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ASSESSING BARRIERS TO TRADE IN SERVICES IN THE MENA REGION

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Abstract

This paper aims to assess barriers to service provision in the financial, telecom, and transport sectors of selected MENA countries, including both trade and domestic restrictions. The analysis is focused on computation of aggregate and modal trade restrictiveness indexes (TRIs) by sector, drawing on information gathered from detailed questionnaires and country reports prepared by local consultants. The conclusions highlight that significant regulatory reforms have taken place in the service sectors of Egypt, Jordan, Lebanon and Morocco over the last decade, but that a broad range of restrictions still remain. The most significant change in these service sectors has been the lifting or softening of the constraints imposed on foreign equity participation. Reforms, however, have had varying degrees of impact on market structure depending on the country and the sector.

ملخص

تهدف هذه الورقة إلى تقييم العوائق التي تحول دون توفير الخدمات المالية وخدمات الاتصالات والنقل في مجموعةٍ مختارة من بلدان منطقة الشرق الأوسط وشمال أفريقيا شاملةً القيود التجارية والمحلية. ويركز التحليل على حساب المؤشرات الكلية والشكلية الأكثر تقييداً للتجارة في كل قطاعٍ على حدة استنادًا إلى المعلومات التي جمعت من استبيانات مفصلة والتقارير القطرية التي أعدها خبراء استشاريون محليون. وتشير النتائج إلى حدوث إصلاحاتٍ تنظيميةٍ مهمةٍ في قطاعات الخدمات في كل من مصر والأردن ولبنان والمغرب خلال العقد الماضي، غير أن طائفةً واسعةً من القيود لا تزال قائمة. وكان أهم تغيير في هذه القطاعات الخدمية في تلك البلدان هو رفع القيود المفروضة على المساهمة الأجنبية في رأس المال أو تخفيفها. ومهما يكن من أمر فقد أثرت هذه الإصلاحات بدرجاتٍ متفاوتةٍ على بنية السوق حسب البلد والقطاع.

I. Introduction

Given the large share of services in the world's GDP (around 60%) and their much lower share in world trade (around 30%) trade theorists and practitioners have to understand the reasons behind this difference and the contribution of regulatory service barriers to the relatively low level of trade in services (Dee, 2003). Measuring restrictions faced by service providers can serve at least two main policy objectives: helping decision-makers to assess the impact of these barriers on the economy and facilitating bilateral and multilateral negotiations on trade in services liberalization (Findlay & Warren, 2000).

As noted by Hoekman (2006), given the domestic regulatory nature of barriers to trade in services, there is no information on these restrictions in the form of databases (as in the case of tariffs, for example). The quantification of these barriers must be preceded by a collection of information on a sector-by-sector basis, relying on government documents and the expertise of sector specialists (Mattoo, Stern, & Gianni, 2008). This qualitative research could be considered as a first output, as it offers policymakers and other stakeholders a comprehensive view not only of barriers to trade in services but also of restrictions to market access and ongoing operations that affect domestic services suppliers. Improving transparency can facilitate domestic political bargaining on service regulatory reforms. Furthermore, quantification of barriers permits policymakers to prioritize reform proposals according to the potential economic benefits and losses.

The aim of this study is to perform a qualitative and quantitative analysis of barriers to trade in services in four MENA countries, namely Egypt, Jordan, Lebanon (for the banking sector only) and Morocco. We focus our analysis on financial (banking and insurance), telecom (fixed and mobile) and transport sectors (air and maritime).

Many policy arguments make this investigation particularly relevant. First, high unemployment rates in the region, especially among educated youth, argue in favor of developing service sectors which are more intensive in skilled labor. Second, further integration of the MENA region into the world economy would require not only the development of transport and telecommunication sectors but also of efficient banking and insurance sectors to help exporters better compete in the international markets. The four countries included in this study have started domestic reform programs to varying degrees in the analyzed service sectors. It is, thus, interesting to assess the progress of reforms implemented at this stage.

Moreover, this investigation can be useful in view of the Euro-Mediterranean negotiations on services liberalization that were launched in the Marrakech Ministerial on 24 March 2006 with the participation of the EU, Egypt, Israel, Jordan, Lebanon, Morocco, the Palestinian Authority and Tunisia. The EU has also begun to engage in bilateral negotiations with Egypt, Morocco and Tunisia since the end of 2006. Negotiators for these and future rounds can benefit from studies assessing the impact of liberalizing trade in services with the EU.

In this study, we rely on the Trade Restrictiveness Index[1] methodology (TRI) which translates qualitative information on services barriers into an aggregated quantitative score by sector. Following Dihel & Shepherd (2007) we also compute modal TRIs (for the four modes defined by the GATS) as this this is how services are traded and how WTO negotiations on services are conducted. This categorization also allows one to capture the issue of complementarity and substitution between modes.

We have gathered qualitative information through questionnaires completed by government agencies and country reports written by trade experts in the MENA region, as well as,

[1] The concept of the Trade Restrictiveness Index was first proposed by Anderson & Neary (1994)

supplementary research. The qualitative information has been used to determine the values of the different components of the sectoral aggregate and modal indexes. The weight of each component has been determined through a principal component analysis whenever the data were available[2].

The transition from qualitative to quantitative analysis involves many benefits, but is not without risks:

The two main benefits of synthesizing qualitative information in a quantitative index are first, to enable the comparison of restrictions across countries at the sectoral level, and second, to determine the impact of barriers on trade in services and on different variables of economic performance. This provides a more objective basis for domestic policy debates, as well as for bilateral, regional and international negotiations through more transparent evaluations of reciprocity in concession-making.

The main risk, however, of such an exercise is the traditional one researchers face when moving from qualitative information on policy to a synthetic quantitative index: some dose of subjectiveness. The methodological improvements proposed by researchers on these subjects such as the use of factor analysis techniques try to minimize the subjectivity[3].

In addition to incorporating the most recent data from the MENA region, this study has aimed to produce reliable TRI estimates. By focusing on a small number of countries, we have been able to investigate which barriers are favored by each country to protect its service sectors (by mode and within modes) and what are the implications of these barriers. We have also extended the TRI coverage of MENA service sectors through the adaptation of a maritime index (World Bank, 2007)[4] and the construction of a new index for air services.

Focusing on a select group of MENA countries, our analysis covers the evolution of the regulatory framework of service sectors as well as the implementation of these regulations and their degree of restrictiveness. From this perspective, we consider the following questions: Which reforms have reduced barriers to trade in services in recent years, and what lessons can be learned by other countries in the MENA region as well as worldwide? What disparities exist between regulations in principle and in practice? How does the government maintain control despite the implementation of liberal reforms?

These questions expose interesting information about country-specific restrictions as well as common trends in the MENA region. Foreign equity limits, for example, have been relaxed in most MENA countries in recent years, yet many service markets remain dominated by state-owned or domestic enterprises. High levels of state control persist in such cases through conflicting regulations that protect current market structures.

The study is organized as follows: section two develops the methodology we used for computing the sectoral TRIs, section three analyzes the results obtained and the policy interpretations of these findings and section four concludes the study.

II. Methodological aspects

Assessing the restrictiveness of barriers to trade in services involves the identification of the relevant barriers, their classification, their quantification, and the assessment of their impact on trade and/or economic performance. This section discusses the different methodological approaches to identification, classification and quantification.

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[2] A subjective approach was applied to the assignment of weights in the air and maritime sectors due to the absence of observations on non-MENA countries.

[3] See Boylaud & Nicoletti (2000) for the use of factor analysis in determining the weights of the different components of a synthetic index.

[4] The World Bank index has been adapted from the Australian Productivity Commission work.

The identification

From the literature, one can identify three main approaches to determining the relevant barriers to trade in services; the stakeholder approach, the econometric approach, and the expert judgment approach. In the first approach, one can ask the key stakeholders, the potential importers or exporters of services, about the main factors that impede their activity (similar to the World Bank ‘‘Doing Business’’ methodology). This approach could be very informative, but is subjective in nature.

The econometric approach is to select a large number of potential barriers a priori and to test their impact (individually and aggregately) on trade in services in a cross-country framework. This would permit an econometric identification of the most significant impediments to trade in services. However, data on trade in services are scarce and, when available, often aggregated (current account data). Information on policies that restrict trade in services is even scarcer.

The third possibility, the expert opinion approach, is to identify the relevant restrictions according to the judgment of sectoral experts. While inherently subjective, this method pioneered by the Australian Productivity Commission has been the most common amongst trade in services specialists. Building upon previous OECD (Dihel & Shepherd, 2007) and non-OECD work (Mcguire & Schuele, 2000); (World Bank, 2007), our study relies on this methodology.

Financial and telecom

For the financial and telecom sectors, we rely on a similar set of questions to those put forward in Dihel & Shepherd (2007), who draw on work by the Australian Productivity Commission (Mcguire & Schuele, 2000). The indexes address key issues for each sector, such as foreign equity limits and movement of workers.

Relying on these indexes allows us to use data on non-MENA developing countries gathered by Dihel & Shepherd (2007) in the factor analysis (discussed further in the following section), a necessary input given the small size of the MENA countries sample.

Transport

The maritime TRI was drawn from the maritime index in the World Bank (2007) study and adapted to permit analysis at the modal level[5]. The air services TRI is a new index developed for this study to address key issues for the air services sector at the aggregate and modal level.

Our TRI for air services aims to provide a comprehensive assessment of the main restrictions on trade in air services across both WTO and non-WTO governed issues, matching each restriction with the modal framework as it would be categorized if included in the GATS (cross-border, consumption abroad, commercial presence and presence of natural persons). Most issues related to air transport services are currently excluded from the GATS (Findlay & Round, 2006). WTO agreements cover aircraft repair and maintenance services, selling and marketing of air transport services, and computer reservation system services. Traffic rights and flight-related services are excluded from the WTO dispute settlement procedure (WTO, 1998). These issues and others related to market access are negotiated at the bilateral or regional levels.

The air index developed for this study addresses many issues that restrict all service sectors to varying degrees (e.g. foreign equity limits) as well as restrictions specific to air services (e.g. freedoms of the air). This index also examines variations between restrictions on domestic vs.

[5] As maritime and air services were not included in the Dihel & Shepherd (2007) study, it was necessary to develop new indices to investigate restrictiveness in these sectors.

international routes, and scheduled vs. non-scheduled flights. Due to the growing low-cost market, further questions are included to investigate restrictions particular to this segment of the market. These issues and others have been combined to create a comprehensive list of restrictions in the air services sector. As the degree of restrictiveness of a certain regulation can be debated, future studies could further develop the scope of this index to incorporate more relevant information.

The classification

Service barriers can be classified according to various criteria such as by mode or *de facto* versus *de jure*. As services are traded by mode, and as WTO and bilateral negotiations are categorized accordingly, it is useful to disaggregate the sectoral trade restrictiveness indexes by mode (Dihel & Shepherd, 2007). Cross-border supply (mode 1) refers to the supply of a service from the country of the supplier into the country of the consumer. Consumption abroad (mode 2) involves the purchase of services by the consumer while abroad in the country of the supplier. Commercial presence (mode 3) entails the supplier providing services through foreign-based establishment in the country of the consumer. Movement of natural persons (mode 4) relates to the supply of services by an individual from the country of the supplier in the country of the consumer. This classification offers a clearer picture of the nature of services restrictions and permits the isolation of barriers with the highest potential impact on services trade.

To the extent possible, we also tried to classify restrictions as *de facto* versus *de jure*. While our assessment of the individual index components is based primarily on national legislation, certain components take into account the absence of implementation due to other constraints such as conflicting legislations. For example, if a country puts no restrictions on the commercial establishment of foreign banks, but at the same time no foreign bank exists in the country, we take indirect restrictions into account in the index computation to the extent that information was available.

The data gathered for this study are rich and could be exploited according to different criteria (e.g. domestic versus foreign restrictiveness) in future research on a larger sample of countries.

The quantification

The index is constructed so that each component could have either a ‘yes or no’ answer or three or more response categories (see Annex I for index components). Our results rely primarily on questionnaires sent to trade in services specialists in the selected countries, as well as on complementary research.

To illustrate how we have arrived at the TRI scores for all sectors, consider an example from air transport services. The first mode 3 question included in this index refers to the degree of foreign ownership permitted in the provision of international scheduled services through commercial establishment (see Annex I). Levels of restrictiveness for each component have been coded on a scale of 0 to 1. A score of 1 denotes the highest level of restriction, in this case that foreign ownership is not allowed at all in air services. Countries scores designated as 0.66 permit minority foreign equity holdings in the air services sector. A score of 0.33 indicates that majority, but not absolute, foreign ownership is permitted. Lastly, a score of 0 means that 100% foreign ownership is allowed. Modal and aggregate scores are then calculated according to the weight assigned to each question.

Nordas (2007) highlights three methods for the assignment of weights: an expert judgment method, a statistical method and an econometric method:

The expert judgment method is subjective, though in some cases based on a highly sophisticated conceptual framework (Colecchia, 2000). The statistical method relies on factor analysis, in which one determines the contribution of each item to the total variance of the sample. The econometric method relies on gravity models aiming to explain bilateral trade by trading countries market size and bilateral trade costs (Kox & Nordas, 2006).

While the econometric method is the most appealing because it deals directly with the impact of restrictions on trade in services, it could not be used in this study due to the lack of data on bilateral trade in services for the selected MENA countries. For the banking, insurance, fixed telecom and mobile telecom sectors, we relied on the statistical method drawing from data gathered for Dihel & Shepherd (2007). The variant of factor analysis used for these sectors is principal component analysis. This approach was used to determine the weight of each component in the aggregate TRIs and the weight of each component of the modal TRIs. With this approach, weights are computed in order to maximize the variance of scores within the sample of countries. Each weight is the contribution of the given component to the index variance and does not reflect a subjective judgment of the component's relative relevance or importance to trade.

The sectoral principal component analyses (PCA) are thus run at two levels: the first level is performed with all the components of the index to determine aggregate sectoral weights, while the second group of PCAs are run at the modal level (with the different components of each mode separately) to determine sectoral modal weights. The aggregate and modal weights that we have calculated can be found in Annex II. For the financial and telecom TRIs, index components are normalized[6] before the computation of aggregate and modal scores. The scores obtained are rescaled to avoid negative values. This is in line with the Dihel and Shepherd methodology, permitting the comparison of results across the two studies.

For the maritime and air transport sectors, we relied on expert judgment because we could not perform data analysis with data from only three countries (a larger sample is needed for statistical significance). For this same reason, the indices for transport services have not been rescaled. Thus, transport TRI scores will appear higher than those calculated for the financial and telecom sectors, but are not comparable.

As a consequence of using two different methods for the assignment of weights, the scales vary across sectors. Scores for the transport sector fall in a range of 0 to 1, while the scale for the financial and telecom indexes is greater than zero but has no maximum.

Given the estimation techniques used to calculate the TRI, the interpretation of results requires particular care and should be viewed within the bounds of the approach. In view of the way the analysis is structured, it is not useful to compare TRI across sectors because different components are evaluated in each sector. At the same time, cross-country comparisons are more robust.

The TRI results are also used as inputs for the estimation of tax equivalents of service barriers in a follow up paper to this study, Bottini & Marouani (2008). This paper develops a framework for estimating the impact of TRIs on firms' economic performance, while controlling for the standard sectoral and macroeconomic determinants of performance (Hoekman, 2006). The performance variable used in this study is price-cost margin. If the

[6] To normalize, the average and standard deviation of the country values are first computed for each index component. The difference between the raw indicator value and the average is then divided by the standard deviation to derive the normalized indicator value. This calculation converts all indicators to a common scale with an average of zero and a standard deviation of one.

TRI's effect on the price-cost margin is positive, this would imply that the restrictions are rent-creating. If the TRI's effect is negative, the restrictions are considered cost-creating.

III. Findings

The following section discusses the results of the TRI indices estimated according to the methodology presented above. TRI scores provide a point of comparison, indicating which MENA countries have higher levels of restrictions on trade in services for each sector. Drawing conclusions about the economic impact of these restrictions is limited, however, given the subjective nature of the index.

In aggregate, no single country ranked most open or most restricted across all sectors. Jordan's TRI values were generally lower than those of the other MENA countries in this study. For other countries, however, the TRIs have revealed varying levels of openness across the various service sectors. Morocco, for example, has relatively open transport sectors but higher restriction levels in financial services.

Data included in our calculations are the most current information available through the end of 2007.We rely heavily on country chapters for our cross-country analysis[7]. Comparisons are frequently drawn to the TRI scores for the Dihel & Shepherd (2007) study, for which data were gathered up to 2005.

Banking

Banking sector regulations in the MENA region have evolved in recent years, further integrating the region into the global financial market. Despite liberal banking reforms, TRI scores still suggest a wide range of restrictions among the MENA countries, both at the aggregate and modal levels.

As seen in Table 1, aggregate scores for the MENA countries range from Lebanon at 0.20 (the least restrictive) to Morocco at 1.16 (the most restrictive). Morocco's high score is primarily attributed to cross-border and consumption abroad restrictions. Egypt follows with an aggregate TRI score of 0.85, comprised of high restrictions across modes 1, 3, and 4, but full openness in mode 2. Jordan's aggregate score of 0.41 reflects the sector's relative openness, carrying higher levels of restriction in modes 1 and 4. Lebanon's banking sector is the most open of the four countries, with nearly no restrictions across modes 1, 2, and 3.

Regarding mode 1, Lebanon is the only country in this study with no cross-border restrictions in the banking sector. Banks, corporations, and households in Lebanon are permitted to both borrow and make deposits on a cross-border basis, that is, from foreign banks situated abroad. Lebanon and Jordan's lower mode 1 scores are reasonable given the large cross-border trade of services that has historically been taking place in the region (Jordan mainly with the Palestinian territories and Lebanon with Syria and many other MENA countries). Morocco and Egypt record higher restriction levels, but these levels have relaxed in recent years. Prior to 1991, Moroccan companies, for example, were not allowed to borrow from abroad. Lowering restrictions on foreign exchange control has allowed Attijari Wafa Bank to open a subsidiary in Senegal and to take majority ownership of the former Tunisian 'Banque du Sud'.

TRI results for mode 2 reveal Morocco's banking sector to be the most restrictive. Residents of Morocco are not authorized to purchase financial services abroad. Residents of Egypt, Jordan, and Lebanon, meanwhile, are completely unrestricted in mode 2.

[7] Country reports were drafted by Lahcen Achy (Morocco), Jad Chaaban (Lebanon), Ahmed Ghoneim (Egypt), and Marwan Kardoosh (Jordan). As information from the four country reports is used heavily throughout our analysis, we do not cite the former on every occasion (see References).

Mode 3 barriers have decreased across Egypt, Jordan, and Morocco relative to TRI scores from the Dihel & Shepherd (2007) study. Egypt's aggregate score for mode 3, however, still reflects high restrictiveness. Morocco has slightly lower mode 3 restrictions, but is the only country of those analyzed in this study that imposes foreign equity limits. While Moroccan regulation previously limited foreign ownership to 49%, this restriction was recently lifted. The new Moroccan banking law reserves however the right to limit foreign ownership in a major bank[8] if acquiring such interests would imply majority control[9].

Egypt has liberalized as well, reforming several regulations in 1991 that had previously discriminated against private, and thus foreign, banks. For example, foreign partners are now allowed majority equity holdings in joint venture banks. Liberalization reforms such as these, however, have been slow to generate an impact in practice. Of Egypt's four banks, three remain 100% domestically-owned public banks. The Bank of Alexandria (the smallest of the four banks) has recently been privatized and is now 80% foreign-owned. There has been discussion of further plans for privatization, but nothing has materialized as of yet.

Lebanese regulation on foreign equity limits was liberalized more recently. In 2001, foreign ownership rights in the banking sector rose from 30% to 100% in an effort to promote an influx of FDI. Five of Lebanon's six largest banks currently include foreign equity, two of which have a foreign majority holding.

Meanwhile, four of Jordan's six largest banks have a majority foreign ownership. Two of Morocco's six largest banks have a majority foreign ownership (four of the six are partially foreign-owned). Likewise, two of Lebanon's six largest banks have a majority of foreign ownership (five of the six are partially foreign-owned).

TRI analysis reveals that Morocco and Lebanon are the most liberal in regards to the issuance of banking licenses. Jordan's license procedures are relatively open apart from a higher fee than that of the other countries in this study. Alternatively, license issuance in Egypt is more restricted, as it is determined by discretionary approval of the Central Bank of Egypt. Entry in the Egyptian banking sector is restricted according to economic needs, limiting both the entry of new domestic and foreign banks and the number of foreign bank branches. (All other countries studied have no policy restrictions on the entry of new banks.) The historical trend in Egypt of favoritism of public banks over private banks has lessened, however, in recent years. A bank privatization program was also introduced to promote market consolidation and increase competition in the private sector.

Mode 4, the movement of natural persons, poses varying levels of restrictions across the MENA countries. TRI scores indicate that Jordan is the most restrictive in mode 4 overall, while Morocco is the most liberal. The entrance of short-term corporate transfer employees is relatively unrestricted across all countries, but time limits are imposed more stringently on the movement of natural persons for temporary movement longer stays (as defined in Annex I). While Morocco has had no restrictions on the Board of Director composition for many years now, restrictions have only recently been eliminated in both Egypt and Jordan. Lebanon's Board of Director restrictions remain high.

Working permits pose restrictions of varying levels across the four countries. Egypt is the most restrictive, issuing work permits according to numerical limits determined by an Economic Needs Test, as imposed by a decree in 2003. The number of foreigners allowed to work in any one establishment is capped at 10% of total employees. In some industries (e.g. tourism), foreigners are not allowed to work at all. Lebanon, Jordan, and Morocco have lower

[8] Represents more than 12% in terms of assets, deposits, or credits of the entire Moroccan banking system.

[9] As an example of use of this discretionary power we can cite the refusal by Bank Al Maghrib of the French Caisse d'Epargne offer to buy 25% of BMCE bank (one of the largest banks in Morocco).

restriction levels than Egypt, limiting work permits according to professional qualifications and basic approval processes.

It seems that the least restrictive countries on mode 3 (Lebanon and Jordan) are the most restrictive on mode 4. Opening on mode 3 facilitates the influx of foreign capital (mainly from GCC countries), while closing on mode 4 protects white-collar workers and important stakeholders in the banking system. Both Lebanon and Jordan impose particularly short limitations on the time allowed in the temporary movement of long stay employees. Lebanon's high mode 4 TRI score is also derived from the country's requirement that a majority of the Board of Directors be Lebanese nationals (while Egypt, Jordan, and Morocco have no restrictions in this area).

In conclusion, the banking sector's recent transformation in the MENA region has had a large impact on many countries' regulatory frameworks, particularly with regard to the involvement of private and foreign capital.

The main reforms that introduced or amended the banking law in the four countries of interest (1993 and 2001 in Lebanon; 2000 in Jordan; 2003 in Egypt and 2006 in Morocco) have lifted the foreign equity limits on the ownership of banks. This has prompted an increase of foreign participation, namely in Lebanon, Morocco and Jordan. In Egypt, despite the regulatory reform, most of the largest banks are currently publicly owned, which demands a privatization (as in the case of the Bank of Alexandria), or at least a partial opening to private capital needs to accompany the regulatory reform. In Morocco the liberalization process has also been cautious since the Moroccan authorities control foreign participation in their largest banks. They also constrain the operations of foreign banks by the amount of capital allocated to their business in Morocco.

Insurance

With an average penetration ratio around 1% of GDP the MENA region is characterized by an underdeveloped insurance market[10], dominated primarily by motor insurance (Vayanos & Hammoud, 2007). Given the crucial contribution of insurance to enhance economic activity in market economies, the MENA countries under investigation have launched different reforms to try to overcome the weaknesses of their respective insurance sectors. Among these weaknesses different country studies have pointed to the fragmentation of the sector and to weak competition[11] despite the high number of operating firms.

Aggregate TRI results indicate that Egypt's insurance sector is the least restrictive of the three MENA countries included in this study (Table 2). Egypt's aggregate TRI score of 0.50 marks a significant liberalization trend over the recent years. Despite greater openness, however, Egypt's insurance sector remains plagued by specific restrictions on commercial presence, namely the Economic Needs Test. Morocco is the most restrictive of the three countries, with an aggregate TRI score of 1.61 due mainly to restrictions on cross-border and consumption abroad.

Egypt is the most open for mode 1. Insurance companies in Egypt are permitted to provide residents with any type of cross-border insurance services. Jordanian residents, meanwhile, are allowed to purchase life and medical cross-border insurance services but only through resident intermediaries. Moroccan insurance companies are not permitted to provide residents with any type of cross-border insurance services.

[10] This ratio is estimated to 8.5% of GDP in the EU.

[11] For example the recently abolished rotation system in Jordan was an impediment to the establishment of a competitive environment.

In mode 2, Egypt is also the most open of the analyzed MENA countries. Egyptian consumers purchase insurance services while traveling abroad without restriction, while Moroccan residents are not authorized to purchase any insurance services abroad. The Jordanian law permits the purchase of insurance services abroad according to basic limitations and subject to government discretion.

Regarding mode 3, several MENA countries have recently removed foreign equity limits. In Egypt prior to 1998, only re-insurance companies permitted any level foreign ownership. Formerly restricted in Egypt to 25% and in Morocco to 51%, foreign equity limits have been completely eliminated in the past two years. 100% foreign-ownership is also permitted for insurance companies operating in Jordan.

While regulation in the MENA countries permits foreign ownership, this has yet to have been applied in practice. Of Egypt's six largest life-insurance companies, four are 100% domestic, state-owned companies. The remaining two have minority foreign equity holdings. For the non-life insurance market, the six largest companies are all 100% domestically-owned. A consortium of foreign advisers was selected by the Minister of Investment in 2004 to assess the situation and develop a proposal for restructuring and privatizing public insurance companies. Further steps to implement this plan have yet to materialize. Of Morocco's six largest insurance companies (both life and non-life), four are 100% domestically-owned. Of the two insurance companies with foreign equity, one has a foreign majority. The low participation of foreign companies in the Moroccan insurance market could be explained by the control exerted by the administration on this sector[12]. In Jordan, the life insurance market leader (controlling about 60% of the life-insurance market) is a branch of a foreign company. Jordan's non-life market is highly fragmented, the three biggest companies representing less than 25% of the market (Vittas, 2004). These small firms in the non-life insurance market are less attractive to foreign multinationals.

Regarding joint ventures, market access in Morocco is the most restrictive. The entry of a foreign insurance company is only permitted through joint ventures with domestic insurance subsidiaries. Moreover, the insurance intermediary function is restricted and subject to nationality requirements. Egypt and Jordan, on the other hand, impose no requirements on a foreign insurance company seeking to enter through a joint venture.

Egypt has the most restrictive screening and approval process due to its use of the Economic Needs Test. For the insurance sector, restrictions of this nature relaxed to a certain extent in 2000 and 2002, but still restrict the market entry of new insurance companies. In Jordan and Morocco, only basic requirements must be met for screening and approval. Since the new insurance code, Morocco no longer requires investors to show economic benefits for getting screening and approval.

Mode 4 restrictions are similar to those of the banking sector.[13]

In conclusion, the insurance sector in the analyzed MENA countries has been liberalized significantly in recent years, primarily in modes 3 and 4. Despite reforms, however, insurance services regulation remains restrictive relative to the banking sector in the MENA region.

High restrictions levels continue to bound modes 1 and 2 for Jordan and Morocco. And while Egypt's TRI score indicates a relative openness, the country's use of the Economic Needs Test to restrict commercial presence remains a significant barrier to the sector's liberalization.

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[12] According to the Moroccan insurance code every change of majority, every cession of more than 10% of the shares and every control of more than 30% of the capital needs to get the approval of the administration.

[13] Refer to previous section on banking sector for more details.

As in the banking sector, foreign equity limits have been a key area of reform in the MENA region. 100% foreign-ownership is now permitted in Egypt, Jordan, and Morocco. However the Government can keep control on the shareholding composition of the largest firms through various regulations (as in Morocco). Foreign equity levels have risen, but slowly, as the majority of insurance companies remain 100% domestically-owned. This means that this measure alone is not enough to attract foreign investment. Restructuring the sector to reduce its fragmentation (mainly in Jordan) could be another prerequisite.

Telecom

Dihel & Shepherd (2007) noted that Middle East countries ranked among the most restrictive for trade in fixed telecom services (relative to Asian and Transition economies). For all three countries, however, aggregate scores have declined since the former study. As Table 3 shows, the aggregate TRI scores for fixed telecom range from 0.80 in Morocco to 1.22 in Egypt. The mobile sector is more open than the fixed telephony in all three countries, ranging from 0.59 in Morocco to 0.99 in Egypt (Table 4). The main reason behind this is certainly the need for foreign investment to expand the mobile network capacities as well as the relative infancy of the mobile industry and its corresponding regulations. Indeed, the historical operators tried in many countries to develop a mobile network on their own but failed to match the needs of an exploding demand at the beginning of the decade (lines were rationed in many countries).

For all three analyzed MENA countries, Mode 1 restrictions are low relative to the other modes for fixed telecom and completely open for mobile telecom services. In the case of Egypt, the current low level of restrictions is recent, emerging with the GATS requirement for Telecom Egypt to release its exclusive rights on cross-border transmissions. Leased line cross border trade was liberalized in 2005 in Egypt, Jordan, and Morocco under GATS commitments.

IP services in the MENA region were previously subjected to high restrictions, but there has been a trend of liberalization in the past few years. The TRA in Egypt recently authorized the use of IP services. Deregulation likewise opened the market in Jordan in 2005-2006. To avoid losing market share, Jordan Telecom Group (JTG) recently launched its own VoIP service, Livebox, through broadband. IP telephony services are permitted in Morocco.

Mode 2 restrictions for this index relate to call back services, a low-cost alternative to traditional international call services. While this service is prohibited by many countries worldwide, restrictions are progressively being lifted. Call back services are now permitted in Jordan (per GATS commitments), but they are still not permitted in Egypt or Morocco.

The analysis of the mode 3 TRI score reveals that the levels of restrictions are very close in the three analyzed countries and that the barriers are lower for mobile telecom services. Foreign equity limits have been liberalized dramatically in recent years, as all three countries were required to disband foreign equity limits as of 1 Jan 2004 in compliance with GATS commitments. In both the mobile and fixed markets of all three countries, foreign companies are allowed to establish commercial presence without a joint venture, though this has yet to have taken effect in practice[14]. Actual foreign ownership participation has risen to varying degrees throughout the analyzed MENA countries, but has yet to reach 100%. Egypt's telecom market has been open since GATS commitments at the end of 2005 eliminated Telecom Egypt's exclusive rights and prohibited the Economic Needs Test in the issuance of licenses. International services and leased-line services have sold a minority share, but local and long-distance services remain 100% owned by Egypt Telecom. Potential market entrants have been discouraged by market saturation and the high set-up costs of establishing a new

[14] Though the Emirati Company, Batelco currently owns 96% of the fourth Jordanian mobile company Umniah.

network. Egypt Telecom has refused to lease its network to new market entrants, as has been done by the incumbent in Morocco since 2007, thus overcoming this obstacle and facilitating consumer choice. Egypt's mobile telecom market has been liberalized more quickly than fixed telecom and currently has foreign ownership in all three mobile operators.

Jordan's formerly government-owned incumbent in fixed line services was privatized in 2000, to be followed by a declaration of market openness in 2005 in compliance with GATS commitments. The Jordanian mobile market is much more open as four firms operate in this sector (relative to two or three mobile companies in the other countries despite much larger populations), the three largest of which are foreign majority-owned (Zain, Orange Jordan, Umniah). The internet sector also appears very competitive with currently 12 service providers.

Foreign ownership is permitted in Morocco, and was first introduced by the incumbent Maroc Telecom who sold 35 percent to Vivendi Universal of France in 2001 (further shares were later sold in 2004). Second and third fixed telecom licenses were issued (to Meditel and Maroc Connect) in 2005, further widening the market. Morocco's mobile telecom sector first opened to competition in 1999 with the issuance of a license to Meditel. A further succession of licenses was released in 2004. Morocco currently has three operators competing in each segment, that is, fixed, mobile, and internet.

The Moroccan Government and telecom regulator (ANRT) restrict the entry of new firms in both the fixed and mobile telecom markets, as exclusive rights are believed necessary to attract strategic investment, as well as in order to allow the provision of universal service in fixed telecom services. In this regard the second mobile operator was offered exclusive rights for a four-year period, as well as a direct international access from 1st Jan 2002. Here marks a difference with Jordan where licenses do not grant exclusivity periods.

Varying levels of restrictiveness affect license regulation in the analyzed MENA countries. Egyptian fixed and mobile licenses are issued according to the discretionary decision of the licensing authority. Selections were made according to economic needs until the end of 2005, but this measure was lifted by GATS commitments. Jordanian fixed licenses are issued with basic entry requirements, and mobile licenses are awarded by competitive tender. Moroccan fixed and mobile licenses are issued by competitive tender, but are issued individually for specific services as opposed to general licenses covering all telecom services (as in the EU).

Mode 4 restrictions are similar to those in the other services sectors. Jordan records the highest restriction levels in Mode 4, while Morocco is the most liberal[15].

In conclusion, the main issues for the telecom sectors in the MENA region are how to improve the quality and coverage of the telecom service while lowering prices. Indeed the quality and price of telecom services are an important determinant of the attractiveness of backbone services in the region but also of the countries competitiveness.

Competition across the MENA countries is greater in the mobile sector than the fixed sector, which has only opened very recently. Foreign capital has risen dramatically during the current decade due to the MENA telecom market's growing potential. New firms (joint-ventures between foreign and domestic capital) have in some cases been offered periods of exclusivity.

Despite the lifting of the monopoly of the Public Telecommunication Operators (PTOs) on the fixed sector, high barriers to entry remain. This market would be more competitive if the PTOs would lease their networks to competitors as has been the case in Morocco. IP

[15] See discussion in the previous section on the banking sector for more information.

telephony development can also have a dramatic impact on telecom prices. But the studied countries are still reluctant to promote commercial use of this technology on a higher scale.

Maritime transport

Maritime services are critical to maintaining competitiveness in global trade. High transport costs weaken the competitiveness of many MENA countries trading with Europe, relative to competitors further afield.

Aggregate TRI scores in Table 5 and Figure 4 indicate the Morocco's maritime sector is the most restrictive of the three analyzed MENA countries. Egypt closely follows, while Jordan is more open. As noted in the methodology section, the transport indices (i.e. Maritime and Air) have been developed by a subjective approach, and are scored on a scale from 0 to 1:

Regarding cross-border restrictions, all three countries are members of the UN Liner Code, which controls the division of cargo, allocating significant shares between conference carriers of the departure and arrival countries (typically 40% each). Egypt also allows both open and closed conferences (though not in practice); whereas Jordan and Morocco permit only open conferences that are subject to competition law. Additional restrictions are imposed on foreign shipping companies in Jordan where containers may not enter the country if discharged in ports of other countries.

To establish commercial presence (mode 3), Egypt requires that a foreign company enter as a joint venture with an Egyptian partner and that foreign equity not exceed 49% of capital. Jordan is slightly more open, but still requires that a foreign company be represented by a local agent, in the role of a branch or subsidiary. Morocco is the most open, as neither joint ventures nor agents are required for foreign companies to establish commercial presence.

Across the MENA countries, it is common to award preferential treatment to ships flying the national flag. Jordanian and Egyptian flag carriers, for instance, are given discounts on prices such as port services. Egypt also gives flag carriers' priority access to the cabotage market. In Morocco, regular shipping line services established in the country must fly the national flag. While open to foreign carriers, non liner shipping is also restricted. Foreign shippers need to contract Moroccan liner intermediaries who have the exclusivity of chartering foreign vessels. However it is expected that Morocco will remove this restriction as it strives to converge with European maritime legislation under the EU Action Plan.

Conditions imposed on the right to fly the national flag are abundant across the analyzed MENA countries, (Egypt and Morocco being the most restrictive). For all three countries, a maritime company must establish commercial presence in the national economy. It is also generally a requirement that more than 49% of equity be domestic or state-owned. 75% of the crew in Morocco and 95% of the crew in Egypt must be domestic, while Jordan is open in this regard. Moreover, ships flying the Moroccan flag are required to contract their insurance in Morocco, inducing extra costs. However, free zones in all three countries reduce the requirements that restrict carriers of the national flag in other parts of the country. Nationality requirements for ship owners and crew are removed in the Alexandria Public Free Zone of Egypt and in the Tangier Free Zone of Morocco. In Jordan, the Aqaba Special Economic Zone exempts maritime companies from the limits on foreign ownership in the rest of the country.

Cabotage services are restricted to domestic companies in many MENA countries. In Egypt, ships flying the national flag are giving priority, limiting foreign flag carriers to the transport of containers if and when Egyptian ships have reached capacity. In Morocco, only companies flying the national flag can provide domestic maritime services. Jordan has only one main port, thus no cabotage industry.

Concerning port services, many restrictions still exist in the three MENA countries. In Jordan the restrictions concern mainly cargo handling, pilotage, towing and the tying of vessels. Exclusive rights are granted to a limited number of companies to attract strategic investment, according to the government. Private ownership is mainly limited in the cargo handling activity where its equity share cannot exceed 50%. In Morocco most port services were under the monopoly of a public office (ODEP) until the end of 2006. Since then this Office has been split in a regulatory agency (ANP) and a port operations corporation (Marsa Maroc) which will supply services in competition with the private sector. In Egypt logistics services remain dominated by public companies, mainly due to restrictions on private entry into port terminals is allowed only in new developed ones. Moreover, port fees and port services prices are set by Government decrees, which impede competition.

Mode 4 restrictions are similar to those of the other service sectors, with slight variations. Restrictions regarding the long term and short term movement of natural persons remain consistent with the scores for the other service sectors. For the Board of Directors, Egypt and Jordan remain unrestricted regarding nationality. In Morocco, ships flying the national flag and owned by enterprises must have a Moroccan national majority and President on the board of directors.

In conclusion, maritime is one of the most restricted service sectors for many MENA countries. Privileged rights given to ships flying the national flag limit liberalization of the maritime market in all of the analyzed MENA countries, though to varying degrees.Foreign equity limits and nationality restrictions on the board of directors and employees further limit integration in the global market. Finally, cabotage services are also subject to high restrictions in all three countries.

MENA Governments face the dilemma of how to guarantee the survival of a maritime industry while allowing for more foreign involvement to ensure lower transport costs for MENA exports. At this stage, the approach seems to be a dual maritime policy, very liberal in free zones and more protectionist in the rest of the country.

Air transport

The air transport sector has been dominated in the MENA region by national flag carriers for decades. However, the need to modernize the sector and increase its efficiency (driven mainly by the development of the tourism sector) has led to many reforms aiming at opening the sector to internal and external competition. The aggregate TRI scores for the air services sector in Table 6 reflect scores ranging from 0.49 to 0.73[16]. Egypt's score is the highest, due to higher restriction levels in modes 1 and 2. Morocco, the most open in modes 1 and 4, has recently introduced many air service reforms in an effort to promote growth in the tourism industry, but it remains more closed than Jordan.

Air transport agreements have been recently signed by many MENA countries with the US (in the form of Open Skies[17] agreements) and with the EU. Morocco pursued an Open Skies agreement with the US in 2001. This was followed by an air transport agreement with the EU in 2006, to be introduced in two phases that would employ the EU's aviation rules and later award the fifth freedom to airline companies headquartered in Morocco and the EU (World Bank, 2007). Egypt does not currently have an air transport agreement with the EU, and has repeatedly declined offers to pursue an Open Skies agreement with the US. Jordan

[16] In computation of the air index, we consider each country's general policy approach and do not address conditions under bilateral air transport agreements unless clearly stated.

[17] "An Open Skies agreement allows air carriers of the United States and the foreign signatory to make decisions on routes, capacity, and pricing, and fully liberalizes conditions for charters and other aviation activities including unrestricted codesharing rights" (http://www.state.gov/e/eeb/tra/c661.htm)

established an air transport agreement with the EU for the one airport in the Aqaba Special Economic Zone in 2006, and is currently pursuing an air transport agreement with the EU for Jordan as a whole. Jordan also has had an Open Sky agreement with the US since 1996.

Concerning the Fifth Freedom of the air[18], Egypt generally does not allow foreign passengers to be carried between two countries by an airline of a third country, though some fifth freedom rights are permitted for U.S. carriers under the U.S.-Egypt Air Transport Agreement. Jordan and Morocco are more open in regards to the fifth freedom, and both have unrestricted fifth freedom rights with the US under their respective Open Skies agreements.

Growth of the charter and low-cost markets has encouraged many of the MENA countries to liberalize general air services policy as a means to stimulating the tourism industry. Charter flights in Jordan are only subject to minor restrictions. Charter flights with departures from Morocco are not allowed at all[19]. In the winter 2003-2004, incoming charter flights were also prohibited at Rabat and Casablanca airports to protect scheduled flights companies. Egypt remains more restricted, however, requiring all charter airlines flying to and from Cairo to gain prior approval from Egypt Air (the national carrier).

The air transport sectors in all three analyzed MENA countries allow foreign low-cost service providers to operate. Morocco, in particular, has encouraged the entrance of foreign low-cost airline companies as a part of its 2010 tourism strategy.

The domestic market, in contrast, remains highly protected across the MENA region. None of the three countries in this study permit foreign service providers to conduct cabotage services (for scheduled or non-scheduled), either on a cross-border basis or with commercial presence.

Airport flight and gate slots are often restricted as well, impeding the entrance of new airlines into the market. Egypt has liberalized certain airports, allocating gate slots by auction, but Cairo's gate slots remain under the control of Egypt Air (the country's flagship carrier). Morocco's gate slots are allocated by grandfathering rights and Jordan's according to the Airport Authority's discretion (this procedure will be evaluated at an upcoming IATA conference).[20]

Concerning the selling and marketing of air transport services, covered by the GATS, the issue of foreign exchange control poses no direct restriction *per se*, but it does indirectly restrict the behavior of Moroccan consumers. It prevents Moroccans from purchasing airline tickets by internet or telephone from non-resident suppliers. Egypt and Jordan are more open on cross-border marketing of air services.

Foreign ownership restrictions in the provision of scheduled services vary across the analyzed MENA countries. In Morocco, a majority foreign ownership (maximum 51%) in a commercial establishment for the provision of international scheduled services is permitted. In companies providing scheduled domestic services, however, foreign ownership is not allowed. Ownership for airline companies conducting domestic services is more restrictive. In Egypt and Jordan, foreign ownership is limited to a minority percentage in companies providing both international and domestic scheduled services (40% in Egypt). Jordan also limits to 49% foreign ownership in the provision of services through commercial presence for non-scheduled international air transport. Charters are restricted to three firms while international scheduled air transport services as well as domestic air services are limited to

18 "To carry freight and passengers between two countries by an airline of a third country on a route with an origin or destination in its home country" (Findlay and Round, 2006).

19 We consider the general case here and not the special provisions governing the Open Skies agreements between the US and Jordan and Morocco.

20 Data on slot allocation gathered from Ministries of Transport in the analyzed MENA countries.

one firm each. In Egypt only national companies are allowed to provide domestic scheduled air transport services.

While foreign ownership restrictions have been liberalized, the percentage owned by national, state or provincial authorities is still significant in many MENA countries. The largest carrier in Egypt remains 100% state-owned. The largest carrier in Morocco is majority state-owned, and in Jordan, the government owns only a minority stake in the largest carrier.

Regarding the areas covered by the GATS, Jordan and Morocco have both committed to no restrictions on the provision of CRS or Selling and Marketing services through commercial presence, while Egypt has no commitments. Neither Egypt nor Morocco has commitments regarding the provision of aircraft Repair and Maintenance through commercial presence. Jordan, however, has no limitations on national treatment but has unbound commitments for market access.

Regarding handling services, the National flag company has the monopoly in all Moroccan airports, which seems to result in a low quality of services according to some foreign companies. In Jordan aircraft repair and maintenance is restricted to four firms.

Mode 4 restrictions in the air services sector are similar to those of other service sectors. There is an additional restriction in Egypt which prohibits the employment of foreigners by foreign companies operating in non-scheduled air transport services, with the exception of posts that could not be filled by Egyptian nationals.

In conclusion, the air services sector has been liberalized significantly across the MENA region. Reforms have been introduced on many fronts as a means to promote the tourism industry. The TRI index indicates, however, that considerable restrictions still exist in Egypt, Jordan, and Morocco. Future liberalization initiatives at the international, regional, and domestic level would facilitate further opening of the sector as it expands with the growing tourism market.

IV. Conclusion

Our study aimed to assess the restrictiveness of barriers to trade in financial, telecom and transport services in the MENA region. Focusing on a select group of MENA countries, the analysis goes beyond previous studies to consider the environment in which these restrictions have evolved (*e.g.* regulatory framework, government behavior, etc.). Each index has been computed at both the aggregate and modal levels to provide a more comprehensive picture of current restrictions for policymakers involved in domestic reform and regional and multilateral negotiations.

One of the main contributions of this study is its collection of information not available from secondary sources, specifically the detailed questionnaires completed by government officials and country reports written by service specialists in the respective countries. The level of detail offered by this research strengthens the reliability of our TRI results and helps us better understand the interactions between regulatory reforms, implementation and actual restrictiveness. De facto/ de jure gaps revealed in our analysis supports the case for future detailed, regular assessments of service barriers in practice as well as in the legislation.

The main conclusion of this study is that there have been significant regulatory reforms over the last decade in the selected service sectors of the four studied countries, but that a broad range of restrictions still remain. Banking, telecom, and air services have been the subject of the most extensive reforms. The most significant change in these and other service sectors has been the lifting or softening of the constraints imposed on foreign equity participation. These regulatory reforms, however, have had varying degrees of impact on market structure depending on the countries and the sectors.

Foreign participation has increased dramatically in the Lebanese banking sector and in most Jordanian service sectors. The only exception is the Jordanian insurance sector where excessive market fragmentation seems to be a hindrance to attracting foreign investment. While these two countries have reduced mode 3 restrictions significantly, they maintain high protection levels in mode 4. This allows them to attract more foreign capital, while keeping some control on management and employment in these sectors.

In Morocco, the sectors that have undergone the most reforms are air services (in the context of strengthening tourism), telecommunication services (in support of initiatives to enhance backbone service exports), and the banking sector (as a primary objective). The benefits of the air liberalization process seem to be significant given the rise of the Moroccan tourism industry, but determination of the net benefit requires also taking into account the cost to domestic companies. The main recent reform in Morocco's telecommunications sector was the lifting of the PTO's monopoly. The maritime sector seems to be the least open of the studied sectors, apart from companies operating in the Tangier Free Zone. Even in the more liberalized sectors, though, the Moroccan Government keeps control on the capital participation of strategic companies (banks, insurance companies, telecom companies). It is important to note here that foreign exchange control in Morocco plays the role of a transversal barrier for modes 1 and 2 trade in services. This raises the important issue of whether to include or not general barriers in the computation of sectoral trade restrictiveness indexes. We decided to include them because they usually have a decisive impact on actual trade in the selected service sectors.

Egypt's insurance and telecom sectors have been the most liberalized sectors, while the air transport sector remains tailored for the national flag carrier. Moreover, recent regulatory reforms seem to have had less impact in Egypt than in the other countries due to the slow progress towards privatization of large public companies.

As a next step, an assessment of the impact of the different reforms engaged by the analyzed countries would be useful. However, such an evaluation is not an easy task given the multiplicity of direct and indirect effects. Ex ante and ex post qualitative and quantitative assessments must be conducted at the sectoral level but also at the economy-wide level to capture the interaction between the various sectoral reforms and the impact on other sectors.

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Figure 1: Aggregate TRI banking score (2007)[1]

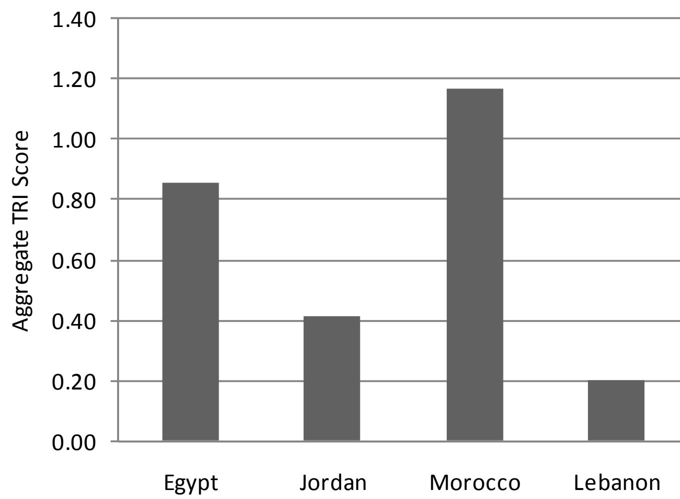
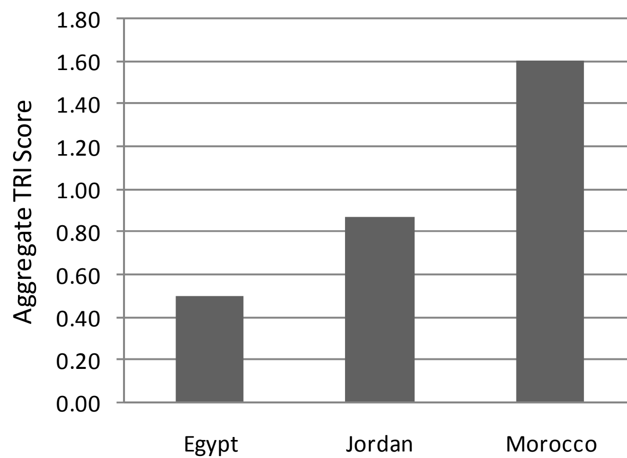


Figure 2: Aggregate insurance TRI scores (2007



[1] For comparative purposes, refer to Dihel & Shepherd (2007), which shows the average banking TRI score for OECD countries to be 0.29 (based on 2005 data); for all figures.

Figure 3: Aggregate telecom TRI scores (2007)

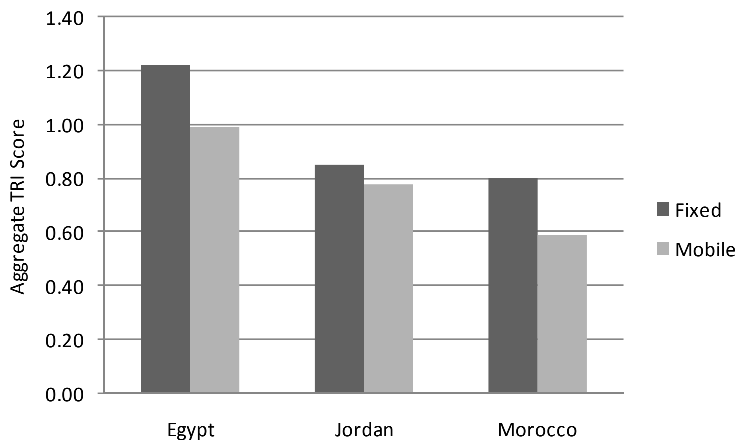


Figure 4: Aggregate maritime transport TRI scores (2007) Error! Bookmark not defined.

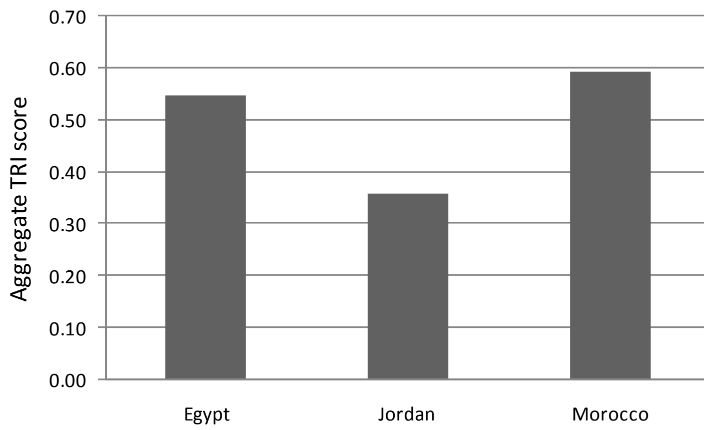


Figure 1. Aggregate air transport TRI scores (2007)

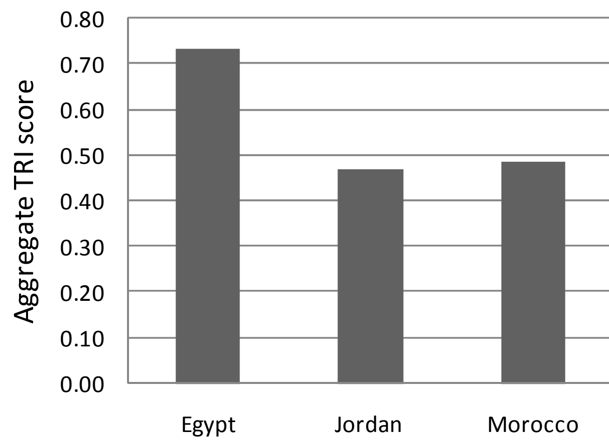


Table 1: TRI scores for the banking sector (2007)

	Aggregate	Mode 1	Mode 2	Mode 3	Mode 4
Egypt	0.85	1.49	0.00	1.03	1.07
Jordan	0.41	1.10	0.00	0.22	1.82
Morocco	1.16	1.98	3.33	0.34	0.19
Lebanon	0.20	0.00	0.00	0.04	2.69

Source: Author calculations

Table 2: TRI scores for the insurance sector (2007)

	Aggregate	Mode 1	Mode 2	Mode 3	Mode 4
Egypt	0.50	0.00	0.00	0.62	1.55
Jordan	0.88	2.27	2.10	0.32	1.88
Morocco	1.61	3.44	3.17	0.91	0.40

Source: Author calculations

Table 3: TRI scores for the fixed telecom sector (2007)

	Aggregate	Mode 1	Mode 2	Mode 3	Mode 4
Egypt	1.22	0.64	2.05	1.36	1.81
Jordan	0.85	0.02	0.00	1.08	2.23
Morocco	0.80	0.64	2.05	0.81	0.73

Source: Author calculations

Table 4: TRI scores for the mobile telecom sector (2007)

	Aggregate	Mode 1	Mode 2	Mode 3	Mode 4
Egypt	0.99	0.00	0.00	0.77	2.24
Jordan	0.78	0.00	0.00	0.67	2.66
Morocco	0.59	0.00	0.00	0.67	1.16

Source: Author calculations

Table 5: TRI scores for the maritime transport sector (2007)

	Aggregate	Mode 1	Mode 3	Mode 4
Egypt	0.55	0.75	0.52	0.17
Jordan	0.36	0.5	0.34	0.37
Morocco	0.59	0.5	0.64	0.25

Source: Author calculations

Table 6: TRI scores for the air transport sector (2007)

	Aggregate	Mode 1	Mode 3	Mode 4
Egypt	0.73	0.65	0.85	0.36
Jordan	0.47	0.46	0.49	0.36
Morocco	0.49	0.41	0.60	0.10

Source: Author calculations