.0	0.2
5823	Alkyds and other polyesters	0.25	6:0	45.2	430	Barley, unmilled	0.00	0.1	-1.0	6725	Blooms, billets, slabs and sheet bars o	0.03	0.1	9.0-
7810	Passenger motor cars, for transport	0.24	0.1	6.2	5621	Mineral or chemical fertilizers, nit	0.00	0.0	-0.7	6733	Angles, shapes and sections and sheet pi	0.05	0.1	-0.5
6727	Iron or steel coils for re-rolling	0.24	2.0	-0.4	7234	Construction and mining machinery, n	00.00	0.0	0.3	2816	Iron ore agglomerates (sinters, pell	0.02	0.2	0.0
579	Fruit, fresh or dried, n.e.s.	0.18	1.0	-0.7	2111	Bovine and equine hides (other than c	0.00	0.2	326.7	2882	Other non-ferrous base metal waste	0.02	0.1	-0.8
9710	Gold, non-monetary	0.18	0.2	0.0	7638	Other sound recorders and reproduce	00.00	0.0	71.4	2815	Iron ore and concentrates, not agglo	0.02	0.1	0.0
2879	Ores and concentrat. of other non-ferr	0.17	1.8	0.0	6924	Casks, drums, boxes of iron/steel for	0.00	0.0	22.3	341	Fish, fresh (live/dead) or chilled, exc	0.05	0.2	2.0

Regional and Industry Aggregation

Economies/region	GTAP region	Industry	GTAP commodity
Turkey (TUR)	Turkey	1. Primary agriculture (PRIMAGRI)	PDR, WHT, GRO, V_F, OSD, C_B, PFB, OCR, CTL, OAP, RMK, WOL, FRS, FSH
Egypt (EGY)	Egypt	2. Food processing (FOODPROC)	CMT, OMT, VOL, MIL, PCR, SGR, OFD, B $_{\rm T}$,
Jordan (JOR)	from Rest of Western Asia	3. Gas extraction and distribution (GASDISTR)	Gas, GDT
West Bank & Gaza (PSE)	from Rest of Western Asia	4. Oil extraction	Oil
Lebanon (LBN)	from Rest of Western Asia	5. Water	WTR
Syria (SYR)	from Rest of Western Asia	6. Other natural resource extraction (OTHNATRE)	COA and OMN
Iraq (IRQ)	From Rest of Western Asia	7. Petroleum, coal products	P_C
Iran (IRN)	Iran	8. Electricity generation and distribution	ELY
Yemen (YEM)	from Rest of Western Asia	9. Chemical industry and metallurgy (CHEMMETA)	CRP, NMM, I_S, NFM
GCC (GCCC)	Kuwait, Qatar, Bahrain, Saudi Arabia, L and Oman	AE, 10. Textiles and apparel (TEXTAPPA)	TEX, APP
Morocco (MAR)	Morocco	11. Resource based manufacturing (RESBAMAN)	LEA, LUM, PPP,
Tunisia (TUN)	Tunisia	12. Equipment, vehicles and machinery (EQUIVEHI)	ELE, OME, MVH, OTN,
Libya (LBY)	from Rest of North Africa	13. Metal products	FMP
Algeria (DZA)	From Rest of North Africa	14. Other manufactures	OMF
EU27 (EU27)	All 27 member states, XNA (all EU mer territories), XTW (all except Antarctica EU territories)		CNS
USA (USA)	USA	16. Transport	OTP, WTP, ATP
Japan (JPN)	Japan	17. Trade	TRD
NIEs (NIES)	Korea, Hong Kong (China), Singapore, Taiwan (China)	18. Communication	CMN
China (CHN)	China	19. Finance, Insurance, Real Estate	OFI, DWE, ISR
India (IND)	India	20. Public services	OSG
Russia (RUS)	Russia	21. Business services	OBS
Rest of Asia (RASI)	Rest of East Asia (XOC, Mongolia, XEA KHM, IDN, LAO, MYS, PHL, THA, VNM, and Rest of South Asia (BGD, NPL, PAŁ LKA, XSA)	XSE)	ROS
SSA (AFRC)	All countries in S	SSA	
LAC (LATA)	All countries in L	AC (including XSM, XCA, XCB)	
Rest of OECD	(OECD) Australia, New Z	ealand, Canada, Switzerland, XEF	
Rest of Europe & FSU (EFS	SO) Albania, Belarus	, Croatia, UKR, XER, KAZ, KGZ, XSU, ARM, AZE, GEO	

Data Sources for Tariff Duties in Iraq, Jordan, Lebanon, Syria, and Turkey

Import destination	Iraq	Jordan	Lebanon	Syrian Arab Republic	Turkey
Export Source					
Morocco	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 59.08% coverage; WITS & WTO (MFN rates) 40.28% coverage; WITS & Reciprocal (WITS (Imports, 2007) 0.64% coverage.
Jordan	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 99.15% coverage; WITS (Inferred from exports, 2007)&Reciprocal (WITS, Inferred from exports, 2007) 0.85% coverage.		WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 99.9% coverage.	WITS & WTO (non-MFN rates) 80.73% coverage; WITS & Reciprocal (WITS (Imports, 2007) 11.59% coverage; WITS & WTO (MFN rates) 7.68% coverage.
West Bank and Gaza	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.		WITS & WTO (MFN rates) 97.78% coverage; WITS & WTO (non-MFN rates) 2.22% coverage.	
Turkey	WITS (Inferred from exports, 2007) & Country sources 47.08% coverage; WITS (Inferred from exports, 2007)&Reciprocal (WITS (Inferred from exports, 2007) 39.36% coverage; WITS (Inferred from exports, 2007)>AP 13.56% coverage.	WITS & WTO (MFN rates) 76.89% coverage; WITS & Reciprocal (WITS (Imports, 2007) 23.11% coverage.	WITS & Country sources 73.77% coverage; WITS & Reciprocal (WITS (Imports, 2007) 22.96% coverage; WITS & GTAP 3.27% coverage	WITS & Reciprocal (WITS (Imports, 2007) 51.59% coverage; WITS & Country sources 32.27% coverage; WITS & GTAP 16.14% coverage.	
Syrian Arab Republic	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.		WITS & WTO (MFN rates) 97% coverage; WITS & Reciprocal (WITS (Imports, 2007) 3% coverage.
Gulf Cooperation Council	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 91.11% coverage; WITS (Inferred from exports, 2007)&Reciprocal (WITS (Inferred from exports, 2007) 8.89% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 99.97% coverage.	WITS & WTO (non-MFN rates) 99.91% coverage.	WITS & WTO (MFN rates) 70.72% coverage; WITS & WTO (non-MFN rates) 29.21% coverage.
Egypt, Arab Republic of	WITS (Inferred from exports, 2008) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 59% coverage; WITS & WTO (MFN rates) 40.81% coverage.

(continued on next page)

(continued)

Import destination	Iraq	Jordan	Lebanon	Syrian Arab Republic	Turkey
Export Source					
Libya		WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (MFN rates) 80.11% coverage; WITS & WTO (non-MFN rates) 15.71% coverage; WITS & Reciprocal (WITS (Imports, 2007) 4.18% coverage.
Tunisia	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage	WITS & WTO (non-MFN rates) 89.82% coverage; WITS & WTO (MFN rates) 10.18% coverage.
European Union	WITS (Inferred from exports, 2007)&Reciprocal (WITS (Inferred from exports, 2007) 48.22% coverage; WITS (Inferred from exports, 2007) & Country sources 43.7% coverage; WITS (Inferred from exports, 2007)>AP 8.08% coverage.	WITS & WTO (MFN rates) 69.19% coverage; WITS & Reciprocal (WITS (Imports, 2007) 30.7% coverage.	WITS & Reciprocal (WITS (Imports, 2007) 70.3% coverage; WITS & Country sources 28.2% coverage; WITS & GTAP 1.5% coverage.	WITS & Reciprocal (WITS (Imports, 2007) 79.14% coverage; WITS & Country sources 11.21% coverage; WITS & GTAP 9.66% coverage.	WITS & WTO (non-MFN rates) 75.47% coverage; WITS & WTO (MFN rates) 21.57% coverage; WITS & Reciprocal (WITS (Imports, 2007) 2.84% coverage.
Iraq		WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (MFN rates) 88.43% coverage; WITS & WTO (non-MFN rates) 11.27% coverage.
Yemen	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (MFN rates) 100% coverage.
Lebanon	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 99.69% coverage.	WITS & WTO (MFN rates) 99.85% coverage.
Algeria	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (non-MFN rates) 100% coverage.	WITS & WTO (MFN rates) 91.06% coverage; WITS & WTO (non-MFN rates) 8.94% coverage.

 $\textit{Note}. \ \ \text{Unless specified otherwise, all information from WITS refers to imports for 2007}.$

Data Sources for Tariff Duties in Egypt, Tunisia, Morocco, Yemen, and Palestinian Territories

mporting country	Egypt, Arab Republic of	Tunisia	Morocco	Yemen	West Bank and Gaza
Exporting source					
Morocco	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 81.51 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 18.49 % coverage	WITS&WTO (non-MFN rates) 99.99 % coverage			WITS&WTO (non-MFN rates) 100 % coverage
Jordan	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 54.54 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 43.41 % coverage; WITS (Inferred from exports, 2007) & WTO (MFN rates) 2.05 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	
West Bank and Gaza	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 60.64 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 39.36 % coverage		WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	
Turkey	WITS (Inferred from exports, 2007) & Reciprocal (WITS (Inferred from exports)) 30.96 % coverage; WITS (Inferred from exports) & WTO (non-MFN rates) 28.71 % coverage; WITS (Imports, 2008)&WTO (MFN rates) 21.73 % coverage; WITS (Inferred from exports)&WTO (MFN rates) 10.72 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 6.77 % coverage; WITS (Imports, 2008)&Reciprocal (WITS (Imports, 2008)) 1.06 % coverage	WITS&WTO (MFN rates) 57.26 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 42.74 % coverage	WITS&WTO (non-MFN rates) 77.25 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 21.45 % coverage; WITS&WTO (MFN rates) 1.31 % coverage	WITS>AP 92.03 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 7.97 % coverage	WITS>AP 87.61 % coverage; WITS & Reciprocal (WITS (Imports, 2007)) 12.39 % coverage
Syrian Arab Republic	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 66.89 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 33.1 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS & WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	
Gulf Cooperation Council	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 93.87 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 5.86 % coverage	WITS&WTO (non-MFN rates) 99.99 % coverage	WITS&WTO (non- MFN rates) 99.96 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 99.72 % coverage
Egypt, Arab Republic of		WITS&WTO (non-MFN rates) 99.99 % coverage	WITS&WTO (non-MFN rates) 100 % coverage		WITS&WTO (non-MFN rates) 100 % coverage
Libya	WITS (Imports, 2008) & WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	
Tunisia	WITS (Inferred from exports, 2007) & WTO (non-MFN rates) 73.71 % coverage; WITS (Imports, 2008) & WTO (non-MFN rates) 26.29 % coverage		WITS&WTO (non-MFN rates) 100 % coverage	\	WITS&WTO (non-MFN rates) 100 % coverage
European Union	WITS (Inferred from exports, 2007) & Reciprocal (WITS (Inferred from exports, 2007)) 38.47 % coverage; WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 37.16 % coverage; WITS (Inferred from exports, 2007)&WTO (MFN rates) 23.1 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 0.59 % coverage	WITS&Reciprocal (WITS (Imports, 2007)) 67.5 % coverage; WITS&WTO (MFN rates) 32.5 % coverage	WITS&Reciprocal (WITS (Imports, 2007)) 53.67 % coverage; WITS&WTO (non- MFN rates) 45.29 % coverage; WITS&WTO (MFN rates) 1.04 % coverage	WITS>AP 81.38 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 18.62 % coverage	WITS>AP 67.24 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 32.76 % coverage
Iraq	WITS (Imports, 2008)&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage		

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Importing country	Egypt, Arab Republic of	Tunisia	Morocco	Yemen	West Bank and Gaza
Yemen	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 90.75 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 9.25 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage		
Lebanon	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 71.2 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 28.79 % coverage	WITS&WTO (non-MFN rates) 100 % coverage			
Algeria	WITS (Inferred from exports, 2007)&WTO (non-MFN rates) 97.96 % coverage; WITS (Imports, 2008)&WTO (non-MFN rates) 2.04 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	

 $\textit{Note} . \ \, \textit{Unless specified otherwise, all information from WITS refers to imports for 2007}.$

Data Sources for Tariff Duties in the GCC Economies, European Union, Algeria, and Libya

mporting country	Algeria	Libya	European Union	Gulf Cooperation Council
Export source	<u> </u>		·	·
Morocco	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&EUROSTAT 91.89 % coverage; WITS>AP 4.47 % coverage; WITS&WTO (MFN rates) 3.62 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
Jordan	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&EUROSTAT 96.39 % coverage; WITS>AP 2.24 % coverage; WITS&WTO (MFN rates) 1.37 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
West Bank and Gaza	WITS&WTO (non-MFN rates) 100 % coverage		WITS&WTO (MFN rates) 47.9 % coverage; WITS&EUROSTAT 41.1 % coverage; WITS>AP 11.01 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
Turkey	WITS&WTO (MFN rates) 80.99 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 19.01 % coverage	WITS&Country sources 100 % coverage	WITS&EUROSTAT 90.83 % coverage; WITS&WTO (MFN rates) 8.89 % coverage	WITS&WTO (MFN rates) 80.76 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 19.17 % coverage
Syrian Arab Republic	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (MFN rates) 80.78 % coverage; WITS&EUROSTAT 16.5 % coverage; WITS>AP 2.72 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
Gulf Cooperation Council	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (MFN rates) 98.36 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 1.62 % coverage	WITS&WTO (non-MFN rates) 99.13 % coverage; WITS&WTO (MFN rates) 0.87 % coverage
Egypt, Arab Republic of	WITS&WTO (non-MFN rates) 99.17 % coverage; WITS&WTO (MFN rates) 0.83 % coverage	WITS&WTO (non-MFN rates) 99.99 % coverage	WITS&EUROSTAT 97.48 % coverage; WITS&WTO (MFN rates) 1.65 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 0.57 % coverage	WITS&WTO (non-MFN rates) 99.99 % coverage
Libya	WITS&WTO (non-MFN rates) 100 % coverage		WITS&WTO (MFN rates) 89.44 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 10.55 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
Tunisia	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&EUROSTAT 95.3 % coverage; WITS>AP 3.85 % coverage; WITS&WTO (MFN rates) 0.85 % coverage	WITS&WTO (non-MFN rates) 99.97 % coverage
European Union	WITS&WTO (MFN rates) 51.36 % coverage; WITS&Reciprocal (WITS (Imports, 2007)) 48.64 % coverage	WITS&Country sources 100 % coverage	WITS&WTO (MFN rates) 96.56 % coverage; WITS>AP 3.44 % coverage	WITS&Reciprocal (WITS (Imports, 2007)) 51.6 % coverage; WITS&WTO (MFN rates) 48.09 % coverage
Iraq	WITS&WTO (non-MFN rates) 100 % coverage		WITS&WTO (MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage
Yemen	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage WITS&WTO (MFN rates) 99.92 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	
Lebanon	WITS&WTO (non-MFN rates) 100 % coverage	WITS&WTO (non-MFN rates) 100 % coverage	WITS&EUROSTAT 90.64 % coverage; WITS&WTO (MFN rates) 7.27 % coverage; WITS>AP 2.08 % coverage	WITS&WTO (non-MFN rates) 99.98 % coverage
Algeria		WITS&WTO (non-MFN rates) 100 % coverage	WITS&EUROSTAT 99.42 % coverage; WITS&WTO (MFN rates) 0.56 % coverage	WITS&WTO (non-MFN rates) 100 % coverage

Note: Unless specified otherwise, all information from WITS refers to imports for 2007.

Turkey's Tariff Protection by Source and Product

Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth. natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	25%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Jordan	67%	3%	0%	0%	0%	0%	0%	1%	3%	0%	0%	0%	0%	1%
West Bank and Gaza	0%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Syrian Arab Republic	10%	24%	0%	0%	0%	4%	0%	4%	6%	9%	2%	0%	2%	3%
Gulf Cooperation Council	1%	62%	0%	0%	0%	0%	0%	3%	5%	1%	0%	1%	0%	1%
Egypt, Arab Republic of	6%	43%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Libya	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	0%	1%	0%	0%
Tunisia	13%	34%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	13%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iraq	11%	12%	0%	0%	0%	0%	0%	1%	6%	1%	0%	1%	0%	0%
Iran	37%	35%	0%	0%	1%	0%	0%	2%	5%	1%	3%	0%	0%	0%
Yemen	84%	38%	0%	0%	0%	1%	0%	0%	12%	8%	2%	4%	0%	51%
Lebanon	0%	16%	0%	0%	0%	0%	0%	1%	7%	0%	1%	3%	1%	1%
Algeria	2%	5%	0%	0%	0%	0%	0%	0%	4%	1%	0%	1%	0%	0%
China	17%	49%	0%	0%	0%	0%	0%	2%	5%	3%	0%	0%	0%	2%
India	5%	54%	0%	0%	1%	0%	0%	1%	4%	1%	2%	1%	0%	3%
Japan	18%	47%	0%	0%	0%	4%	0%	4%	5%	2%	4%	3%	5%	4%
Latin America	35%	28%	0%	0%	1%	0%	0%	1%	2%	1%	1%	1%	4%	8%
Newly industrialized countries	21%	31%	0%	0%	0%	4%	0%	4%	7%	1%	3%	3%	25%	4%
Sub-Saharan Africa	8%	21%	0%	0%	0%	0%	0%	1%	5%	1%	1%	0%	0%	2%
Rest of Asia	75%	21%	0%	0%	0%	0%	0%	1%	5%	2%	2%	0%	0%	5%
Rest of Europe and FSU	22%	35%	0%	0%	0%	0%	0%	4%	4%	0%	0%	0%	0%	6%
Rest of OECD	5%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%
Russian Federation	30%	23%	0%	0%	0%	0%	0%	5%	2%	0%	1%	0%	0%	2%
USA	12%	20%	0%	0%	0%	3%	0%	2%	7%	0%	2%	2%	306%	6%

Egypt's Tariff Protection by Source and Product

Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth, natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Jordan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
West Bank and Gaza	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turkey	1%	9%	0%	0%	0%	0%	0%	2%	3%	3%	1%	4%	3%	2%
Syrian Arab Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gulf Cooperation Council	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Libya	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tunisia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	0%	53%	1%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	2%
Iraq	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iran	8%	7%	0%	0%	2%	5%	0%	2%	20%	11%	15%	12%	0%	6%
Yemen	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lebanon	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Algeria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
China	10%	31%	0%	0%	2%	11%	0%	8%	29%	25%	9%	16%	15%	16%
India	10%	6%	0%	5%	4%	5%	0%	6%	15%	14%	14%	13%	21%	10%
Japan	3%	9%	0%	0%	2%	5%	0%	9%	13%	12%	23%	11%	20%	19%
Latin America	3%	5%	0%	0%	1%	9%	0%	9%	16%	10%	8%	14%	9%	6%
Newly industrialized countries	15%	5%	0%	0%	0%	7%	0%	6%	16%	13%	20%	13%	15%	15%
Sub-Saharan Africa	1%	218%	1%	0%	2%	6%	0%	2%	17%	8%	13%	13%	5%	21%
Rest of Asia	9%	11%	0%	0%	2%	6%	0%	11%	16%	14%	15%	15%	20%	12%
Rest of Europe and FSU	2%	4%	0%	1%	2%	5%	0%	2%	13%	6%	6%	11%	5%	2%
Rest of OECD	2%	17%	0%	0%	1%	4%	0%	10%	17%	9%	7%	12%	13%	9%
Russian Federation	2%	3%	0%	0%	0%	5%	0%	3%	12%	6%	11%	11%	16%	3%
USA	2%	9%	0%	0%	1%	8%	0%	8%	15%	8%	6%	12%	16%	5%

Lebanon's Tariff Protection by Source and Product

Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth. natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Jordan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
West Bank and Gaza	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Turkey	4%	12%	0%	5%	0%	3%	0%	6%	4%	6%	6%	5%	4%	5%
Syrian Arab Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gulf Cooperation Council	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Egypt, Arab Republic of	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Libya	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tunisia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	2%	7%	0%	4%	1%	4%	0%	4%	3%	3%	3%	4%	1%	4%
Iraq	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iran	5%	7%	0%	5%	2%	2%	0%	6%	5%	4%	5%	5%	5%	5%
Yemen	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Algeria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
China	15%	14%	0%	5%	2%	0%	0%	7%	4%	15%	7%	6%	7%	7%
India	4%	4%	0%	5%	3%	2%	0%	6%	4%	12%	4%	6%	0%	3%
Japan	24%	14%	0%	5%	0%	2%	0%	4%	4%	4%	7%	5%	6%	7%
Latin America	2%	4%	0%	5%	3%	5%	0%	5%	6%	7%	6%	6%	2%	3%
Newly industrialized countries	5%	12%	0%	5%	2%	6%	0%	3%	2%	5%	9%	5%	4%	6%
Sub-Saharan Africa	6%	20%	1%	5%	0%	0%	0%	1%	5%	1%	5%	4%	5%	3%
Rest of Asia	6%	7%	0%	5%	1%	2%	0%	5%	3%	11%	9%	6%	4%	7%
Rest of Europe and FSU	3%	5%	0%	5%	0%	2%	0%	5%	5%	4%	5%	6%	7%	3%
Rest of OECD	3%	5%	0%	5%	3%	2%	0%	1%	3%	3%	5%	5%	3%	2%
Russian Federation	1%	11%	0%	5%	0%	2%	0%	5%	6%	1%	6%	5%	3%	1%
USA	1%	6%	0%	5%	2%	2%	0%	5%	3%	2%	5%	5%	3%	3%

Jordan's Tariff Protection by Source and Product

Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth. natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
West Bank and Gaza	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turkey	7%	47%	30%	5%	12%	0%	0%	5%	7%	7%	9%	4%	6%	9%
Syrian Arab Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gulf Cooperation Council	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Egypt, Arab Republic of	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Libya	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tunisia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	1%	5%	30%	0%	1%	0%	0%	4%	2%	2%	1%	4%	1%	2%
Iraq	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iran	25%	20%	30%	5%	3%	13%	0%	6%	20%	11%	7%	11%	30%	16%
Yemen	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lebanon	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Algeria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
China	18%	8%	30%	5%	6%	7%	0%	7%	5%	19%	8%	12%	25%	8%
India	24%	7%	30%	8%	2%	10%	0%	2%	8%	13%	3%	10%	25%	7%
Japan	0%	11%	30%	10%	0%	10%	0%	6%	1%	7%	8%	16%	24%	7%
Latin America	6%	9%	30%	5%	25%	10%	0%	7%	2%	6%	8%	17%	18%	8%
Newly industrialized countries	0%	10%	30%	5%	17%	10%	0%	3%	2%	12%	7%	10%	7%	6%
Sub-Saharan Africa	7%	100%	30%	5%	10%	10%	0%	2%	3%	5%	13%	14%	24%	54%
Rest of Asia	3%	4%	30%	5%	9%	10%	0%	8%	4%	7%	11%	9%	16%	8%
Rest of Europe and FSU	1%	11%	30%	5%	0%	11%	0%	4%	20%	0%	2%	15%	30%	3%
Rest of OECD	5%	23%	30%	5%	15%	10%	0%	3%	6%	10%	7%	3%	15%	9%
Russian Federation	0%	48%	30%	5%	0%	29%	0%	0%	30%	1%	17%	8%	30%	0%
USA	2%	4%	19%	5%	2%	10%	0%	3%	7%	2%	4%	13%	12%	4%

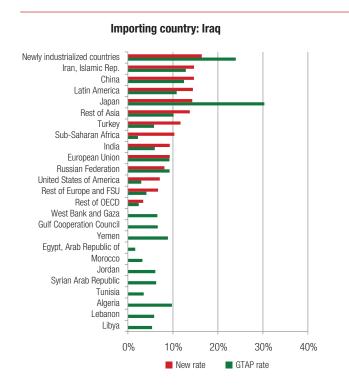
Syrian Arab Republic's Tariff Protection by Source and Product

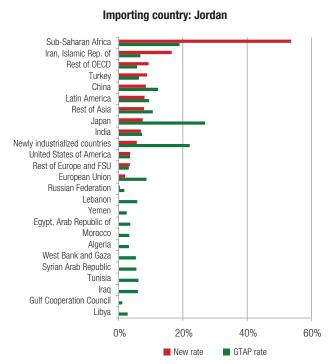
Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth. natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Jordan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
West Bank and Gaza	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Turkey	4%	13%	5%	0%	1%	3%	0%	5%	7%	4%	8%	6%	6%	5%
Gulf Cooperation Council	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Egypt, Arab Republic of	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Libya	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tunisia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	3%	13%	5%	0%	5%	9%	0%	5%	11%	5%	14%	12%	10%	9%
Iraq	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iran	18%	23%	5%	0%	6%	9%	0%	6%	13%	23%	25%	6%	5%	18%
Yemen	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lebanon	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Algeria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
China	6%	17%	5%	0%	5%	6%	0%	5%	13%	18%	16%	13%	10%	11%
India	18%	7%	5%	5%	5%	9%	0%	4%	8%	10%	10%	10%	7%	8%
Japan	1%	28%	5%	0%	3%	5%	0%	6%	12%	1%	28%	9%	17%	24%
Latin America	7%	8%	5%	0%	1%	9%	0%	6%	7%	1%	22%	12%	6%	8%
Newly industrialized countries	5%	4%	5%	0%	3%	9%	0%	3%	9%	2%	30%	9%	8%	21%
Sub-Saharan Africa	7%	14%	5%	0%	3%	8%	0%	9%	7%	6%	23%	9%	24%	7%
Rest of Asia	7%	7%	5%	0%	2%	9%	0%	5%	9%	4%	25%	14%	8%	9%
Rest of Europe and FSU	4%	2%	5%	0%	1%	9%	0%	2%	11%	3%	13%	23%	25%	2%
Rest of OECD	1%	8%	5%	0%	1%	9%	0%	2%	7%	3%	9%	12%	25%	7%
Russian Federation	3%	3%	5%	0%	0%	9%	0%	2%	21%	2%	15%	7%	24%	8%
USA	2%	12%	5%	0%	3%	5%	0%	4%	7%	4%	14%	6%	26%	3%

Iraq's Tariff Protection by Source and Product

Commodity	Primary agriculture	Food processing	Gas extraction and distribution	Oil extraction	Oth. natural resource extraction	Petroleum, coal products	Electricity generation & distribution	Chemical industry	Textiles and apparel	Resource- based manufacturing	Equipment, vehicles and machinery	Metal products	Other manufactures	Total
Morocco	0%	0%	© 6 € 0%	0%	0%	0%	<u>ш 5</u> 5	ڪ.⊆ 0%	<u>8 ≃</u>	<u>~ ~ ~ E</u>	™ % E	≥ 0%	0%	0%
Jordan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
West Bank and	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Gaza														
Turkey	6%	17%	0%	10%	13%	5%	10%	9%	15%	14%	11%	12%	8%	12%
Syrian Arab Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gulf Cooperation Council	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Egypt, Arab Republic of	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Libya	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tunisia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
European Union	5%	22%	10%	8%	13%	5%	10%	7%	13%	12%	8%	11%	12%	9%
Iran	8%	43%	10%	9%	2%	10%	10%	6%	19%	11%	17%	11%	3%	15%
Yemen	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lebanon	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Algeria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
China	2%	14%	10%	1%	19%	5%	10%	9%	17%	19%	16%	11%	16%	15%
India	10%	11%	10%	1%	6%	5%	10%	9%	18%	15%	9%	11%	26%	9%
Japan	75%	47%	10%	10%	1%	5%	10%	9%	13%	12%	14%	9%	22%	14%
Latin America	8%	15%	10%	1%	4%	4%	10%	9%	7%	19%	9%	15%	30%	14%
Newly industrialized countries	3%	26%	10%	1%	3%	7%	10%	9%	24%	11%	13%	9%	8%	16%
Sub-Saharan Africa	14%	28%	10%	1%	1%	6%	10%	11%	9%	17%	10%	8%	16%	10%
Rest of Asia	10%	13%	10%	1%	2%	6%	10%	9%	18%	16%	20%	10%	16%	14%
Rest of Europe and FSU	10%	21%	10%	1%	2%	4%	10%	5%	21%	13%	11%	7%	9%	7%
Rest of OECD	1%	15%	10%	1%	1%	5%	10%	5%	7%	8%	8%	8%	18%	3%
Russian Federation	6%	80%	10%	7%	0%	7%	10%	3%	19%	5%	12%	7%	3%	8%
USA	2%	7%	10%	10%	3%	5%	10%	10%	7%	14%	10%	13%	13%	7%

Protection in GTAP 8 Database and in the MENA-specific GTAP 8 Database





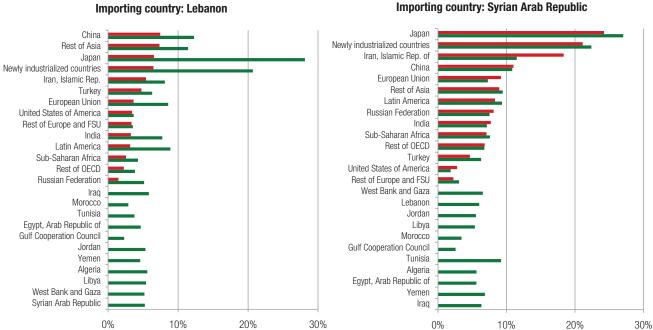
New rate

■ GTAP rate

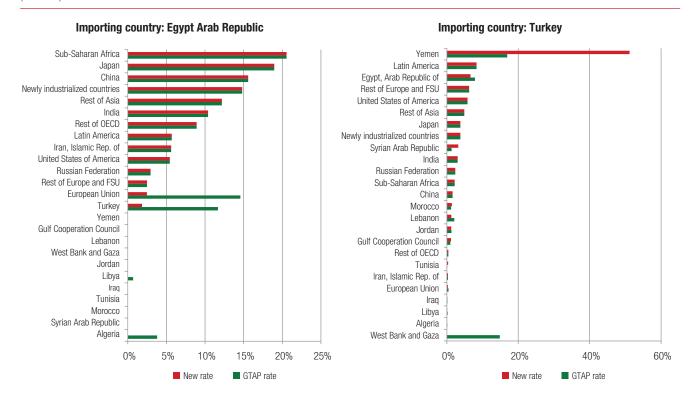
Importing country: Lebanon

New rate

■ GTAP rate



(continued)



Change in Turkey's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	20	11	9	-102	-62
Processed food	420	-8	83	-64	431
Gas extraction & distr.	0	0	0	0	0
Oil extraction	0	0	1	0	0
Water	0	0	0	-1	-1
Other natural resources	-1	-1	1	-45	-45
Petroleum and coal	0	527	204	52	782
Electricity	0	0	0	7	7
Chemicals and metallurgy	-35	-38	97	-511	-487
Textiles and apparel	-44	-59	-135	-818	-1057
Resource based manufactures	-6	23	16	-69	-36
Equipment and vehicles	-77	-61	-150	-1066	-1355
Metal products	-9	9	16	-78	-62
Other manufactures	-4	40	-10	-63	-37
Construction	-1	-2	-5	158	151
Transport	-17	-15	-19	-306	-357
Trade	-3	-5	-13	187	165
Communications	-1	-2	-4	-27	-33
FIRE	-3	-4	-11	-41	– 59
Public services	-3	-4	-12	-48	-67
Other Business services	-1	-2	- 5	-22	-29
Tourism and others	-2	-3	-9	102	88
Total	233	406	53	-2755	-2063
	0.2%	0.3%	0.0%	-2.2%	-1.7%

Change in Egypt's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	-12	-4	10	-241	-246
Processed food	341	42	46	-177	252
Gas extraction & distr.	-28	-7	-16	-1157	-1208
Oil extraction	-1	-4	-6	-409	-421
Water	0	0	0	0	0
Other natural resources	-1	-1	1	-25	-25
Petroleum and coal	-5	-6	-1	-393	-404
Electricity	0	-1	0	-6	-8
Chemicals and metallurgy	-46	169	135	-367	-110
Textiles and apparel	-37	-24	-12	-327	-400
Resource based manufactures	-5	9	3	-63	- 57
Equipment and vehicles	-8	-1	4	-93	-98
Metal products	-4	-5	-1	-10	-20
Other manufactures	0	0	0	-7	-7
Construction	-8	-8	-4	631	611
Transport	-65	-62	-46	4007	3834
Trade	-8	-7	-5	326	306
Communications	-16	-15	-11	1180	1138
FIRE	-7	- 7	- 5	487	467
Public services	-8	-7	-4	-125	-144
Other Business services	-18	– 15	-12	1125	1079
Tourism and others	-10	-8	-6	261	237
Total	51	40	71	4615	4778
	0.1%	0.1%	0.2%	13.0%	13.4%

Change in Jordan's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	34	3	14	-3	48
Processed food	-20	0	- 7	4	-24
Gas extraction & distr.	0	0	0	-1	-1
Oil extraction	0	0	0	0	0
Water	0	0	0	-2	-2
Other natural resources	0	0	0	-4	-4
Petroleum and coal	0	3	0	-4	-1
Electricity	0	0	0	0	0
Chemicals and metallurgy	6	-4	-7	-110	-114
Textiles and apparel	7	-3	6	-66	- 57
Resource based manufactures	1	11	-2	0	10
Equipment and vehicles	3	9	4	26	42
Metal products	1	15	-7	0	10
Other manufactures	1	5	1	-11	-5
Construction	0	0	0	12	13
Transport	7	-7	-2	415	413
Trade	2	-1	0	98	99
Communications	1	-1	0	96	96
FIRE	2	-1	0	85	85
Public services	4	-3	-1	-113	-113
Other Business services	11	-9	-1	589	590
Tourism and others	1	0	0	27	27
Total	61	14	-2	1037	1112
	0.6%	0.2%	0.0%	10.9%	11.7%

Change in Lebanon's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	1	0	11	-14	-3
Processed food	-1	-5	3	-19	-22
Gas extraction & distr.	0	0	0	0	-1
Oil extraction	0	0	0	0	0
Water	0	0	0	-1	-1
Other natural resources	0	0	1	0	1
Petroleum and coal	0	1	1	-1	1
Electricity	0	0	0	0	0
Chemicals and metallurgy	1	36	5	-62	-19
Textiles and apparel	0	-1	5	-9	-4
Resource based manufactures	1	20	1	-18	4
Equipment and vehicles	1	-2	1	-35	-35
Metal products	0	9	-1	-7	2
Other manufactures	1	30	6	-43	-7
Construction	0	-1	0	-2	-3
Transport	1	16	-6	185	197
Trade	0	- 5	-2	-16	-23
Communications	0	-3	-1	42	38
FIRE	0	-4	-1	18	13
Public services	1	-15	- 7	-57	-78
Other Business services	3	-48	-18	218	155
Tourism and others	0	-1	-1	- 5	-7
Total	11	29	-3	172	208
	0.2%	0.5%	0.0%	2.8%	3.5%

Change in Syria's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	15	13	-11	-213	-196
Processed food	-17	-9	-7	-44	-76
Gas extraction & distr.	0	0	0	-5	-6
Oil extraction	0	90	250	-1133	-793
Water	0	0	0	-7	-7
Other natural resources	0	1	3	-9	-4
Petroleum and coal	0	19	24	-66	-22
Electricity	0	1	0	-1	0
Chemicals and metallurgy	1	19	33	-45	7
Textiles and apparel	2	-3	-1	-53	-54
Resource based manufactures	0	8	0	-20	-12
Equipment and vehicles	0	2	5	4	11
Metal products	0	0	-1	-9	-9
Other manufactures	0	4	3	-8	-2
Construction	0	0	0	38	38
Transport	3	-13	18	1201	1209
Trade	1	-10	-6	131	116
Communications	0	-7	-4	186	175
FIRE	0	-6	-3	190	181
Public services	1	-12	-7	-143	-160
Other Business services	3	-41	-22	1408	1348
Tourism and others	0	-1	0	30	29
Total	12	54	275	1434	1775
	0.1%	0.3%	1.7%	9.3%	11.4%

Change in Iraq's Export Volumes (US\$ million)

	Agricultural liberalization	Reducing AVEs of NTMs	Improving transport logistics	Services liberalization	Cumulative results
Primary Agriculture	5	5	30	-11	29
Processed food	2	0	12	-2	12
Gas extraction & distr.	0	0	0	-4	-5
Oil extraction	15	-6	-66	-1479	-1536
Water	0	0	-1	-7	-7
Other natural resources	0	0	1	-6	-5
Petroleum and coal	0	2	5	-4	3
Electricity	0	0	0	-1	-1
Chemicals and metallurgy	1	4	57	- 7	54
Textiles and apparel	1	2	37	-3	36
Resource based manufactures	0	5	9	-3	12
Equipment and vehicles	0	1	8	-3	6
Metal products	0	1	5	-2	5
Other manufactures	0	1	1	-3	-1
Construction	0	0	0	32	32
Transport	7	-4	-22	685	666
Trade	2	-1	- 5	181	177
Communications	2	-1	-6	216	211
FIRE	2	-1	-6	173	167
Public services	3	-1	-8	-88	-94
Other Business services	14	-6	-46	1267	1229
Tourism and others	1	0	-1	45	44
Total	57	2	0	976	1034
	0.4%	0.0%	0.0%	7.0%	7.4%

Global Competitiveness Index

	Turkey	Syria	Jordan	Lebanon
Total score (out of 142)	59	98	71	89
Basic requirement	64	77	61	109
Institutions	80	70	45	115
Infrastructure	51	97	59	121
Macroeconomic environment	69	68	97	125
Health and primary education	75	62	72	35
Efficiency enhancers	52	109	78	64
Higher education and training	74	106	59	49
Goods market efficiency	47	102	54	35
Labor market efficiency	133	134	107	110
Financial market development	55	117	65	58
Technological readiness	55	105	59	89
Market size	17	66	88	71
Innovation and sophistication factors	58	111	70	78
Business sophistication	58	94	68	51
Innovation	69	125	77	115

Source: The Global Competitiveness Report 2011–12, World Economic Forum 2012.

Indicators of Trade Policy Environment

	Turkey	Syria	Jordan	Lebanon
Enabling trade index 2012 ^a	<u> </u>			
Overall ranking (out of 132)	62	108	42	93
A. Market access	51	122	36	93
Domestic and foreign market access	51	122	36	93
B. Border administration	63	117	50	91
2. Efficiency of customs administration	68	132	65	97
3. Efficiency of import-export procedures	60	91	59	76
4. Transparency of border administration	68	114	43	111
C. Transport and communication infrastructure	47	96	58	79
5. Availability and quality of transport infrastructure	39	72	44	70
6. Availability and quality of transport services	38	77	73	68
7. Availability and use of ICTs	64	112	71	88
D. Business environment	86	48	35	97
8. Regulatory environment	55	93	44	79
9. Physical security	102	29	32	103
Logistics performance index 2012 ^b				
Overall ranking (out of 155)	27	92	102	96
1. Customs	32	104	115	124
2. Infrastructure	25	84	91	102
3. Ease of arranging shipments	30	100	63	85
4. Quality of logistics and services	26	107	137	119
5. Tracking and tracing	29	125	104	91
6. Timelines	27	73	106	86

Note:

^a "The Global Enabling Trade Report 2012," World Economic Forum 2012.

^b "Connecting to Compete: Trade Logistics in the Global Economy," World Bank 2012.

Ease of Doing Business Ranking 2011–2012

	Turkey	Syria	Jordan	Lebanon	Iraq
Total ranking (out of 183)	71	134	96	104	164
Starting a business	61	129	95	109	176
Dealing with construction permits	155	133	93	161	120
Getting electricity	72	83	36	47	46
Registering property	44	82	101	105	98
Getting credit	78	174	150	78	174
Protecting investors	65	111	122	97	122
Paying taxes	79	111	21	30	49
Trading across borders	80	122	58	93	180
Documents to export (number)	7	8	6	5	10
Time to export (days)	14	15	13	22	80
Cost to export (\$ per container)	990	1,190	825	1,050	3,550
Documents to import (number)	8	9	7	7	10
Time to import (days)	15	21	15	32	83
Cost to import (\$ per container)	1,063	1,625	1,335	1,250	3,650
Enforcing contracts	51	175	130	120	140
Resolving insolvency	120	102	104	125	183

Source: Doing Business 2012, World Bank-IFC 2012.

ANNEX 29: PERFORMING A TRADE-RELATED REGULATORY AUDIT IN SERVICES: WHY AND HOW?

An inventory or trade-related audit of domestic regulatory measures "affecting services and trade in services" should be compiled on the basis of existing legislation and regulations. Such an internal exercise can be very useful and should be pursued even in the absence of external negotiations, as it will strengthen inter-agency coordination while also promoting a culture of regulatory reform and regulatory impact assessment.

Trade and investment negotiations, however, offer excellent, ready-made, opportunities for engaging in such an exercise. This, in turn, begs the additional question of the need to build trade-related capacity among regulatory officials who may have limited knowledge or experience about international agreements, trade law and negotiating processes. It can also help beef up knowledge among trade officials who may not have a full understanding of the underlying law and economics of sectoral regulatory challenges.

Conducting an audit of all service-related regulation can prove a daunting task, particularly in light of the fact that such an exercise may typically exceed the scope of measures subject to services trade negotiations. This is why enhancing the ability of government officials to gain a fuller understanding of trade law is particularly important, if nothing else to properly identify and circumscribe what by way of domestic regulatory conduct may legitimately be expected to arise in international trade discussions and distinguish that from more purely domestic matters of non-discriminatory conduct. Regulatory officials naturally tend to view their work as primarily

domestic in nature. Yet the advent of trade disciplines on services in the GATS and in a growing number of PTAs has clearly revealed that much of what regulators consider domestic in nature potentially lies within the perimeter of trade and investment negotiations.

Why a regulatory audit?

The two-way interaction afforded by the request-offer process on which services negotiations typically rest can be put to good use if it can underpin attempts to benchmark a country's domestic approach to services regulation with that of its main trading partners and identify means of achieving greater policy convergence and/or move in the direction of "best" or "better" (often pro-competitive) regulatory practices. Such benchmarking, and the related need (in response to potential requests from trading partners) to identify more precisely what policies and measures can (and cannot) be addressed in the negotiations, may also allow a useful policy dialogue to take place between trade officials, sectoral regulators and officials in other government agencies and departments, as well as with key stakeholders in business and civil society (including, critically, users). Such two-way policy interaction is also a potentially important means of answering the central question of what policy objectives developing countries ultimately wish to pursue in their GATS/PTA negotiations, both domestically and in foreign markets? Questions that may arise in such a domestic dialogue

so as to inform the request-offer process comprise the following:

- What is policy objective pursued by the relevant regulatory measure?
- Is the policy objective pursued by the specific measure still consistent with overall government policy?
- How transparent is the regulatory measure and the process to adopt it?
- Are private sector stakeholders, domestic and foreign, consulted prior to the enactment of new policy measures?
- When was the policy measure, law or regulation enacted?
- When was the measure last invoked in domestic court proceedings or in the legislature?
- Is the measure periodically reviewed?
- Is the government satisfied that the policy objective behind specific regulatory measures is being achieved and has it developed an impact assessment framework to assess the effectiveness of its regulatory regime?
- Can the policy objective be achieved through other means or in a manner that might lessen its restrictive impact on trade or investment?

Performing an audit of a country's regulatory regime in the context of negotiations on services trade and investment liberalization may thus generate positive policy spill overs in terms of domestic regulatory conduct and design and contribute to a strengthening of consultations within and outside government in the services field. Among the reasons why governments might be interested in engaging a trade-related regulatory audit are the following:

Ensuring that key regulatory objectives are met in the most efficient manner (i.e., in the manner that is least wasteful of scarce public resources), including in respect of prudential, consumer protection or social policy objectives.

- Identifying antiquated or inefficient regulations and adopting or converging towards international or regional best practices or norms. In the field of financial services, for instance, this may allow a benchmarking of the degree to which domestic prudential standards and regulations approximate agreed international norms.
- Encouraging, where feasible, the adoption of market access-friendly (pro-competitive) regulation.
- Building trust within the government (i.e., encouraging a "whole of government" approach to the formulation and enactment of domestic regulation) through closer dialogue between trade negotiators, line ministries and sectoral regulators.
- Deepening dialogue with key external stakeholders, including regional/local governments, producers and users/consumers, NGOs, and the academic community.
- Gaining a clearer sense of the reasons behind the possible continued need to maintain potentially trade- and investment-restrictive measures.

How can a regulatory audit be carried out?

As regards the practical means of effecting such an audit, one useful starting point is to prepare a list of non-conforming measures, i.e., the equivalent of a negative list of measures which, absent their inscription in reservation lists, would be found in breach of the key liberalizing provisions found in trade agreements—national treatment, market access (quantitative restrictions), local presence requirements, and MFN treatment—and to describe comprehensively:

- The sectoral nature of the listed non-conforming measures (for definitional purposes);
- The level of government at which they are applied (i.e., national, sub-national or municipal);
- Their legal anchoring (i.e., the full citation of the law or regulation in question); and

■ The precise nature of their non-conformity.

There are several uses to which a trade-related regulatory audit may be put. These include:

- Providing a comprehensive overview of the tradeand investment-restrictive components of a country's regulatory regime.
- Identifying regulations in need of reform and possibly elimination (which can then yield useful negotiating currency).
- Confirming the legitimacy and continued need for trade- and/or investment-restrictive regulations.
- Being clearer on the implicit hierarchy of trade- and investment restrictive measures (i.e., understanding which type of restrictive measure is most likely to be deemed market access unfriendly by trading partners). This may include non-discriminatory measures, particularly quantitative restrictions (i.e. market access measures), including prudential measures.
- Identifying measures that may be scheduled in trade agreements (i.e., in making new and/or improved negotiating offers).
- Anticipating partner country negotiating requests and assessing the scope for opening up/reforming regulations or leaving them unchanged.

It bears noting that the negative list-based regulatory audit depicted above focuses policy attention on measures that are either overtly discriminatory (in the case of measures violating the national treatment and MFN provisions of trade agreements) or which overtly constrain the quantum of competition allowed in market (in the case of market access or non-discriminatory quantitative restrictions).

A trade-related regulatory audit conducted along these lines may therefore not always easily provide a full reading of all non-discriminatory measures which may nonetheless be unduly burdensome or act as disguised restrictions to trade and investment and for which trade disciplines are being sought under the GATS' Article

VI:4 work program. Identifying such measures is inherently more difficult and requires considerably more dialogue between trade negotiators, line ministries and sectoral regulators and greater technical competence on the part of trade ministries than is often on offer.

Despite the above caveats, experience shows that a trade-related regulatory audit that maps the universe of explicitly restrictive governmental measures affecting trade and investment in services can still yield important gains in transparency and help anticipate negotiating red lines and implementation bottlenecks deriving from engagement in trade and investment negotiations. In turn, the homework and regulatory dialogue that flow from such an exercise can help promote a culture of pro-competitive regulatory reform in countries that attempt it.

Conducting a regulatory audit is indeed a useful means of preparing for services negotiations, to master the sectoral intricacies and the technical details that are the very currency of services negotiations conducted along request-offer lines, to provide service providers with a one-stop inventory of restrictive measures maintained at home (and in the markets of key trading partners to the extent that such efforts are reciprocated or mandated by trade agreements), and to afford negotiators a complete road map of measures to target and rank order in future negotiations. None of the above is readily possible without precise information on the regulatory status quo. Securing information on the regulatory status quo over a broad sample of developing countries or WTO Members would allow useful analytical work of a comparative nature - across countries, regions, levels of development, sectors, modes of supplying services, types of PTAs (North-North, North-South, South-South; positive vs. negative list type, single undertaking or sequential type) to be undertaken. Such work would also help measure the distance that exists between the actual level of market access afforded under status quo regulations and that resulting from legally binding commitments scheduled under PTAs and the WTO (including DDA offers). Such information could thus usefully underpin

attempts at assessing the political economy of preferences in services trade and to study the forces likely to drive or limit their erosion in a multilateral setting.

Working through the bodies responsible for coordinating the preparatory work for negotiations, and using a common methodological framework for ease of comparison and consistency, governments should thus be encouraged to gather an inventory of measures that will enable them to seek answers to at least a few basic policy questions:

- Is the existing regulation or regulatory regime adequate and/or acceptable or does it need to be changed?
- Can any needed changes can be contemplated within the timeframe of on-going international negotiations?
- Can regulatory changes be "offered" in international negotiations?

What regulatory gaps need to command early attention before legally binding commitments can be envisaged?

The above elements are important because offers in services negotiations may involve the binding of existing regulatory situations, and countries should avoid scheduling legally binding measures which domestic regulators do not find adequate or fully developed. At the same time, changes to domestic regulation that may be needed or contemplated for internal or domestic political reasons may in fact constitute valuable offers to make in the negotiations if they tend to improve on market access or national treatment conditions—as defined in most international agreements. It may indeed be opportune in some circumstances for countries to undertake domestic regulatory changes and offer to bind them in a trade negotiating setting while there is still time to (seek to) obtain reciprocal concessions from major trading partners.

Gravity Equation for Bilateral Passenger Flows using Country Level Air Traffic Data

Dependent Variable:			Log(Pax)			Pax ≥ 0
Methodology: Model Specification:	OLS Basic (1)	OLS Basic (2)	OLS Extended (3)	OLS Interactions (4)	OLS, weights Interactions (5)	Poisson Interactions (6)
PANEL A: Regression Coefficients						
ALI	0.014***	0.029***	0.030***			
	(0.005)	(0.005)	(0.006)			
ALI * Plurilateral ASA		-0.048***	-0.051***			
		(0.009)	(0.009)			
ALI * NN				0.033***	0.029***	0.017***
				(0.009)	(0.010)	(0.006)
ALI * Plurilateral ASA * NN				-0.013	-0.009	0.030*
				(0.019)	(0.020)	(0.018)
ALI * NS				0.028***	0.022***	0.034***
				(0.008)	(800.0)	(0.006)
ALI * Plurilateral ASA * NS				-0.005	0.006	-0.065**
				(0.032)	(0.035)	(0.026)
ALI * SS				0.033*	0.031*	0.063***
				(0.017)	(0.018)	(0.016)
ALI * Plurilateral ASA * SS				-0.037	-0.033	-0.091***
				(0.022)	(0.024)	(0.021)
Plurilateral ASA	-0.427**	1.151***	1.440***	1.122**	0.978*	1.588***
	(0.178)	(0.337)	(0.341)	(0.460)	(0.521)	(0.336)
Plurilateral ASA * NN				-0.106	0.060	-3.032***
				(0.908)	(0.997)	(0.906)
Plurilateral ASA * NS				-0.031	-0.151	0.975
				(1.313)	(1.436)	(1.122)
Log ASA age	0.007	0.061**	0.079**	0.179***	0.168***	0.007
	(0.028)	(0.029)	(0.032)	(0.037)	(0.038)	(0.059)
Log distance	2.042***	1.971***	1.686***	1.176*	0.659	4.182***
	(0.501)	(0.493)	(0.586)	(0.605)	(0.619)	(0.831)
Log distance squared	-0.148***	-0.147***	-0.121***	-0.092**	-0.054	-0.298***
	(0.032)	(0.031)	(0.038)	(0.039)	(0.040)	(0.050)
Log origin population	0.138***	0.140***	0.119***	0.129***	0.155***	-0.014
	(0.038)	(0.038)	(0.043)	(0.049)	(0.049)	(0.055)
Log origin GDP	0.225***	0.239***	0.234***	0.243***	0.214***	0.436***
	(0.031)	(0.031)	(0.033)	(0.043)	(0.043)	(0.063)
Log destination country population	0.107***	0.110***	0.117***	0.127***	0.156***	-0.035
	(0.035)	(0.035)	(0.039)	(0.043)	(0.043)	(0.051)

(continued on next page)

(continued)

Dependent Variable:			Log(Pax)			Pax ≥ 0
Methodology: Model Specification:	OLS Basic (1)	OLS Basic (2)	OLS Extended (3)	OLS Interactions (4)	OLS, weights Interactions (5)	Poisson Interaction (6)
Log destination GDP	0.272***	0.286***	0.289***	0.298***	0.270***	0.428***
	(0.029)	(0.029)	(0.031)	(0.041)	(0.041)	(0.060)
Log trade	0.284***	0.280***	0.290***	0.283***	0.281***	0.482***
	(0.027)	(0.026)	(0.027)	(0.027)	(0.028)	(0.035)
Border	0.306***	0.222**	0.208*	0.133	0.119	-0.320***
	(0.109)	(0.107)	(0.111)	(0.113)	(0.117)	(0.120)
Common colony	0.441***	0.494***	0.585***	0.647***	0.687***	0.520***
	(0.093)	(0.093)	(0.100)	(0.103)	(0.100)	(0.113)
Common language	0.614***	0.525***	0.393***	0.253***	0.246**	0.419***
	(0.088)	(0.087)	(0.095)	(0.097)	(0.098)	(0.100)
Log area, origin country	-0.119***	-0.127***	-0.098***	-0.100***	-0.104***	-0.119***
	(0.020)	(0.020)	(0.026)	(0.027)	(0.026)	(0.031)
Log area, destination country	-0.097***	-0.105***	-0.100***	-0.103***	-0.107***	-0.103***
	(0.019)	(0.019)	(0.024)	(0.024)	(0.025)	(0.028)
RTA			-0.118	-0.009	-0.009	0.083
			(0.078)	(0.080)	(0.082)	(0.088)
Both WTO members			-0.240***	-0.229**	-0.256***	0.485***
			(0.088)	(0.090)	(0.090)	(0.105)
Trade share in differentiated goods			0.198	0.197	0.186	-0.304*
			(0.145)	(0.145)	(0.147)	(0.177)
Both democracies			0.023	0.152*	0.141*	-0.074
			(0.076)	(0.078)	(0.079)	(0.089)
Log temperature difference			-0.009	0.008	0.001	0.046
			(0.029)	(0.029)	(0.029)	(0.031)
Log time difference			-0.117**	-0.127**	-0.143***	-0.020
			(0.050)	(0.051)	(0.052)	(0.072)
Observations	2,046	2,046	1,884	1,884	1,884	2,043
R-squared	0.53	0.54	0.54	0.55	0.54	
PANEL B: Partial Effect of ASA Plur	ilateral (p–value)					
Plurilateral (ALI=39)		-0.514	-0.422			
		(0.000)	(0.000)			
Plurilateral SS (ALI=39)				-0.275	-0.266	-0.681
				(0.513)	(0.536)	(0.007)
Counterfactual Growth in Traffic fr	om Removing Pluril	ateral Policy Distortio	ns (%)			
Plurilateral (ALI=39)		206	173			
Plurilateral SS (ALI=39)				138	136	313

*** p<0.01, ** p<0.05, * p<0.1; Robust standard errors in parentheses.

**Notes: The results reported in this table are obtained by estimating the regression model given by equation in the text. The unit of observation is a country pair. The dependent variable is the number of air passengers traveling between two countries. The regression specifications in columns 4–6 include unreported indicator variables for NN, NS and Intra-Europe country pairs.

Turkey's Exposure to NTMs

	China	a	Ει	ıropean	Union		Tunis	sia		Lebar	non		Indon	esia		Egy	pt		Syri	a
	I	II		I	II		I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	14%	11%	Α	4%	2%	Α	0%	1%	Α	5%	36%	Α	9%	8%	Α	8%	7%
В	100%	100%	В	87%	91%	В	11%	21%	В	14%	31%	В	21%	33%	В	96%	98%	В	24%	21%
С	19.68%	7.97%	С	7%	17%	С	15%	24%	E	0%	0%	С	24%	7%	С	17%	9%	Е	13%	29%
D	100%	100%	Ε	1%	1%	F	15%	24%				Е	30%	11%	F	47%	79%	F	66%	44%
Ε	100%	100%	G	1%	1%															
F	0.78%	0.25%	Н	1%	6%															
Н	99.9%	100%																		
N	0.06%	0.0%																		

Source: Author's elaboration with data from UN COMTRADE Database.

Iraq's Exposure to NTMs

	China			European U	Inion		Lebanon	l		Indone	sia		Egypt	
	I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	10.43%	0.03%	Α	3.7%	0.1%	Α	40%	99.98%	Α	14%	77%
В	100%	100%	В	84.48%	99.98%	В	25.926%	17.234%	E	20%	0.007%	В	71%	79%
С	48.57%	0.0%	С	8.40%								С	29%	2%
D	100%	100%	E	1.27%								F	29%	2%
E	100%	100%	G	1.02%										
F	1.43%	0.0%	Н	3.31%										
Н	100%	100%												

Note: No trade data Tunisia and Syria. ".": less than 0.02%.

Source: Author's elaboration with data from UN COMTRADE Database.

Jordan's Exposure of NTMs

	China	1	Е	uropean l	Jnion		Leban	on		Indone	sia		Egyp	t		Syria	ı
	I	II		I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	16.2%	6.6%	Α	3%	1%	Α	2%	0%	Α	14%	22%	Α	23%	60%
В	100%	100%	В	86.8%	77.1%	В	19%	12%	В	22%	98%	В	94%	98%	В	25%	13%
С	22.0%	5.1%	С	7.7%	3.7%				С	18%	1%	С	14%	2%	Ε	22%	59%
D	100%	100%	E	1.9%	1.2%				Е	34%	1%	D	1%	1%	F	58%	37%
Ε	100%	100%	G	1.3%	1.2%							F	47%	46%			
F	0.7%	0.0%	Н	1.9%	0.1%							J	0%	1%			
Н	100%	100															

Note: No trade data for Tunisia.

Source: Author's elaboration with data from UN COMTRADE Database.

Note: A: Sanitary and phytosanitary (SPS) measures; B: Technical barriers to trade (TBT); C: Pre-shipment inspection and other formalities; D: Price control measures; E: Licenses, quotas, prohibitions and other quantity control measures; F: charges, taxes and other para-tariff measures; G: finance measures; H: anti-competitive measures; I: trade-related investment measures; sures; N: intellectual property. Column I: frequency index. Column II:

coverage ratio.

Lebanon's Exposure to NTMs

	China			European l	Jnion		Indone	sia		Egyp	ot		Syria	ı
	I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	22.3%	17.1%	Α	11%	7%	Α	13%	40%	Α	16%	35%
В	100%	100%	В	84.8%	80.5%	В	11%	0.3%	В	95%	94%	В	23%	10%
С	24.7%	89.7%	С	6.1%	3.9%	С	37%	80%	С	17%	6%	E	18%	27%
D	100%	100%	E	2.2%	0.7%	Е	37%	80%	D	1%	0.3%	F	64%	38%
E	100%	100%	G	1.3%	0.5%				F	54%	29%			
Н	100%	100%	Н	1.3%	0.4%									

Note: No trade data for Tunisia.

Source: Author's elaboration with data from UN COMTRADE Database.

Syria's Exposure to NTMs

	China	ì	E	European	Union		Tunisi	ia		Lebano	n		Indone	sia		Egyp	t
	I	II		I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	20.0%	3.1%	Α	9%	8%	Α	1%	0.4%	Α	13%	95%	Α	12%	28%
В	100%	100%	В	86.6%	98.1%	В	13%	5%	В	12%	7%	В	43%	0.3%	В	96%	93%
С	24.2%	4.6%	С	8.8%	3.3%	С	20%	11%	Ε	0.3%	1%	С	9%	0.1%	С	23%	43%
D	100%	100%	Ε	2.0%	0.1%	F	20%	11%				Ε	17%	0.1%	D	1%	0.05%
Ε	100%	100%	G	1.3%	0.1%										F	52%	28%
F	0.8%	0.0%	Н	0.8%	0.01%												
Н	100%	100%															

Source: Author's elaboration with data from UN COMTRADE Database.

Egypt's Exposure to NTMs

	China		Е	uropean	Union		Tunisi	a		Lebano	n		Indone	sia		Syria	
	I	II		I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	15.4%	8.8%	Α	15%	27%	Α	1.12%	0.59%	Α	18%	9%	Α	27.4%	20.5%
В	100%	100%	В	86.7%	95.5%	В	13%	16%	В	16.23%	3.55%	В	37%	74%	В	17.9%	8.7%
С	15.3%	2.1%	С	7.7%	8.1%	С	27%	43%	Ε	0.50%	0.01%	С	35%	2%	Ε	23.9%	40.9%
D	100%	100%	Ε	2.1%	1.8%	F	27%	43%	F	0.12%	0.00%	Ε	36%	2%	F	50.8%	31.3%
Е	100%	100%	G	1.4%	1.8%												
F	0.2%	0.0%	Н	1.3%	0.1%												
Н	100%	100%															

Source: Author's elaboration with data from UN COMTRADE Database.

Tunisia's Exposure to NTMs

	China			European U	Inion		Lebano	n		Indone	sia		Egyp	t
	I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	12.7%	5.3%	Α	0.8%	0.3%	Α	2%	43%	Α	13%	11%
В	100%	100%	В	88.0%	88.7%	В	41.6%	71.4%	В	37%	31%	В	94%	91%
С	23.0%	22.1%	С	8.1%	20.3%	E	0.8%	0.0%	С	50%	6%	С	13%	3%
D	100%	100%	E	1.4%	0.8%				E	54%	10%	D	2%	0%
E	100%	100%	G	0.6%	0.3%							F	42%	20%
F	0.2%	0.0%	Н	1.4%	0.7%									
Н	100%	100%												

Note: No trade data for Syria.

Source: Author's elaboration with data from UN COMTRADE Database.

Libya's Exposure to NTMs

	China			European U	nion		Leban	on		Egypt	
	I	II		I	II		I	II		ı	II
Α	100%	100%	Α	11.1%	0.0%	В	100%	100%	Α	15%	2%
В	100%	100%	В	84.6%	99.98%				В	97%	99.7%
С	29.4%	0.0%	С	5.6%	0.2%				С	8%	29%
D	100%	100%	E	1.6%	0.0%				D	1%	0%
E	100%	100%	G	1.0%	0.0%				F	41%	12%
Н	100%	100%	Н	3.0%	0.0%						

Note: No trade data for Tunisia, Syria, and Indonesia.

 ${\it Source}. \ {\it Author's elaboration with data from UN COMTRADE Database}.$

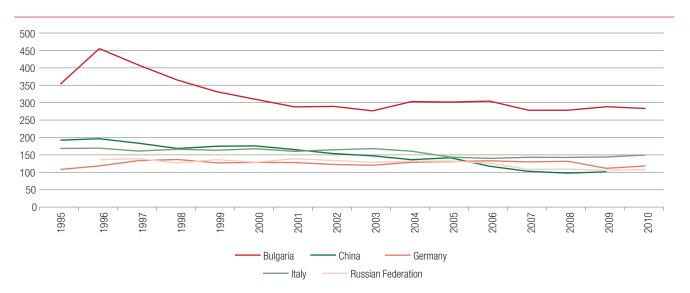
Iran's Exposure to NTMs

	China		European Union		Lebanon		Indonesia		Egypt			Syria					
	I	II		I	II		I	II		I	II		I	II		I	II
Α	100%	100%	Α	19.8%	2.3%	Α	1%	4%	Α	7%	0%	Α	11%	25%	Α	11%	15%
В	100%	100%	В	86.2%	99.5%	В	11%	6%	В	16%	14%	В	94%	98%	В	24%	46%
С	27.4%	0.0%	С	5.6%	0.5%				С	5%	0%	С	13%	4%	Е	22%	28%
D	100%	100%	Ε	2.0%	0.0%				Е	18%	12%	D	2%	0%	F	64%	15%
Е	100%	100%	G	1.4%	0.0%							F	46%	11%			
F	0.6%	0.0%	Н	1.3%	0.0%												
Н	100%	100%															
N	0.2%	0.0%															

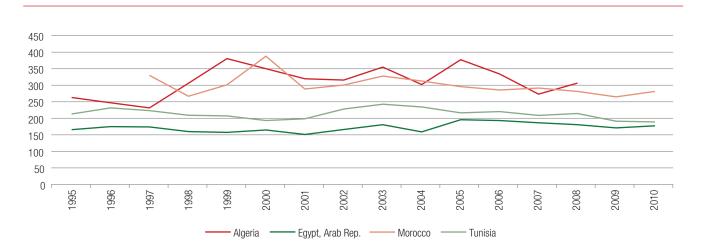
Note: No trade data for Tunisia.

Source: Author's elaboration with data from UN COMTRADE Database.

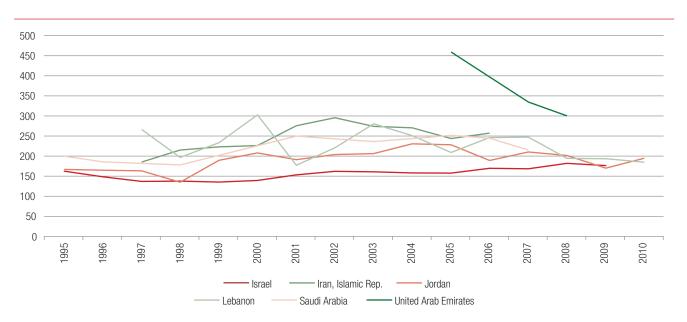
Evolution of the Agricultural Trade Costs with Reference Countries



Evolution of the Agricultural Trade Costs with Maghreb Countries



Evolution of the Agricultural Trade Costs with the Middle East Countries



Bilateral Trade Costs for Turkey and Selected Partners: Total Trade in 2009

	BGR	BHR	CHN	CYP	DEU	DZA	EGY	ISR	ITA	J0R	KWT	LBN	MAR	OMN	RUS	TUN	TUR
BGR		383	180	139	83	341	147	142	86	204	348	150	214	296	123	168	81
BHR	383		178	281	165	303	142		156	117	102	153	192	108	445	160	183
CHN	180	178		186	73	181	129	123	104	172	118	239	170	141	99	184	153
CYP	139	281	186		119	278	142	111	137	190	193	136	309	231	143	247	
DEU	83	165	73	119		159	119	93	47	193	271	146	118	175	86	93	73
DZA	341	303	181	278	159		104		102	196	238	188	112	289	315	93	97
EGY	147	142	129	142	119	104		157	99	104	139	106	130	136	136	127	101
ISR	142		123	111	93		157		98	109					120		93
ITA	86	156	104	137	47	102	99	98		147	165	144	107	145	84	70	84
JOR	204	117	172	190	193	196	104	109	147		120	82	174	131	178	152	145
KWT	348	102	118	193	271	238	139		165	120		123	215	124	411	255	131
LBN	150	153	239	136	146	188	106		144	82	123		157	160	224	180	132
MAR	214	192	170	309	118	112	130		107	174	215	157		262	163	116	134
OMN	296	108	141	231	175	289	136		145	131	124	160	262		340	278	179
RUS	123	445	99	143	86	315	136	120	84	178	411	224	163	340		183	88
TUN	168	160	184	247	93	93	127		70	152	255	180	116	278	183		119
TUR	81	183	153		73	97	101	93	84	145	131	132	134	179	88	119	

Logistics Performance at the Country Level

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Customs	Infrastructure	Intl. shipments	Logistics Competence	Track and Trace	Timeliness
In GDP	0.31***	0.40***	0.20***	0.33***	0.32***	0.27***
	(0.021)	(0.020)	(0.018)	(0.018)	(0.020)	(0.019)
In POP	-0.24***	-0.27***	-0.12***	-0.22***	-0.20***	-0.17***
	(0.027)	(0.026)	(0.023)	(0.024)	(0.026)	(0.024)
Landlocked	0.01	0.01	0.02	-0.01	-0.01	0.01
	(0.079)	(0.079)	(0.069)	(0.071)	(0.079)	(0.073)
Egypt	-0.50	-0.49	-0.34	0.03	-0.48	-0.19
	(0.379)	(0.375)	(0.331)	(0.339)	(0.376)	(0.349)
Iran	-0.60	-0.62*	-0.59*	-0.41	-0.75**	-0.42
	(0.379)	(0.375)	(0.331)	(0.339)	(0.376)	(0.349)
Iraq	-0.44	-0.82**	-0.61*	-0.60*	-0.94**	-0.89**
	(0.378)	(0.374)	(0.330)	(0.338)	(0.375)	(0.348)
Jordan	-0.24	0.14	0.32	-0.19	-0.54	0.03
	(0.377)	(0.373)	(0.330)	(0.337)	(0.375)	(0.347)
Lebanon	0.51	0.24	-0.04	0.84**	00.10	0.45
	(0.378)	(0.374)	(0.330)	(0.338)	(0.375)	(0.347)
Libya	-0.73*	-0.80**	-0.72**	-0.76**	-1.13***	-0.66*
	(0.377)	(0.373)	(0.330)	(0.337)	(0.375)	(0.347)
Syria	-0.14	-0.09	0.07	-0.09	-0.25	0.08
	(0.377)	(0.373)	(0.330)	(0.337)	(0.375)	(0.347)
Tunisia	-0.15	-0.05	0.53	-0.38	-0.36	0.17
	(0.377)	(0.373)	(0.329)	(0.337)	(0.374)	(0.347)
Turkey	-0.18	-0.14	0.01	-0.03	-0.34	0.10
	(0.379)	(0.375)	(0.331)	(0.339)	(0.377)	(0.349)
Constant	-1.30***	-2.88***	-0.03	-1.97***	-1.68***	-0.47
	(0.393)	(0.389)	(0.343)	(0.351)	(0.390)	(0.361)
Observations	148	148	148	148	48	148
R-squared	0.657	0.765	0.518	0.740	00.684	0.638

Notes: Outcome variables are components of the logistics performance index. ** indicates statistical significance at the 0.05 level; *** indicates statistical significance at the 0.01 level

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