

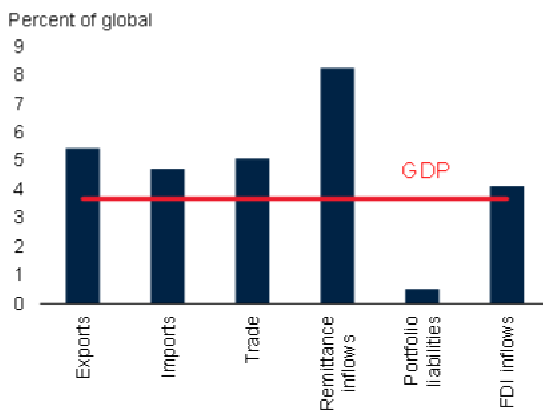
### BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa

Most of the external trade and financial ties of countries in the Middle East and North Africa (MENA) region are with countries outside the region. Trade and financial flows between MENA countries are modest. As a result, within-region growth spillovers even from the largest developing countries in the region—the Arab Republic of Egypt—are small. Spillovers from a large neighboring developing economy—Turkey—are also limited. In contrast, spillovers from G7 countries and GCC countries are considerably larger.

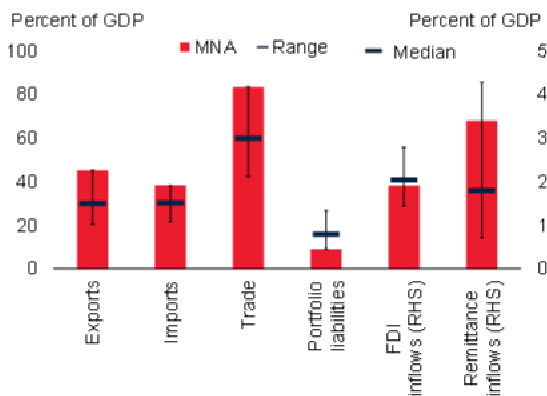
#### FIGURE 2.4.1.1 Cross-region comparison

The MENA region is one of the most open regions to global trade and remittances but receives limited financial flows by comparison with other developing regions.

##### A. MENA: Share of global activity, trade and finance, 2014



##### B. MENA: Trade and finance in regional comparison, 2014



Sources: IMF October 2015 World Economic Outlook, IMF International Financial Statistics, IMF Direction of Trade Statistics, UNCTAD FDI/TNC database, World Bank Remittance and Migration Database, World Bank World Development Indicators.

B. The red bar denotes exports, imports, trade, remittance inflows, portfolio liabilities and FDI inflows in percent of GDP on average across MENA countries. The vertical line denotes the range of averages for all six developing country regions.

#### Introduction

The MENA region is highly open to trade and remittance flows (Figure 2.4.1.1).<sup>1</sup> Trade accounts for more than 60 percent of GDP for both oil exporters and oil importers in the region. There has, however, been a decline in economic integration with the rest of the world since the global financial crisis. Trade as a percentage of GDP has declined (Figure 2.4.1.2). Political uncertainty and falling commodity prices have contributed to a sharp fall in foreign direct investment (FDI) inflows to below 2 percent of GDP, about 1 percentage point below the average for other regions and considerably below the high FDI inflows pre-crisis. Remittance receipts in oil-importing countries have recovered only modestly after dropping significantly during the crisis.

With anemic growth in advanced economies, the pattern of MENA's trade and remittances links has shifted. Trade with other emerging markets, especially the BRICS (Brazil, Russia, India, China, and South Africa), has increased threefold compared to 2000 (Figure 2.4.1.3). Within-region trade and remittance flows have increased, but remain low. In addition to direct economic ties, confidence shocks, related to the recent conflicts and security issues in the region may also affect the economies of neighboring countries and are of increasing concern to policymakers.

This box addresses the following two questions:

- How open is the MENA region to global and regional trade and financial flows?
- How large are the potential intra-regional spillovers from one of the region's largest developing countries,

Note: This box was prepared by Ergys Islamaj and Jesper Hanson.

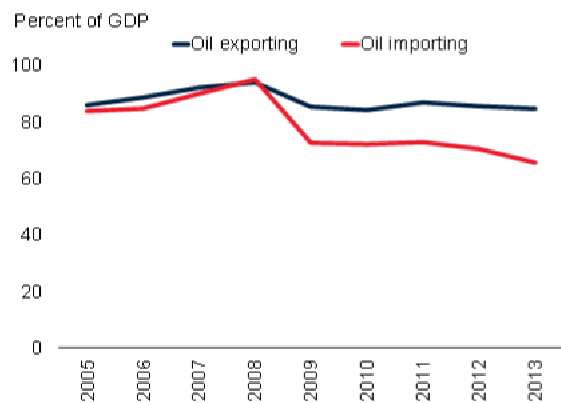
<sup>1</sup>Unless otherwise specified, the MENA region is defined to include oil-exporting countries (Algeria, Bahrain, the Islamic Republic of Iran, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates and the Republic of Yemen) and oil-importing countries (Djibouti, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia and West Bank and Gaza). GCC stands for Gulf Cooperation Council countries. For the purposes of this box, Israel is also included as a recipient country of shocks (although it is not part of the World Bank's definition of the geographic region) since it has substantial trade ties to some other countries in the region.

**BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa (continued)**

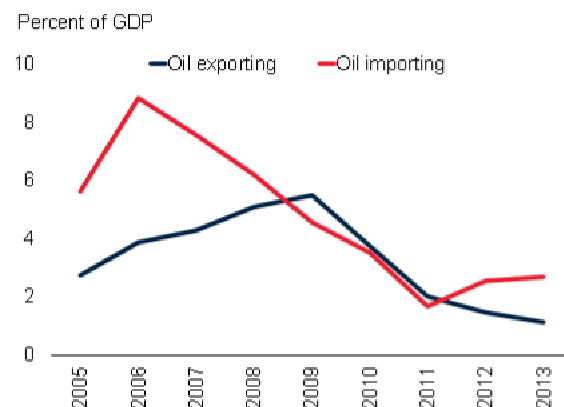
**FIGURE 2.4.1.2 Trade, FDI, and remittances**

The MENA region is highly open to trade and remittances despite a decrease since 2008. FDI inflows have fallen steeply in both oil exporters and importers, partly as a result of political uncertainty and falling commodity prices.

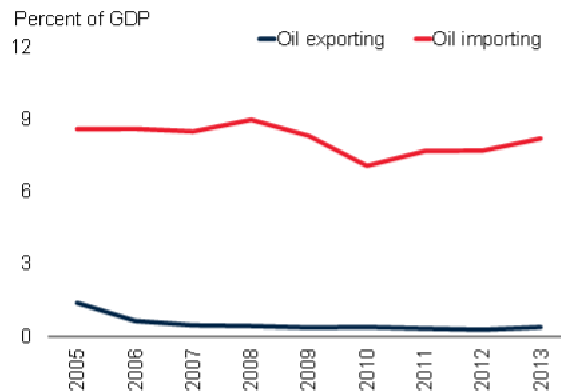
**A. Trade**



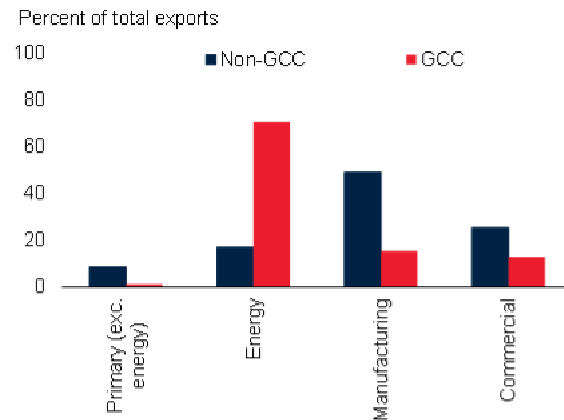
**B. Foreign direct investment**



**C. Remittances**



**D. Exports of GCC and non-GCC MENA countries, 2011**



Sources: World Bank World Development Indicators; IMF Balance of Payments Statistics; World Bank Export Value Added Database. Notes: A., B. and C. Trade is defined as the sum of exports and imports. Oil-exporting countries include Algeria, Bahrain, Iraq, Islamic Republic of Iran, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates and Yemen. Oil-importing countries include Djibouti, Egypt, Jordan, Lebanon, Morocco, Tunisia and West Bank and Gaza. Data unavailable for Islamic Republic of Iran, Iraq, Libya, Qatar, and the United Arab Emirates. Lines show sums of all countries in each sample. D. GCC countries include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates; non-GCC countries include Algeria, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Tunisia, West Bank and Gaza, the Republic of Yemen. Data is unavailable for Algeria, Djibouti, Iraq, Jordan, Lebanon, Libya West Bank and Gaza, Yemen. Bars show unweighted averages.

Egypt, and from one of its largest neighboring developing countries, Turkey?

The empirical results suggest that the region is predominantly vulnerable to growth shocks originating from outside the region. Growth shocks from developing countries inside the region have negligible spillovers on other MENA countries. Potential spillovers from Gulf Cooperation Council (GCC) countries could be significantly larger, although data limitations prevent a

formal estimation. Other types of shocks—for example, of a political, security or financial nature—may also generate important spillovers that are not captured in the econometric analysis.

**How open is the MENA region to global and regional trade and financial flows?**

Trade and financial ties with countries outside the region far outweigh those within the region (Figure 2.4.1.3). On

**BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa (continued)**

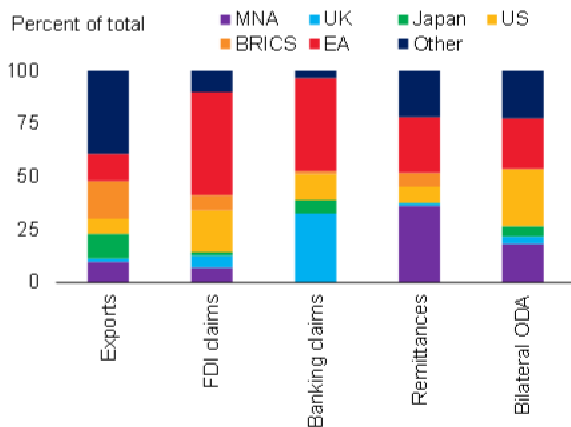
average across the MENA region during 2011-14, the United States, the Euro Area, and Japan combined accounted for 31 percent of exports, 69 percent of inward FDI, and 62 percent of banking claims on countries in the

MENA region. This average masks considerable cross-country heterogeneity, however. For many MENA countries, the Euro Area and the United States together account for more than 50 percent of export revenues and

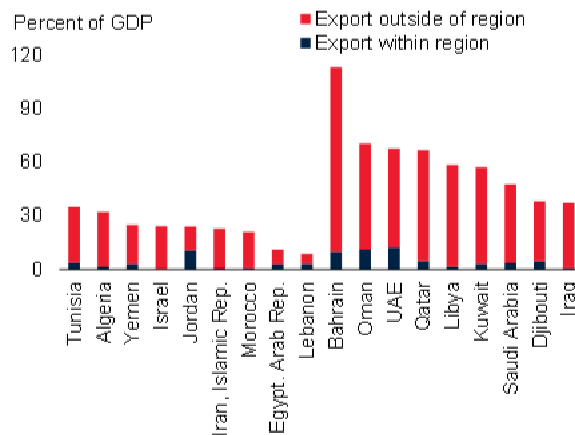
**FIGURE 2.4.1.3 Openness inside and outside the region**

*The main economic partners of MENA countries are outside the region, although within-region remittance and official development assistance flows are important. Since 2000, ties with the United States and the Euro Area have weakened while those within the region and the BRICS countries have strengthened.*

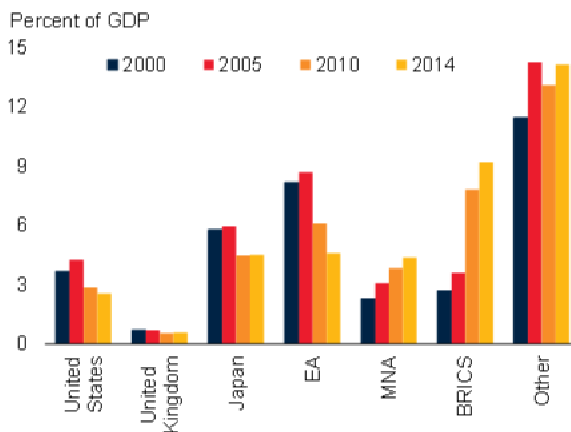
**A. Trade, investment, remittances, and official development assistance in MNA region, average 2011-14**



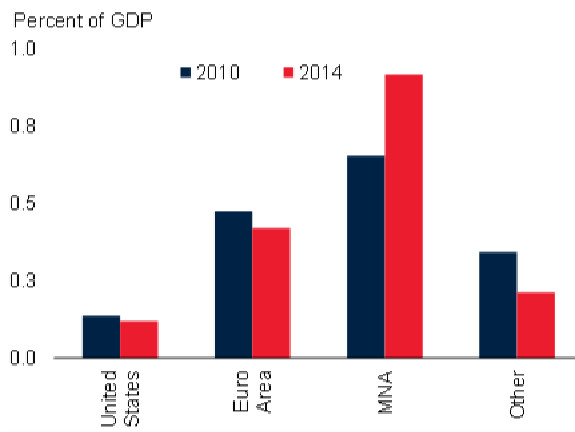
**B. Trade within and outside the region, average 2011-14**



**C. Evolution of trade within and outside the region**



**D. Remittance Inflows**



Source: IMF Direction of Trade Statistics (DOTS); IMF Coordinated Direct Investment Survey (CDIS); Bank for International Settlement (BIS) Consolidated Banking Statistics; World Bank Remittances and Migration database and WB country economists' estimates; OECD.  
 Notes: BRICS = Brazil, Russia, India, China, and South Africa; EA = Euro Area. Also see abbreviations above.  
 A. ODA = Official Development Assistance. Latest available data: 2014 for trade, remittances, BIS-reporting banks' consolidated foreign claims; 2013 for foreign direct investment and official development assistance. FDI claims from CDIS not available for Oman, and replaced with BBVA data. Data provided for Algeria, Bahrain, Djibouti, Egypt, Iraq, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates, West Bank and Gaza, and the Republic of Yemen. Within-region FDI reported only for Kuwait. Within-region ODA includes Kuwait, Saudi Arabia and the United Arab Emirates.  
 B. Includes Algeria, Bahrain, the Arab republic of Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Morocco, Oman, Qatar, Tunisia, Lebanon, Saudi Arabia, the United Arab Emirates, and Yemen.

### BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa (continued)

FDI inflows. The openness of the region to global trade and finance is reflected in spillovers of global shocks to financial market activity. For example, equity returns in the MENA region move strongly with U.S. and European equity markets (Khalifa, Hammoudeh and Otranto 2013; Balli et al. 2015).<sup>2</sup>

Within-region remittance and official development assistance (ODA) flows remain significant and potentially constitute important channels for within-region spillovers. In contrast, within-region trade and financial links are modest by comparison with other regions. Given the proximity to the EU, one of the world's largest trading blocs, MENA countries trade predominantly with countries outside the region. Nevertheless, since they continue to face trade barriers in the EU, MENA countries trade more with each other than would be expected based on the size of their economies and transport cost (Freund and Jaud 2015). Limited within-region trade links also partly reflect close similarities in the export base of many energy-exporting countries in the MENA region.

Bilateral trade and official assistance flows from GCC to some oil importing countries have grown, but remain modest on average, with considerable heterogeneity. Since 2000, trade within the region has doubled, to an average of 4 percent of GDP. Remittances from GCC to other MENA countries have risen by one third, to 0.9 percent of GDP. Official development assistance from GCC countries to Egypt, Jordan and the Republic of Yemen increased from near-zero in 2000 to 2.7, 1.7, and 0.6 percent, respectively, of recipient government revenues during the 2011-2013 period. Since the Dubai World debt restructuring and the Arab Spring uprisings, comovement of GDP among MENA countries has increased somewhat (IMF 2013).

Two channels are particularly likely to generate within-region spillovers:

- *Remittances.* Remittance inflows ranged from 5 percent of GDP in Tunisia to close to 11 percent of GDP in Jordan during 2011-2014. More than three-fifths of these remittances were from GCC countries. While large remittances increase the risk of transmission of

negative shocks in GCC source countries to other countries in the region (IMF 2014d), remittances also help smooth consumption against unexpected variations in output in recipient countries (Balli, Basher and Louis 2013; World Bank 2015q; Abdih et al. 2012; IMF 2014d).

- *Official development assistance.* ODA from GCC to other oil-importing MENA countries was scaled up during the financial crisis of 2008 and the Arab Spring. It has remained high since then. GCC countries have provided or pledged loans and grants to Egypt, Jordan, Morocco, Tunisia and Yemen to finance infrastructure investment, balance of payments deficits, and commodity imports (Rouis 2013). ODA from Kuwait, Saudi Arabia and UAE represents more than 18 percent of total aid to the region, ranging from 4 percent of total ODA for Morocco to 72 percent of total ODA for Egypt. Historically, GCC aid to other MENA countries has varied with oil revenues (Talani 2014, Rouis et. al. 2010). The revenue losses associated with falling oil prices in GCC countries may make GCC assistance to the region less forthcoming.

Disruptions in trade and finance and displacements of large parts of the population during conflicts in parts of the region can also generate significant spillover effects to neighboring countries. These could be both positive and negative. Disruption of trade routes and trade disintegration lowers potential output. Migrants can occupy jobs previously held by low-skilled workers in the host country (Del Caprio and Wagner 2015). However, the domestic demand generated by large numbers of migrants or government expenditures related to migrants could stimulate activity. The net effect has been estimated to be positive for Lebanon—reflecting the large share of the migrant population—but negative or mixed for Turkey, Egypt and Jordan (Ianchovichina and Ivanic 2014, Cali et al. 2015, Del Caprio and Wagner 2015).

**How large are the potential intra-regional spillovers from one of the region's largest economies, Egypt, and from one of its largest neighboring countries, Turkey?**

Several countries in the MENA region have stronger ties with other MENA economies than others: the GCC countries and Egypt. Trade links are similarly sizeable with Turkey, one of the largest economies neighboring the MENA region.

<sup>2</sup>Khalifa et al. (2013) finds significant spillovers from U.S. equity markets to Saudi Arabia and UAE equity indices, while Balli et al. (2015) document spillovers from U.S. equity markets to all GCC countries and from European equity markets to Qatar and Oman.

### BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa (*continued*)

- GCC countries account for more than half of remittance inflows to Jordan and Egypt (50 and 60 respectively).
- Egypt and Turkey are sizeable export markets for Jordan, Lebanon, Morocco and Tunisia.
- Turkey remains an important trading partner for Egypt and the Islamic Republic of Iran. Anecdotal and survey data suggest sizeable informal trade between the Islamic Republic of Iran and other countries in the region.

A sufficiently long time series of quarterly data is available to estimate growth spillovers only from Egypt and Turkey to several non-GCC economies in the MENA region. A Bayesian structural vector autoregression (VAR) model is estimated, using data for 1998Q1-2015Q2. The variables are: G7 average growth; JPMorgan's Emerging Market Bond Index; growth in the shock source countries (Egypt and Turkey); trade-weighted commodity prices; and growth and real effective exchange rates of the countries subject to the external shock. Figure 2.4.1.4 shows the cumulative response after four quarters of recipient-country growth to a 1 percentage point decline in growth in Egypt or Turkey.<sup>3</sup>

Growth spillovers from Egypt and Turkey appear to be modest, and, in most cases, not statistically different from zero, reflecting limited within-region ties.<sup>4</sup> A 1 percentage point drop in Turkey's growth is associated with small or statistically insignificant growth effects across the region.<sup>5</sup> A 1 percentage point decline in growth in Egypt is associated with a 0.16 percentage point decline in growth in Jordan and a 0.15 percentage point decrease in growth

<sup>3</sup>Quarterly GDP data are available from IMF's International Financial Statistics, Haver and Bloomberg for 1998Q1-2014Q4. Countries for which there were considerable differences amongst the three sources were dropped. The resulting unbalanced panel included Egypt, Islamic Republic of Iran, Jordan, Morocco and Tunisia. For Lebanon, quarterly energy production data was used as a proxy for output. For Egypt, the data starts in 2002Q2 and for Tunisia in 2000Q2.

<sup>4</sup>The results in Figure 2.4.4 include four lags. They are robust to alternative specifications: different Cholesky ordering, Bayesian priors, decay in the lag structure, correlation across variable lags, and number of lags.

<sup>5</sup>Shocks in Turkey seem to be inversely correlated with growth in Tunisia. This may reflect competition in key export sectors, especially tourism: when tourist arrivals to Tunisia declined during 2005-13, those to Turkey increased as tourists shifted their destinations during bouts of political uncertainty. Tourism has been a significant channel for the transmission of spillovers in Mediterranean countries (Canova and Dallari 2013). As expected, the estimated spillovers are smaller if the period after the Arab Spring (starting 2010Q4) is excluded.

in Tunisia by the end of the first year. A decline in growth in Egypt does not appear to have significant effects elsewhere. The correlation between shocks to Egypt's growth and growth in Jordan and Tunisia reflect trade and remittances ties between these countries, as well as proximity in the case of Tunisia. In a similar regression using Islamic Republic of Iran as source country of the shock, estimates suggest a negligible effect of a slowdown on Israel, Jordan, Morocco and Tunisia.<sup>6</sup>

Growth spillovers from outside the region are larger in magnitude than those within the region, but mostly insignificant, with the exception of Morocco. A 1 percentage point decline in G7 growth is associated with an average 1 percentage point decline in growth in countries in the MENA region.<sup>7</sup>

These results are broadly comparable to the few available studies by other authors. Using a global VAR, Cashin, Mohaddes and Raissi (2012) show that growth shocks from Europe and the United States have a modest, but negative effect on the output growth of countries like Egypt, Jordan, Morocco and Tunisia.<sup>8</sup> Behar and Espinosa-Bowen (2014) suggest that non-oil trade in MENA countries would decline considerably following shocks to growth in Europe and the global economy.

### Conclusion

The MENA region is highly open, but with fewer within-region ties than other regions. As a result, spillovers from the larger developing countries in the region and from neighboring Turkey are modest.

Although not estimated explicitly for lack of comparable data, spillovers from GCC countries to the rest of MENA region are likely to be significantly larger than spillovers from Egypt and Turkey, given large remittance and ODA flows from GCC to non-GCC countries in the region

<sup>6</sup>The response of the non-GCC MENA countries' average growth rate to a one percentage point decline in Turkey and Egypt is also near-zero. Because of the higher volatility of industrial production (IP), measured spillovers from industrial production are somewhat larger: a 1 percentage point decline in IP growth in Egypt and Turkey is associated with 0.15 and 0.2 percentage point decline in growth in the other countries.

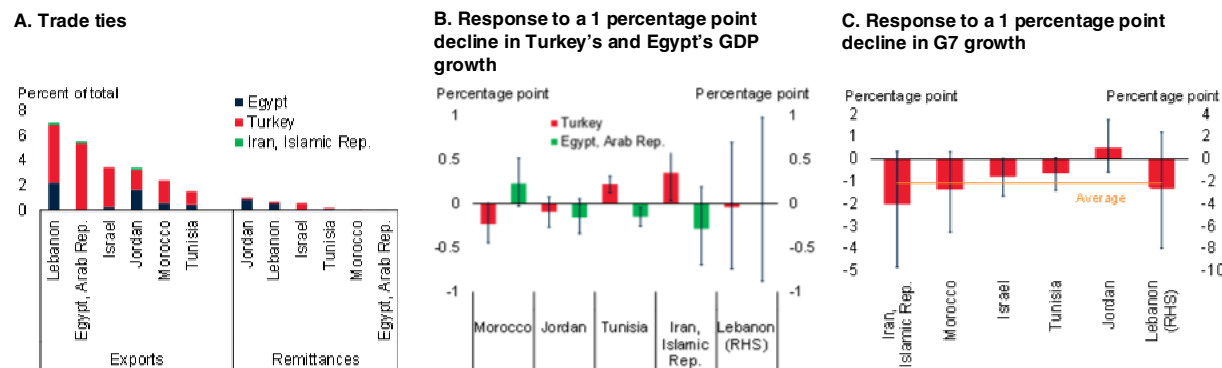
<sup>7</sup>Spillovers from a decline in G7 growth to electricity production growth in Lebanon could be sizable (shown on the right axis of Figure 2.4.1.4). Those to Egypt are not statistically significantly different from zero after 4 quarters.

<sup>8</sup>They find that the cumulative effect after four quarters of a 1 percentage point decline in growth in Europe is not statistically significantly from zero or on the order of 0.1-0.2.

**BOX 2.4.1 Regional integration and spillovers: Middle East and North Africa (continued)**

**FIGURE 2.4.1.4 Spillovers from Egypt and Turkey**

*Output spillovers between non-GCC MENA countries have been modest, reflecting the predominance of trade and financial ties of non-GCC MENA countries to economies outside the region.*



Source: World Bank staff estimates.  
 Notes: B and C. Cumulative response of each country's growth after 1 year to a 1 percentage point decline in growth rates of Egypt, Turkey and World GDP, respectively. World GDP refers to average GDP growth in G7 countries. Energy production data used for Lebanon. Quarterly GDP data for Tunisia and Egypt are available from 2000Q2 and 2002Q2, respectively. All other series are available from 1998Q1. Bayesian VARs include Arab Spring dummies for Tunisia (2010Q4-2011Q4) and Egypt (2011Q1-Q4), financial crises dummy (2008Q2-2009Q2), a dummy for Turkey's financial crises (2001Q1), a dummy for conflict in Lebanon (2006Q1-Q4) and dummies for droughts in Morocco (2002, 2003, 2006 and 2012). Horizontal line represents MENA average response. Vertical lines show a one standard deviation confidence band. Solid bars represent medians and the error bands represent 33-66 percent confidence bands. Lebanon shown on the right axis.

(Cashin, Mohaddes and Raissi 2012, IMF 2012c). GCC economies may also have a significant effect on developing MENA countries through their investments in infrastructure, such as airlines, telecom and multi-country railway projects, as well as banking and financial ties (World Bank 2014b).

In addition, spillovers from political uncertainty, security concerns or spreading violence could also be sizeable.

Going forward, more stability in the MENA region will not only allow countries to benefit from deepening trade and finance, but will also alleviate some of the fiscal burden associated with creating infrastructure to help people displaced by conflicts. Continued turmoil will derail efforts to tackle problems of corruption, and prolong necessary reforms in the labor markets (World Bank 2015f).