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WORLD BANK **MIDDLE EAST AND NORTH AFRICA REGION – A REGIONAL ECONOMIC UPDATE**, MAY 2011

FACING CHALLENGES AND OPPORTUNITIES

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MENA Facing Challenges and Opportunities

This report was prepared by a team led by Elena Ianchovichina (MNACE) and including Lili Mottaghi (MNACE) who worked on the regional macroeconomic outlook jointly with country economists in MNSED, and Christina A. Wood (MNACE) who worked on the special topic of food price increases together with Josef Loening (AFTAR) and Cristina Savescu (DECPG). The following group of MNSED country economists contributed to the report: Antonio Nucifora, Chadi Bou Habib, Daniela Marotta, Dorsati Madani, Hania Sahnoun, Hoda Youssef, John Nasir, Jorge Araujo, Karim Badr, Kevin Carey, Khalid El Massnaoui, Nancy Claire Benjamin, Ndiame Diop, Santiago Herrera, Sherine H. El-Shawarby, Sibel Kulaksiz, Stefano Paternostro, Wael Mansour, Wilfried Engelke, and Youssef Saadani. We would like to thank Manuela Ferro (Sector Director, MNSED), Bernard Funck (Sector Manager, MNSED), Jonathan Walters (Director, MNARS) and Julian Lampietti (Lead Program Coordinator, MNSAR) for their assistance and comments. The report was prepared under the guidance of Caroline Freund (Chief Economist, Middle East and North Africa Region).

For ease of analysis and exposition, the region is divided into three main groups: the GCC oil exporters, developing oil exporters and oil importers. The first group contains the Gulf Cooperation Council (GCC) countries, namely, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates. The second group comprises the developing oil exporters such as Algeria, Islamic Republic of Iran, Iraq, Libya, Syrian Arab Republic, and Yemen. Oil importers include countries with strong GCC links (Djibouti, Jordan, and Lebanon) and those with strong EU links and located in North Africa (Egypt, Morocco and Tunisia). Developing MENA represents all MENA countries except the GCC oil exporters.

THE WORLD BANK
Washington, D.C.

1818H Street, NW
Washington, DC 20433
Telephone: 202–473–1000
Internet www.worldbank.org
E-mail feedback@worldbank.org

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ABBREVIATIONS

AFTAR	Africa Region Agriculture and Rural Unit
CPI	Consumer Price Index
CDS	Credit Default Swaps
DECPG	Development Economics Prospects Group (World Bank)
DFSF	Dubai Financial Support Fund
DW	Dubai World
EAP	East Asia and Pacific
ECA	Europe and Central Asia
EDP	Economic Developments and Prospects report
EIU	Economist Intelligence Unit
EMBI	Emerging Market Bond Index
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
HIC	High Income Countries
ILO	International Labor Organization
IMF	International Monetary Fund
JD	Jordanian Dinar
LAC	Latin America and the Caribbean
LNG	Liquefied Natural Gas
MENA/MNA	Middle East and North Africa
MNACE	Middle East and North Africa Office of the Chief Economist
MNARS	Middle East and North Africa Regional Strategy & Programs
MSCI	Emerging Markets index
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Oil Exporting Countries
PDS	Public Distribution System
RGE	Roubini Global Economics
S&P	Standard and Poor
SA	South Asia
SR	Saudi Arabia Rial
SSA	Sub-Saharan Africa
T-bills	Treasury bills
TDN	Tunisian Dinar
UAE	United Arab Emirates
UK	United Kingdom
US	United States of America
USD	U.S. Dollars
USDA	United States Department of Agriculture
VAT	Value Added Tax
WB	World Bank
WBG	West Bank and Gaza
WTO	World Trade Organization

EXECUTIVE SUMMARY

By the end of 2010, countries in the Middle East and North Africa (MENA) had largely recovered from the global financial crisis, and growth rates were expected to reach pre-crisis levels in 2011. In early 2011, a series of prodemocracy movements began that resulted in swift regime change in Tunisia and Egypt, and spread to Bahrain, Libya, Syria and Yemen. The unrest and uncertainty associated with these movements have affected the *short-term* macroeconomic outlook and the status and speed of economic reforms in the region. The medium-run growth prospects are likely to improve, especially if the political changes are associated with more open and accountable governance and more rapid reforms.

While political change will bring short-run challenges; the transition has the potential to significantly boost economic growth and raise living standards in the medium run. If the political changes lead to greater accountability and transparency in governance, countries could relax a key constraint to growth and steer resources more effectively to productive uses while reducing unproductive rent-seeking behavior. Better rule of law will promote competition and political stability will attract investment, facilitating more rapid growth in a sustainable way. More voice for civil society will prevent the unequal application of regulations, and can lead to more inclusive growth. It will also bring dignity and raise wellbeing. While the challenges are many, the opportunities are more.

Transitions from other regions suggest that the medium-run gains from moving to more open and accountable governments are sizable. Income growth tends to stabilize at a higher average rate in the decade after transition, and income volatility at a lower rate, as compared with the previous period. The results will depend on how swiftly and credibly governments can commit to reform. In the meantime, as investors wait for political uncertainty to be resolved in countries affected by political turmoil, it is inevitable that investment will be delayed and economic challenges will emerge. Evidence from earlier transitions shows that these difficulties tend to be limited; growth typically dips for only one year and then returns to or exceeds previous levels.

These challenges alter the short-term economic outlook and subject it to significant uncertainty in several countries in the region. The forecast is for 3.6 percent growth in 2011, down from 5 percent growth expected in January of this year. The decline is largely due to the sharp drop in Egypt's and Tunisia's economic activity, but also because of weaker growth in developing oil exporters. The GCC will support the region, with robust growth above 5 percent. Overall, the growth effects are expected to differ by country, depending on whether the country is an oil exporter or an oil importer and the degree to which unrest and political changes disrupt country's economic activities.

- Growth of oil importers in North Africa is expected to be 1.9 percent in 2011, down by 3.2 percentage points relative to January projections for 2011. The main factors for the weaker outlook are a drop in tourism, business disruptions, and reduced investment, resulting from political uncertainty.
- Growth of oil importers with strong GCC links is expected to be around 4.4 percent, which is two percentage points lower than our pre-unrest estimate. The decline is due to rising political tensions in Jordan and Lebanon, and disruptions in intra-regional trade.
- Developing oil exporters are expected to grow at 1.7 percent in 2011. Despite rising oil prices, growth of this group is less than half of the previous projection for 2011. The slowdown is due to Iran's weak economic performance and unrest in Yemen and Syria.
- Economic expansion in the GCC countries is expected to be stronger in 2011 than in 2010 and reach 5.2 percent this year, boosted by rising oil prices and Qatar's projected double-digit growth from increased natural gas production.

Financial market movements reflect a modest tightening of financing conditions for sovereigns as well as the corporate sector, which is expected to dampen regional growth. FDI inflows are likely to decline and short-term capital outflows to rise in the countries affected by unrest, putting downward pressure on exchanges rates. The extent of the decline in investment will depend on how long it takes for uncertainty to be resolved.

On the demand side, government spending is expected to rise in 2011 as MENA governments have moved quickly towards expanding supportive policy measures and social transfers to

help the unemployed and ease the burden of high commodity prices. Partly because of these actions, but also because of rising fuel and food prices, inflation rates are expected to increase in many MENA countries in 2011.

The fiscal stance of oil importers in North Africa is expected to worsen in 2011, as revenues decline in response to reduced business activity and expenditures increase reflecting the supportive social policy measures provided by governments. Oil exporters will also see increased expenditures, but these will be offset by higher oil revenues, leading to improvements in their fiscal balances relative to those reached in 2010 and the pre-unrest forecasts. Yemen and Syria however are exceptions.

The main risk to the forecast is prolonged instability and lack of clarity about the future political transition in the affected countries in the region. Most importantly, until a reasonable level of political stability returns, investment will be compromised. Prolonged tensions would also amplify the negative impact on tourism receipts, which have been a large share of GDP in a number of countries, and could translate into increased cost of capital, further dampening growth prospects.

The report also focuses on the effects of higher food prices in the MENA region. Impacts are determined by the country's dependence on food and oil imports, and the extent of the pass-through from international to domestic prices. While the region includes some major oil exporters that are benefiting from the oil price increases, it is also home of a number of countries that rely on imported oil. MENA countries are highly dependent on imported food, particularly cereals, oils, and sugar. In the event of further food price increases, they face the risk of increased import bills, higher domestic inflation, and worsened fiscal balances in cases when governments subsidize food. New estimates of pass-through coefficients for the MENA countries, calculated for this report, indicate that a rise of global food prices has been transmitted to domestic food prices to a significant degree. Transmission from international to domestic food price levels has been notably high for Egypt, Iraq, Djibouti, United Arab Emirates and West Bank and Gaza, while being particularly low in Tunisia and Algeria. Where international food price increases filter into domestic prices, overall inflation tends to be higher.

Looking forward, the forecast is for improvement in the economic prospects of the MENA region in 2012 as compared with 2011. The increase comes from about a 2 percentage point jump in growth in developing MENA. Growth in the GCC is likely to retreat slightly from 2011 rates, as oil prices stabilize.

The boost in expected growth in developing MENA in 2012 assumes a move to enhanced political stability. If governments in the countries experiencing unrest are able to gain a reasonable level of legitimacy and begin a credible reform program, growth is likely to quickly return to or surpass pre-revolution levels. Of utmost importance is citizen security and political stability. With security and stability, a few steps toward government reform will reassure investors and the growth rate will improve. There is, of course, a good deal of uncertainty, but the opportunity to move to a path of stronger and more inclusive growth is present. If the MENA countries take the demands of the population for more accountable and transparent governance seriously, and move to a structure that promotes competition and inclusiveness, this will promote robust growth in the region and many more opportunities for the young population.

I. INTRODUCTION

This report discusses the economic outlook for the Middle East and North Africa (MENA) region, and also analyses how high and rising food prices have impacted the region. The first part focuses on the short-term economic outlook, with a breakdown of how each sub-region is being affected by unrest and uncertainty, and also by high commodity prices. Overall, the MENA region is expected to experience about 1.2 percentage point drop in growth, as compared with the January estimates, owing to output disruptions and the decline in confidence associated with transition in several countries. In particular, developing MENA is expected to see a decline in growth of about 2.6 percentage points, as compared with pre-revolution estimates. In contrast, the GCC will receive a small growth premium as a result of higher oil prices.

An important consequence of public discontent in both transition and non-transition countries has been a sizable expansion in social policies. Many new measures are being taken to soften the impact of high and rising food prices. Similarly, the urgent need for more and better jobs, which was repeatedly highlighted in the demonstrations around the region, has led to enhanced employment support. While some measures are targeted at the most vulnerable, many of the new measures are not well targeted and will be costly. This raises concern about potential economic distortions, as well as the fiscal costs of these measures going forward.

The second part narrows in on food prices and examines the vulnerability of the region to food price increases. The poor are especially vulnerable because of the large share of income spent on food and the lack of domestic production in most countries. Evidence is presented that pass through from international to domestic prices is relatively high in many countries in MENA, despite subsidies. High and rising commodity prices thus exacerbate existing concerns about inflation in some countries.

The report focuses on the short-run forecast and immediate challenges. Given current uncertainty, it is impossible to make a credible forecast of the medium run. One way to get around this issue is to look at other transitions to get a sense of what typically happens. Before moving to the body of the report, we present some lessons gleaned from experiences in other parts of the world that have had similar upheavals.

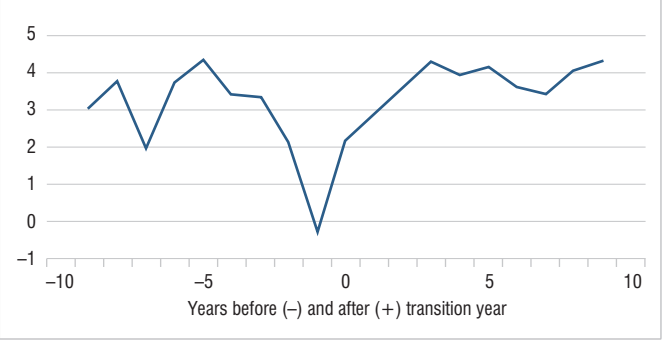
EXPERIENCES OF COUNTRIES IN POLITICAL TRANSITION

Short-run sacrifices are to be expected and with appropriate policies they are likely be limited in duration and scope. Indeed, ongoing research examining 50 transitions to democracy around the world (Freund and Mottaghi 2011) shows that on average income growth declines by 3–4 percentage points during transition, but the dip lasts only one year and growth quickly resumes or exceeds pre-transition rates. Figure 1 shows average income growth over time, scaled by date of transition, where year zero is the first year the government was democratic.[1] Following transition, there is reason for optimism about the medium- and long-run growth potential of the region. A number of studies find that GDP growth tends to stabilize at a higher rate, with volatility at a lower rate, post transition (Rodrik and Wacziarg 2005, Papaiannou and Siourounis 2008, and Freund and Mottaghi 2011).

Still, democracy does not bring a guarantee of higher growth. A large cross-country literature finds no evidence that democracies grow significantly faster than autocracies (see

Figure 1. Average Growth Performance during Typical Transition

(percent)



Source: Freund and Mottaghi (2011); Note: Mean growth performance during 31 transitions based on information in Polity database.

1 Transitions are identified from the Polity IV Project, which includes an index of regime characteristics. The index is scaled from 0 (authoritarian) to 10 (democracy). The index must jump by at least 5 points, and the new higher level must be sustained for at least 5 years to qualify as a transition. Thus, this data includes only countries with complete transitions. The graph records the average real income growth for a balanced panel of 31 countries with data for 21 years (transition at least 20 years ago).

Durlauf *et al.* 2005 for a review). The reasons for the difference in cross-country and within-country results on democracy are not well understood, but one possibility is that countries that have poorly functioning autocratic governments are more likely to transition to democracy, and also to achieve a higher growth rate under a new system. Put differently, the transition is not exogenous; countries with poor growth performance may be more likely to change systems. Indeed, within-country results also show that transition tends to happen after a period of poor performance. Another possibility is that cross-section results capture long-run effects, which differ from the medium-run results found in within-country investigations.

The time-series results also may not adequately control for time-varying country characteristics that accompany political change, and which are included in many of the cross-section studies. In particular, governance is likely to change with political transition, and a large body of work shows that improvements in governance have sizable positive economic returns. For example, there is evidence that differences in the quality of institutions are the main reason for differences in prosperity across countries (Acemoglu, Johnson and Robinson 2001, Acemoglu and Robinson 2010). Similarly, excessive regulation can protect rents and guide resources to special interests. And empirical evidence shows that more burdensome regulatory systems lead to more corruption and lower income (Djankov *et al.* 2002).

To the extent that transition to democracy brings better and more accountable institutions, we expect higher growth in post-transition MENA. Going back to the studies of transition, a handful of them (for which governance data exist) have been associated with significant improvements in voice and accountability and some gain in regulatory quality in the first few years after transition (Freund and Mottaghi 2011). What has proven more difficult is improving rule of law, corruption control, and government effectiveness subsequent to transition.

In sum, there are a number of reasons for optimism about the medium- and long-run prospects of the countries in transition. The political transitions in Tunisia and Egypt, as well as promises of deep reform by incumbents in some of the other countries, have increased the likelihood of comprehensive institutional and regulatory reforms. If the MENA countries take the demands of the population for more accountable and transparent governance seriously, and move to a structure that promotes competition and inclusiveness, this will promote robust growth in the region and many more opportunities for the young population.

II. MENA'S SHORT-TERM MACRO-ECONOMIC OUTLOOK

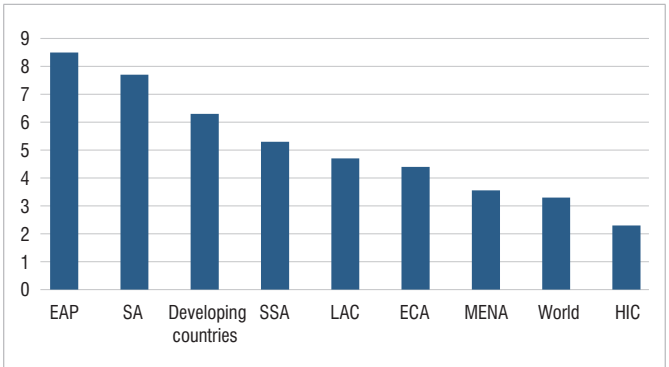
By the end of 2010, countries in the Middle East and North Africa (MENA) had largely recovered from the global financial crisis, and growth was expected to reach its pre-crisis levels in 2011. In early 2011, a series of pro-democracy movements began that resulted in swift regime change in Tunisia and Egypt, and spread to Bahrain, Libya, Syria and Yemen. This has impacted short-term growth, fiscal and trade prospects, inflation, and the status and speed of economic reforms in the region. The transition in the Arab world also has important economic implications for global growth. Unrest in Libya and the potential for further unrest in the oil-rich region has pushed up international oil prices over the past four months, threatening the global recovery (Figure 2).

The short-term economic prospects in the region have changed because of recent unrest and political and economic uncertainty. Economic growth region-wide was 3.9 percent in 2010 (an increase of close to 2 percentage points over growth in 2009) and was expected to advance to 4.8 percent in 2011 and 2012, respectively (see January edition of the Middle East and North Africa's Economic Developments and Prospects report). The ongoing unrest that started in early January has lowered that forecast. MENA's growth is now expected to be 3.6 percent in 2011–a decline of about 1.2 percentage points relative to the pre-unrest growth forecast for 2011 (Figure 3, see also Table 1 and Annex Table 1).

A drop in the growth rates of Egypt and Tunisia, and a weaker growth in developing oil exporters is the driving force for

Figure 2. Annual Growth Outlook in 2011

(percent)



Source: World Bank data.

Figure 3. Growth in MENA Marked Down

(percent)

Source: World Bank data.

MENA's regional growth deceleration. Growth in the group of oil importers in North Africa is expected to decline by 3.2 percentage points with respect to the pre-revolutionary projection for 2011 (Figure 4), reflecting a drop in tourism, business disruptions and reduced investment due to political uncertainty. Growth in developing oil exporters[2] is expected to be less than half of pre-unrest growth expectations and decline to 1.7 percent in 2011, largely because of Iran's weak economic performance and unrest in Yemen and Syria. Economic expansion in the GCC countries is expected to be robust, boosted by oil prices and Qatar's projected double-digit growth from increased natural gas production (Table 1). Oil importers with strong GCC links are expected to grow at a moderate pace of 4.4 percent, 2 percentage points lower than our pre-unrest estimate. The decline reflects rising political tensions in Jordan and Lebanon, and disruptions in intra-regional trade.

On the demand side, growth in MENA is expected to be driven more by consumption and less by investment and exports than was envisaged in EDP 2011. Government consumption, in particular, is expected to be a major driver of growth this year, especially in oil-importing countries, as MENA governments have moved quickly towards taking on supportive policy measures and social transfers to counter rising commodity prices and reduce discontent from high unemployment. Because of lack of clarity about the future political developments in

2 Libya is excluded due to the conflict situation and lack of estimates.

Table 1. Macroeconomic Outlook

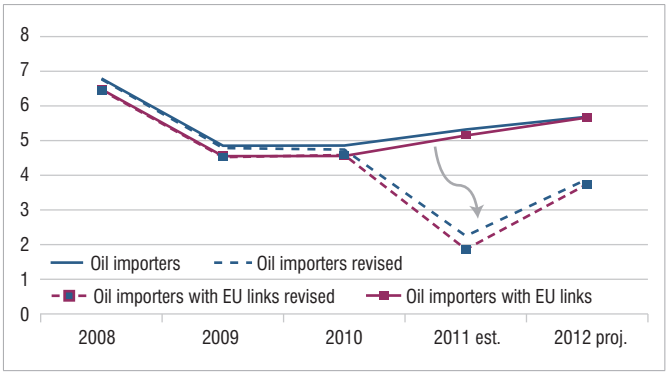
	Real GDP Growth					Fiscal balance					Current account balance				
	2008	2009	2010	2011 est.	2012 proj.	2008	2009	2010	2011 est.	2012 proj.	2008	2009	2010	2011 est.	2012 proj.
	(Annual percentage change)					(in percentage of GDP)					(in percentage of GDP)				
MENA region	**5.2**	**1.8**	**3.9**	**3.6**	**4.2**	**12.4**	**–2.8**	**1.7**	**4.0**	**4.7**	**15.1**	**1.5**	**6.3**	**10.4**	**9.9**
Oil Exporters	**4.6**	**0.7**	**3.5**	**4.0**	**4.3**	**15.8**	**–2.1**	**3.7**	**6.8**	**7.6**	**18.8**	**3.2**	**8.9**	**14.3**	**13.4**
GCC	**6.0**	**0.2**	**4.2**	**5.2**	**4.6**	**24.2**	**0.8**	**7.8**	**11.3**	**11.5**	**23.9**	**6.7**	**12.1**	**17.6**	**16.5**
Bahrain	6.1	2.6	4.0	1.0	3.0	4.9	–8.7	–7.8	0.5	–1.0	10.6	1.6	4.6	9.0	8.0
Kuwait	5.6	–4.4	2.3	4.0	4.0	19.9	19.3	17.5	20.0	22.0	40.7	29.2	31.8	33.0	35.0
Oman	12.3	3.6	4.8	1.0	3.0	13.9	2.2	7.5	11.0	9.0	9.1	–2.2	11.6	12.0	11.0
Qatar	15.8	9.0	16.0	18.6	9.2	10.9	13.0	11.4	12.2	14.3	33.0	15.7	18.7	38.0	34.9
Saudi Arabia	4.2	0.6	3.4	4.5	4.4	32.5	–6.1	7.7	9.0	8.0	27.8	6.1	8.7	14.0	12.0
United Arab Emirates	5.1	–2.0	2.4	3.2	4.0	20.4	0.4	3.3	12.0	13.0	8.5	–2.7	7.3	9.0	9.0
Developing Oil Exporters	**2.1**	**1.6**	**2.2**	**1.7**	**3.6**	**1.5**	**–6.3**	**–2.3**	**0.1**	**1.9**	**10.0**	**–1.9**	**4.2**	**9.5**	**8.9**
Algeria	2.4	2.4	3.3	3.7	3.6	7.7	–6.8	–3.9	–3.3	–1.1	20.2	0.3	9.4	17.8	17.4
Iran, Islamic Republic of	1.0	0.1	1.0	0.0	3.0	0.0	–2.7	0.6	3.7	4.3	7.3	4.2	6.0	11.7	10.4
Iraq	9.5	4.2	0.8	9.6	12.6	–1.2	–21.8	–10.8	–4.0	3.5	12.8	–26.6	–6.2	–3.0	–0.4
Syrian Arab Republic	4.5	6.0	3.2	1.7	3.0	–2.8	–2.9	–4.8	–7.3	–5.1	0.1	–5.7	–4.4	–5.3	–4.8
Yemen	3.6	3.9	8.0	3.0	4.0	–3.2	–10.2	–4.0	–7.0	–5.6	–4.6	–10.7	–4.4	–4.0	–4.0
Oil Importers	**6.8**	**4.8**	**4.7**	**2.3**	**3.9**	**–4.3**	**–5.5**	**–6.1**	**–7.1**	**–6.9**	**–3.3**	**–4.9**	**–4.2**	**–5.0**	**–4.3**
Oil importers with GCC links	**8.6**	**6.3**	**5.6**	**4.4**	**4.7**	**–6.8**	**–8.1**	**–4.8**	**–6.1**	**–5.7**	**–12.2**	**–14.8**	**–10.9**	**–12.7**	**–12.2**
Djibouti	5.8	5.0	4.5	5.5	5.7	1.3	–4.6	–0.5	–0.1	0.0	–24.3	–9.1	–6.9	–18.2	–15.7
Jordan	7.6	2.3	3.1	3.5	4.0	–4.3	–8.5	–5.3	–6.2	–5.2	–9.6	–5.1	–4.3	–8.0	–6.8
Lebanon	9.3	8.5	7.0	4.8	5.0	–8.8	–8.0	–4.6	–6.2	–6.2	–13.6	–21.5	–15.4	–15.6	–15.6
Oil importers with EU links	**6.5**	**4.5**	**4.6**	**1.9**	**3.7**	**–3.9**	**–5.0**	**–6.3**	**–7.3**	**–7.1**	**–1.8**	**–3.2**	**–3.0**	**–3.6**	**–2.9**
Egypt	7.2	4.7	5.2	1.0	3.5	–6.8	–6.9	–8.2	–9.0	–9.0	0.5	–2.3	–2.0	–2.9	–2.4
Morocco	5.6	4.9	3.3	4.3	4.5	0.4	–2.2	–4.6	–4.5	–4.0	–5.2	–5.0	–4.2	–4.0	–3.5
Tunisia	4.5	3.1	3.7	1.5	3.5	–1.0	–3.0	–1.3	–4.8	–4.1	–3.8	–2.9	–4.8	–6.2	–4.0

Source: World Bank data.

the region, the extent to which exports and investment will contribute to growth in MENA is uncertain. On the supply side, the sources of growth differ by country, depending on whether the country is an oil exporter or an oil importer and the degree to which political turmoil and changes disrupt its economic activity.

Figure 4. Growth in Oil Importers Dips

(percent)

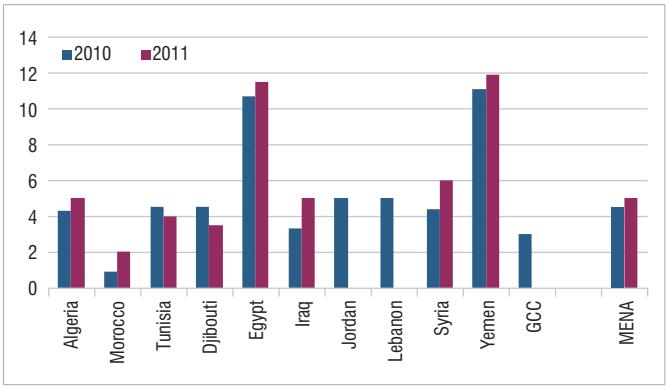


Source: World Bank data.

Inflation is projected to increase slightly in the region, in line with rising fuel and food prices; but the extent of price pressure across countries depends on the extent to which subsidies and price controls protect consumers (Figure 5 and Table 2). Wage increases and cash transfers will also feed into prices. Inflationary expectations could also rise, leading to second-round effects, as more intense pressure for further wage increases stimulates inflation.

Figure 5. Inflation Rates

(percent)



Source: World Bank data. Note: The figure presents the median inflation rate for GCC and MENA.

Table 2. Subsidies in the MENA Region

	Percent of GDP 2009	In billions USD 2009
Tunisia		
Food	1.2	0.5
Energy	1.0	0.4
Transport	0.4	0.2
Lebanon		
Energy	4.3	1.4
Jordan		
Food	0.8	0.2
Energy	0.2	0.1
Morocco		
Food	0.7	0.6
Fuel	1.1	1.0
Egypt		
Food	2.0	3.8
Energy	6.0	11.3
Other	0.3	0.5
Syria		
Food	1.4	0.7
Other direct	1.1	0.6
Implicit energy subsidies	4.9	2.6
Yemen		
Energy	10.3	2.6
Iraq		
Food	3.5	2.3
Implicit energy subsidies	1.5	1.0
Algeria	13.5	18.8

Source: World Bank MNA regional data for 2009.

Risk premiums have increased across MENA countries as more countries fell into unrest (Figures 6 and 7). These market movements reflect a tightening of financing conditions for sovereigns as well as the corporate sector, which could affect economic activity negatively this year. Spreads of credit default swaps (CDSs) on Egyptian sovereign debt have increased, but are mild as compared with increases during the global financial crisis. Spreads of CDSs were already in an upward trend in January due to political uncertainty about regime's change but after the revolution, peaked at 450 basis points (bps) before returning to 388 bps on March 15 (Figure 8). The cost of insuring Bahraini sovereign debt jumped by 18.5 bps to reach 286 bps, the highest level since 2009, and the debt insurance

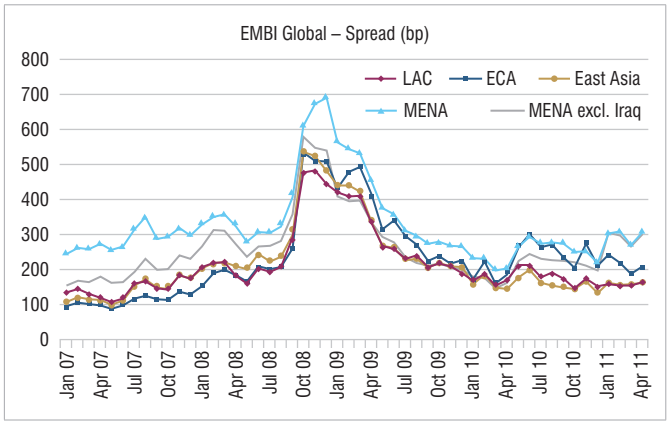
costs have increased 50 bps since the beginning of 2011. Other countries not considered high-risk, such as Abu Dhabi and Qatar, have seen their CDS levels widen to around 120 bps.[3]

OIL IMPORTERS' PROSPECTS IN 2011 HURT BY TURMOIL

Economic recovery of oil importers is at risk, awaiting the resolution of political events in Egypt, Tunisia, and to some extent in Jordan and Morocco. The main factors affecting the outlook for the oil importers are a large drop in tourism; ongoing business disruptions; a slowdown in domestic demand; and reduced investment following loss of confidence in the prospects of this group of countries. Short-term growth, fiscal and current account balances, investment and FDI of the oil importers are expected to be revised downward compared to estimates prior the unrest, due to uncertainty in the sub-region (Figure 4 and 9). Still, the extent to which growth, fiscal and current account balances will be affected differs by country. Egypt's economic growth is expected to decline from the 5.5 percent originally forecasted for fiscal year 2011 to about 1 percent. Growth will likely remain below its potential until political stability is restored. Growth in Tunisia is expected to slow down in 2011 and decline to 1.5 percent in 2011 due to a sizeable reduction in production and reduction of about 40 percent in tourism (Table 1). Morocco's growth performance in 2011 is expected to slow down but remain close to the growth projection for 2011 prior the unrest.

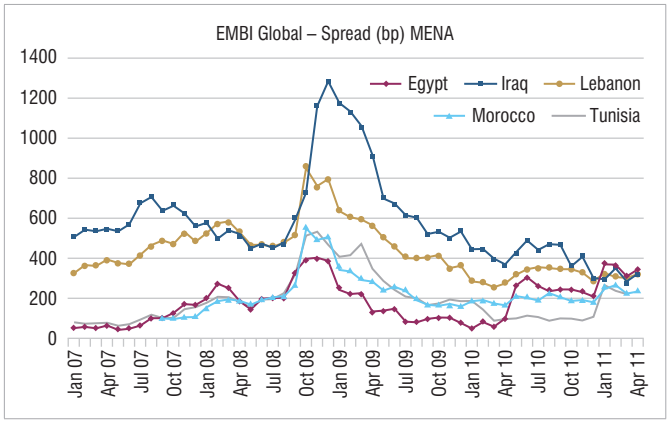
Fiscal deficits of the group of oil importers in North Africa are expected to worsen in 2011 relative to 2010 and the pre-unrest budget estimates, as revenues decline in response to reduced business activity and expenditures increase reflecting the supportive social policy measures provided by governments (Figure 9). Still, there are differences in the way fiscal stances of individual countries in this group are likely to evolve in 2011 (Table 1 and Annex Table 1). Egypt's overall budget deficit in fiscal year 2011 is now expected to widen to 9 percent of GDP. Little, if any, change is expected to take place regarding the continuation of energy subsidy restructuring over the short to medium term. The fiscal deficit in Tunisia will rise considerably in 2011, as it will incorporate both decreased revenues and additional spending, including the exceptional measures taken

Figure 6. EMBI Global Spread over US Treasuries



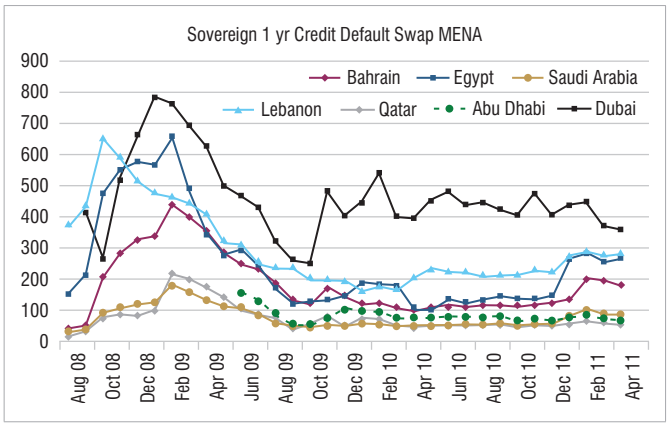
Source: Datastream.

Figure 7. EMBI Global Spread over US Treasuries within MENA



Source: Datastream.

Figure 8. Credit Default Swaps Increased since January



Source: Bloomberg.

3 The Saudi Arabia' CDS refers to CDS on debt of Sabic - the state owned petrochemical giant. Sabic has some some operations in Egypt so the move up in the Saudi CDS is a spillover from the Egypt market expectations.

to support businesses in difficulty, the new programs to help young unemployed, and the suspension of any revision of the subsidies system. The extent of political unrest will have a dramatic impact on tourism arrivals, as well as the amount of time tourists spend in Egypt, and Tunisia.

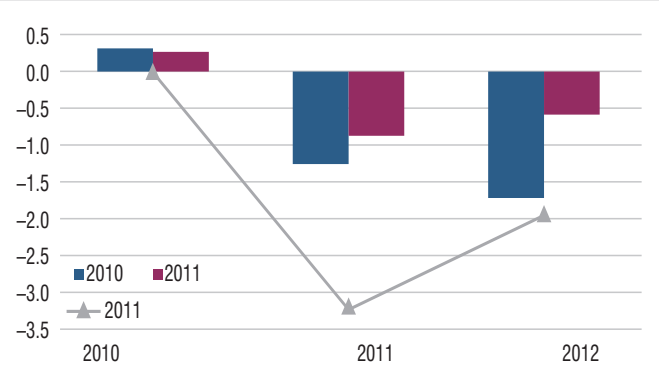
In Morocco, the fiscal stance and external position are expected to deteriorate in 2011 due to government plans to increase the salaries of all public civil and military employees starting in May. The recent terrorist attack in Marrakesh is expected to have a negative impact on tourism and related activities.

Capital outflows are expected to rise in the short term as uncertainty continues in Egypt. FDI flows are likely to decline temporarily as investors wait for uncertainty to be resolved, and short-term capital outflows to rise as investors liquidate their positions in LE-denominated investments, mostly T-bills, putting downward pressures on the LE/US$ exchange rate. In Morocco, short-term prospects for FDI inflows are positive, partly helped by the "investment grade" confirmed in February and March by leading rating agencies.

The tourism sector has lost momentum due to tensions in both Egypt and Tunisia, with negative consequences for the current account deficits. In 2010, tourism accounted for 13 percent and 16 percent of GDP, and 11 percent and 15 percent of total employment in Egypt and Tunisia, respectively.[4] The sector is also a main source of hard currency revenue for Egypt, estimated at over $11.6 billion in 2010, or almost two thirds of all services exports and close to 30 percent of all exports. In February, cancelled bookings led to a fall in tourist arrivals in Egypt by 80 percent; in tourism revenues, by 53 percent; and revenue losses of about $825 million. In Tunisia, the tourism sector is expected to contract by 40 percent in 2011. Morocco is likely to suffer a contraction in tourism due to recent terrorist attack. Remittances are expected to decline by US$1 billion due to reluctance of migrants to send money home, given the uncertainty and the closing of foreign exchange houses in February.[5]

Figure 9. Short-term Prospects of Oil Importers in North Africa

(percentage point change relative to January forecasts)



Source: World Bank data for Egypt, Tunisia and Morocco.

The unrest has taken a toll on financial markets in oil importers in North Africa since early January. The Egyptian stock exchange, North Africa's second-biggest after Morocco's by market capitalization, fell 16 percent in the week the market closed as political unrest led to the ouster of the country's president. The selloff prompted a 55 day closure. The bourse delayed the reopening several times, but resumed trading on March 23, two days before a deadline that could have prompted its removal from the MSCI Emerging Market Index. Egypt shares fell to the lowest level in nearly two years shortly after reopening. The Tunisia bourse also declined following the unrest (Figure 10).

In the medium term, the growth outlook of Egypt and Tunisia is expected to gradually improve, as domestic demand picks up, buoyed by government consumption. In contrast, investment expenditure is expected to remain weak for a longer period, as both government and private financing is expected to become more costly. Signs of political stability and improved governance could have big effects, as investors are waiting for uncertainty to be resolved. In the case of Morocco, improved fundamentals will enable the economy to take advantage of the global recovery.[6]

Unemployment and inflation (Figures 11 and 5) will continue to be overriding concerns. Inflationary pressures are likely to persist in the near term because of sustained external food and oil price increases, and could be further exacerbated by exchange rate depreciation in some countries. Inflation in Egypt has remained at double-digit levels and food price inflation—a major driver of CPI inflation—is around 20 percent. Recent increases in global food prices are likely to put further pressure on prices in Egypt and exacerbate inflationary pressures

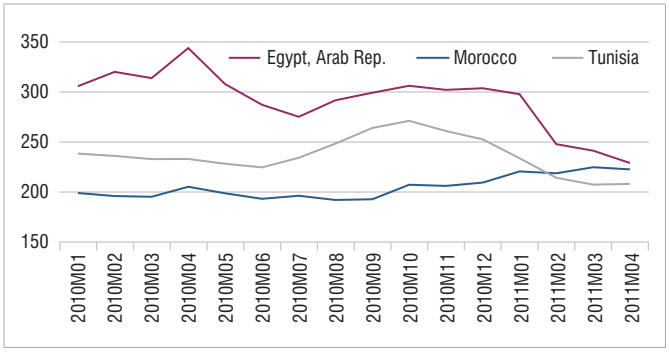
4 Source: World Travel and Tourism Council (WTTC) 'Tourism economic data and forecasts— Summary'. 2010. London. United Kingdom.

5 A large portion of remittances to Egypt comes from the GCC countries.

6 Sound macroeconomic and fiscal policies, as well as efforts to improve sector productivity and competitiveness, are expected to enable Morocco to benefit from the global recovery.

Figure 10. Stock Market Performance during Turmoil

(stock market indexes)



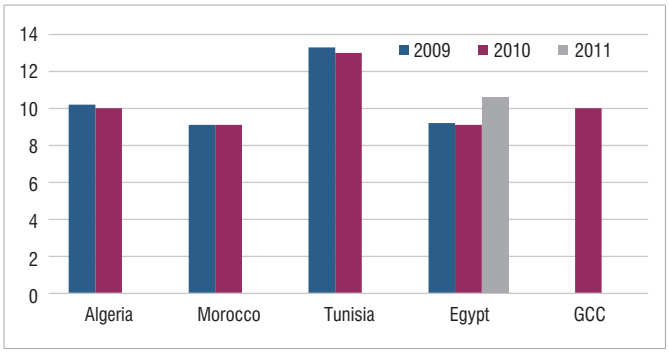
Source: Datastream.

in the near term, especially if exchange rate depreciation expectations set in. In Tunisia, the inflation rate increased to 4.5 percent in 2010 as a result of the recent surge in food prices and previously planned annual increases in public-sector pay and the minimum wage, which led to an increase in non-agricultural private-sector wages by more than 4 percent. Some inflationary pressures may be present in 2011 due to increased wage pressures and a rise in international commodity prices, but inflation is expected to decline to around 4 percent as the system of energy and food subsidies limits to some extent external inflationary pressures. Inflation in Morocco remained subdued because of tight monetary policy and the government's continued policies of subsidizing prices of fuels and some basic foods and controlling prices of regulated commodities.[7]

Growth in oil importers with GCC links is also expected to be affected by the regional turmoil, with rising oil prices, disruptions in intra-regional trade, and signs of increasing political tensions

Figure 11. Unemployment Rates in the Region

(percent)



Source: World Bank data.

in Jordan and Lebanon (Figure 12). The recovery in Jordan in 2010 was fueled by increased regional economic activity, leading to increased demand for Jordanian goods and services (domestic exports increased by 18 percent) and some recovery in capital inflows and remittances. Nevertheless, the promising signs of recovery seen in some sectors are now questionable going forward into 2011. Recent events have led to a contraction in regional economic activity, which in turn is expected to hold back both the demand for Jordanian goods and services and the recovery of capital inflows. Additionally, in February 2011, Moody's and S&P's both downgraded Jordan's outlook rating, casting further doubt on the country's short-term recovery and negatively impacting investor activity. Jordan's growth could also be affected by developments in Egypt as it depends on Egyptian gas for 60 percent of its electricity production.

On the fiscal side, the cost of salary increase and subsidies package introduced in Jordan in January 2011 have been absorbed mainly through cuts in capital expenditure (US$311 million) and a higher estimate for grants to be received (US$198 million). Higher expenditures may be difficult to contain. Weak political support in a context of a prolonged domestic slowdown, higher international oil and food prices, and broad discontent with government policies has raised the urgency for action. In response, the government may be pushed to implement more social measures, especially in public sector employment (the filling of 20,000 vacant jobs was announced this year) and consumption and utilities subsidies.

Lebanon's macroeconomic performance is likely to be influenced by developments linked to the business cycle, recent Lebanese political tensions, and events in Egypt and other MENA countries. The regional unrest has affected Lebanon's exports, financial and tourism services, especially exports of agricultural products as Egypt is one of Lebanon's main export markets for fruit, vegetables and processed foods.[8]

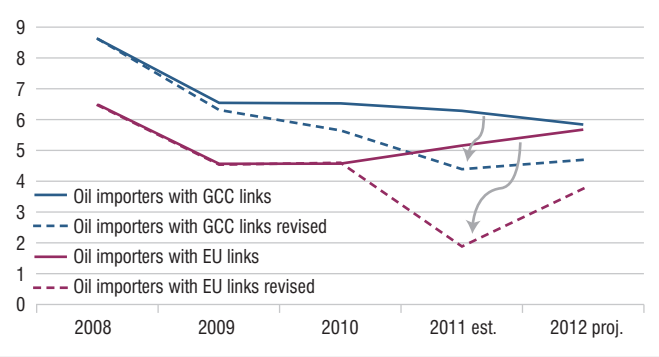
Jordan and Lebanon remain vulnerable to international price increases and imported inflation (Figure 5). In Jordan, inflation accelerated in 2010 following the trend of international

7 Subsidized products include national wheat flour, sugar, and liquid and gaseous fuels. Products whose prices are regulated include manufactured tobacco; electricity; drinking water; liquid waste disposal; road transportation of passengers; urban transport of persons; pharmaceutical and veterinary products; medical services in the private medical sector; services performed by midwives and nurses in the private sector; and primary and secondary national school books.

8 Egypt imports more than 70 percent of Lebanon's annual apple production.

Figure 12. Growth in Oil importers with GCC Links Declines

(percent)



Source: World Bank data.

commodity prices; however, inflation remained contained due to food subsidies, accumulated grain reserves, and government measures to decrease domestic prices of gasoline and related material, and certain food commodities. These measures include suspension of the special sales tax on kerosene and diesel; reducing the tax on gasoline from 18 to 12 percent; and allocating transfers to the state-run consumer corporations to subsidize the price of sugar, rice and frozen poultry and to implement income generating projects in poor areas.

In Lebanon inflation accelerated in 2010, following the increase in international prices of food items and oil products. Imported inflation in Lebanon has a strong impact on the CPI because imports amount to 37 percent of domestic absorption and 50 percent of domestic consumption. The combined rise in food items and oil products contributed 2.7 percentage points to the CPI increase.

The events in the region are unlikely to impact growth prospects in Djibouti. GDP growth is expected to remain close to pre-unrest forecasts, supported by on-going investments in tourism, alternative energy and the Free Zone, and projected increase in earnings from port services. Growth prospects however depend largely on continued FDI flows which are at risk in the medium term. FDI levels are likely to decline due to economic impacts of Dubai World crisis and its consequences on investments in Djibouti.[9] Exports should continue rising over the projection period, following the expansion of port activities, cattle processing facilities and salt extraction. This should help reduce the trade deficit.

Djibouti has very limited fiscal space, with the foreign debt reaching 55 percent of GDP. Inflation is projected to stabilize at 3.5 percent in 2011 (Figure 5). Although the prices of commodities and food products (mainly imported) remain high, several factors have helped the country to control inflation. Monetary stability, lower taxes on food and an awareness campaign aimed at inducing wholesalers and retailers to limit their margins have played an essential role in insulating local prices from the effects of rising world prices. Moreover, the spike in world wheat prices has not so far affected domestic inflation, as bread prices are stabilized including through the agricultural production from government-owned farms in Ethiopia and Sudan.

DEVELOPING OIL EXPORTERS' OUTLOOK FOR 2011 DIMMED BY UNREST DESPITE HIGH OIL PRICES

Growth in developing oil exporters in 2011 and 2012 is expected to be lower than pre-unrest estimates due to the events in Yemen and Syria, and the weak performance of Iran's economy (Figure 13, Table 1 and Annex Table 1).[10] For this group of countries, the outlook depends highly on developments affecting global oil markets and the expectation is that the positive impact of high oil prices will partially offset the negative impacts of regional tensions. In 2011 fiscal balances are expected to improve relative to 2010 in Iran and Iraq, with higher oil prices, and deteriorate in Syria and Yemen, as the benefits of the revenue windfall from high oil prices on the fiscal and external balances in these two countries will be more than offset by increased government spending (Figure 14).

In Yemen, initial rough projections of the economic impact of the ongoing political unrest suggest a large first round effect on fiscal imbalances, a rapid depreciation of the Yemeni Riyal, higher inflation, especially for food, and poorer service delivery by the government. It is conceivable that reaching a political consensus would enable reforms which could improve growth and welfare in a second round. New capital inflows to Yemen are likely to be put on hold, given the increasing political uncertainty in the country. Yemen is also adversely affected because of anticipated lower remittances. Nonetheless, it is possible that Saudi Arabia, as in the past, might provide substantial financial support.

9 Difficulties in Dubai may mean lower-than-expected FDI in coming years, unless Djibouti can raise the interest of other foreign investors.

10 Analysis excludes Libya due to lack of estimates.

Yemen's external account improved in 2010, but is likely to deteriorate in 2011. While oil revenues are projected to end up 10 percent higher than previously expected, it is likely that remittances will, at best, stagnate, and the import bill is expected to rise as a result of higher food prices. The services deficit is also expected to increase due to the underperformance of the tourism sector.

Preliminary estimates for Syria show a decline of about 4 percentage points in growth compared to the January forecast due to the ongoing unrest. If the turmoil persists over the second half of the year, growth is expected to decline even further. Tourism receipts and FDI will also remain down in the short term as a result of elevated political tensions.

Economic performance in Iran has weakened over the last two years and is expected to remain weak in the short run despite the gradual recovery in the international oil prices over the last eighteen months. The economy was buffeted by external shocks and a major internal policy reform. Sanctions are expected to increase the cost of doing business, and in response the government is encouraging economic self-reliance. Inflation, which had been brought under control through Central Bank intervention and a slowing world economy, is expected to increase as a consequence of the subsidy removals and the high food and energy import prices. Food and general CPI rose from around 10 percent in the third quarter of 2010 to 18.7 percent and 12.4 percent, respectively, in the fourth quarter of 2010 partially due to the impact of the international food price increases.[11] The large fiscal stimulus proposed in the budget of the New Year 1390 (2011/12) could also feed inflation. The overall fiscal deficit is projected to decrease in 2010/2011, owing mainly to improved petroleum revenues. After a period of decline, Iran's current account surplus is expected to soar in the short term due to the surge in oil prices. Also, while field production will slowly decline due to lack of investment, the removal of the fuel subsidies is bound to increase oil exports as domestic residents decrease consumption of petroleum products.

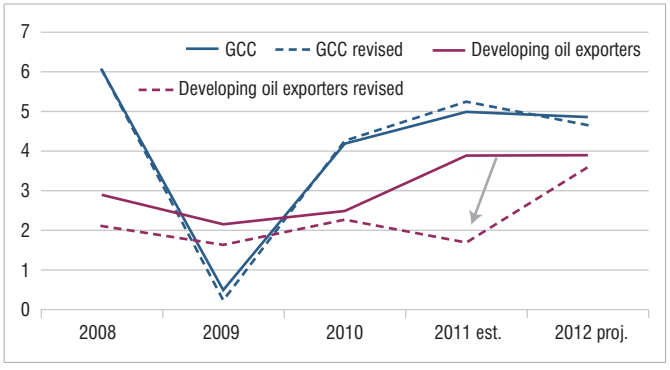
The Algerian government largely benefits from high oil prices and the impact of recent demonstrations in the country is expected to be offset by oil windfall. Growth in 2011 is estimated to be slightly lower than the January forecasts for 2011.[12] Algeria is expected to post a fiscal deficit over the projection period mostly due to high public spending. The country's external situation remains comfortable, largely as a result of high oil prices.

Iraq's GDP growth and fiscal balance are expected to improve in 2011, mostly because international oil companies' in Iraq are increasing oil production and oil prices have been on a rise. Inflation has increased between July 2010 and January 2011 by 6.1 percent and food prices increased by 8.7 percent. Furthermore, prices of other consumer products increased during the same period: electricity and water supply (42.7 percent); rent (7 percent); health (6.6 percent); and restaurants (4.5 percent). The highest increase was in electricity and water prices, the result of a government decision to increase the electricity tariff in October 2010. As prices remain administered in Iraq, the impact of rising food prices might be seen through the fiscal impact as the cost of Public Distribution System (PDS) is expected to increase if international food prices continue rising.

We do not have data on Libya, as violent conflict continues and the political and economic situation remains unpredictable, but severe negative economic consequences are unavoidable. Libya's oil exports almost halted in March 2011 due to ongoing fight between rebels and pro-government forces, strikes, port closures and the evacuation of foreign personnel and it could be months before Libya's crude surface in the market.[13] Revenues will plummet as business and oil output decline, while expenditures to finance government forces, meet existing and new spending packages, and finance eventual reconstruction will soar, weakening the fiscal outlook.

Figure 13. Growth in Developing Oil Exporters Marked Down

(percent)



Source: World Bank data.

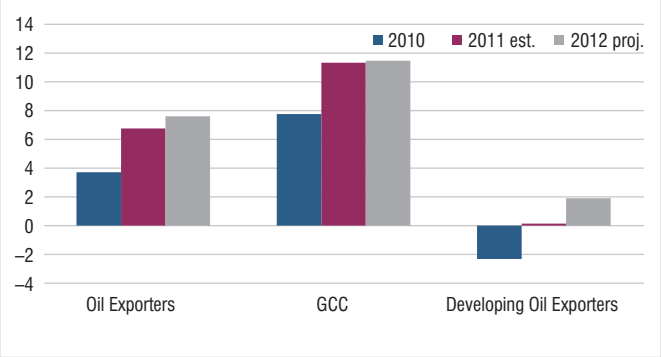
11 Source: Central Bank of Iran website.

12 In 2010, hydrocarbons accounted for 36 percent of GDP, 98 percent of total exports and a large percentage of public revenues.

13 More than 67 percent of Libya's GDP in 2009 came from oil production.

Figure 14. Fiscal Balances in Oil Exporters Improve

(percent of GDP)



Source: World Bank data.

GCC OIL EXPORTERS' PROSPECTS STRENGTHENED BY HIGH OIL PRICES

GCC countries have been in a better position to absorb the shockwaves from recent regional events than oil importers and developing oil exporters, due to their smaller populations, comfortable fiscal and current account stance, foreign assets, and rising oil revenues[14] (Figure 13). GCC oil exporters' growth in 2011 is expected to remain robust and perhaps slightly higher than the levels projected in the January edition of EDP (World Bank 2011a).[15] Higher oil prices might facilitate public spending in these countries and might boost GCC's transfers to the region to maintain economic stability.

In Saudi Arabia, economic growth is expected to improve in 2011 and forecasts are up slightly with respect to the forecasts in the January edition of the EDP. Although global risk aversion has increased, there will be a direct boost to the economy from higher oil prices and higher government spending. But it will induce fiscal pressures, leaving aside the fact that the government seemed to have a de facto cap on public expenditure of around 40 percent of GDP and was receptive to measures that would trend it slowly downwards over the medium term. Yet recently, the government announced additional spending of around 25 percent of GDP, albeit spread over several years and in some cases absorbing existing "temporary" commitments (e.g. cost of living allowances). Currently, there is no appetite to consider the compatibility of the new spending posture with longer-run objectives.

Kuwait's oil-dominated economy returned to modest growth in 2010, following the steepest recession in the GCC, as Kuwait observed its share of OPEC production cuts and non-oil growth declined with falling oil revenues and financial sector disruption.[16] In the near-term, prospects have improved due to higher oil prices and expansionary policies that predate the Arab political crisis but are now reinforced by it.

Qatar will be unique among GCC countries in maintaining double-digit growth during 2010 and 2011, reflecting the coming on-stream of new liquefied natural gas (LNG) facilities, which will sharply boost LNG volume. In the short-term, the Japan nuclear crisis provides a positive demand shock for LNG, as it will be the primary replacement fuel for the lost nuclear capacity.

The UAE has seen little impact of the tensions, either in terms of domestic protests or economic effects. The primary effects have come through higher oil prices and the increased attractiveness of Dubai as the region's commercial hub. While the volatility in oil prices and their associated effect is common to the GCC, the UAE also features emerging-market vulnerabilities and underdeveloped intergovernmental fiscal relations.

Bahrain is the country in the sub-region most affected by recent events; political polarization has sharply increased and evidence indicates significant economic impacts requiring downward revisions to growth projections for 2011. Most importantly, financial sector activity was disrupted by protests. Many small and medium businesses are apparently facing a liquidity crisis. Major conferences have been either canceled or relocated to Europe. Also, an increasing number of expatriates are transferring to Dubai, at least as a temporary measure until the situation stabilizes. Major components of GDP will be sustained by the oil, petrochemical, and aluminum sectors, but it is clear that the service sector will decline. With disturbances continuing, growth will remain weak in 2011, but is expected to improve in 2012.

A number of factors explain the slowdown in Oman's growth performance. The scope for further increases in oil production arising from enhanced recovery techniques is slightly more limited than previously believed, and thus the crude oil sector

14 One of the important channels of transmissions of the political tensions in other neighboring countries to GCC economies has been through equity markets, as waves of selling surged following the starting of the unrests in the region.

15 Bahrain and Oman are the exception.

16 Crude oil production is currently around 2.3 million barrels per day (mbd), down from 2.6 mbd in July 2008, but slightly above the OPEC quota.

will provide less impetus to growth than in 2010. The tourism sector has seen some impact from the political crisis, both through a general regional risk aversion and disruption specific to Oman, notably through strikes. In addition, the government's policy response to protests has resulted in higher costs for the private sector, as a result of wage and benefit concessions to Omani nationals. Nnationals working in the private sector have felt disadvantaged compared both to nationals in the public sector and high-wage expatriates in the private sector. The private sector is likely to want clarity on the policy framework before undertaking further expansion.

The overall impact of the developments in the region on the fiscal position in the GCC countries will be mixed. Higher oil prices will boost fiscal balances, but higher international food prices (Figure 15) are expected to increase fiscal costs in a number of countries where basic food prices are administered and heavily subsidized. The fact that governments are scaling up subsidies as part of their supportive policy measures exacerbates these fiscal expenses (Table 3).

Given these interventions, the impact on inflation is expected to be mixed in the GCC countries. There is no indication of sharp increases in the general price level or in food prices in Bahrain. Both general CPI and its food component have increased to around 2 percent over the last year, with significant seasonal fluctuations associated with Ramadan. In response to the food price increases in recent years, UAE will institute bread and rice subsidies in April that will be administered on selected brands of rice and breads with the goal to bring down the prices of these products to 2004 levels. Overall inflation in Qatar is low, but the food price component has been elevated by about 5 percent over the last year. The CPI has increased by less than 1 percent, as residential rents are down 5 percent, pulling down the overall CPI. By contrast, inflation in Kuwait is well above policymaker comfort levels, with food prices a particular concern. The recent (pre-crisis) concessions, which include a US$3600 grant to all Kuwaiti citizens and free food for 13 months, are a response to this.

Some indirect effects of the unrest in MENA on the GCC economies are worth highlighting. A number of Gulf countries may be willing to provide fiscal support and economic assistance to the affected countries in the region, which would impact their overall fiscal stance. Within the GCC, Kuwait, UAE, and Saudi Arabia have some direct investments in Egypt, while Qatar's, Bahrain's and Oman's direct exposure is very small. Dubai companies, which have substantial infrastructure projects in Egypt, and Kuwait, with large investments in the Egyptian market, have faced more volatility than others. Also possible is an increase in inflow of funds from Egypt to more stable markets in the GCC.

RISKS TO THE REGIONAL OUTLOOK

In MENA, prolonged instability, resulting from unmet political and social targets or spillover effects and lack of clarity about the future political transition, is the most serious risk to the short-term regional economic outlook. Prolonged tensions would amplify the negative impact on capital inflows and domestic financial exchanges, tourism receipts and remittances, and in turn on investment, output, and employment. Construction, manufacturing, tourism and financial institutions are most likely to suffer losses with further deterioration of the situation. A renewed loss of investors' confidence would translate into increased cost of capital further dampening growth prospects.

Prolonged unrest would also threaten MENA's social policy design and fiscal health, as revenues would remain weak and expenditure would be elevated, especially if commodity prices remain strong. Already, as governments want to reduce unemployment and ease the burden of high commodity prices, social protection has expanded rapidly in the region (Table 3). While some measures are desirable, especially those targeted at protecting the most vulnerable, there is a risk that many of these policies are broad and will be very costly. In particular, expansion of public sector employment is costly and difficult to reverse. More effective employment policies are likely to involve short-term employment in public works. In addition, raising minimum wages, public sector wages, and/or unemployment benefits, as has been done in a few countries, will likely reduce equilibrium employment in the absence of other changes. To the extent that fuel is subsidized this creates a distortion and steers resources towards fuel-intensive industries, which tend to be capital intensive. These policies may have the undesirable consequence of reducing employment prospects for those outside the public sector. Moreover, it is important they are used to complement and support government reforms, and not as a substitute.

New governments are likely to rely on some form of additional short-term financial support, as opposed to revenue expansion,

Table 3. New Social Measures in the Region

	Wages	Subsidies	Tax cuts	Transfers	Infrastructure	Jobs	Total cost
GCC							
Bahrain		Increase in food subsidies, including flour and meat by 44 million dinars.	25% cut in housing installment payments.	US$2600 per family.	Construction of public housing by at least 6000 units per year.	20,000 new jobs at Ministry of Interior.	
Kuwait		Free food for 13 months through discount price program.		US$3600 grant to all Kuwaiti citizens.	US$4 billion for construction of new housing.		
Oman	Unemployment benefit program of US$390 per month; US$520 minimum wage.	Pay subsidies and fix the prices of essential commodities.				A new public sector employment program covering 50,000 citizens.	
Saudi Arabia	Unemployment allowance was set at SR2000 (US$530) per month, and a SR3000 (US$800) per month. minimum wage was instituted for nationals working in the public sector.			US$300 million in grants for charities and needy students, a bonus payment of 2 months' salary/stipend to all public employees and scholarship students.	0.5 million new houses to be built with budget allocation of SR250 billion (US$67 billion).	Add 60,000 new security jobs in the Ministry of Interior; add 500 new jobs at Ministry of Commerce and Industry.	25% of GDP
Developing oil exporters							
Algeria	Pay increases for public sector workers.	Higher state subsidies on flour, milk, cooking oil and sugar. Waived value added tax (VAT) and customs tariffs on imports of cooking oil and raw and white sugar.			Building new houses.	Up to 2.5 million public sector jobs and sustainable job creation in agriculture by creating 100000 new farms.	Increased public spending by 25% of GDP.
Iraq				ID15000 per person within PDS			
Syria		Reversed subsidy cuts on energy, lifting heating-oil allowances for public workers by 72%.		Public sector employees' allowances (especially fuel) will be increased, and poor households will benefit from higher Cash transfers in 2011.			2–3% of GDP

(Continues to next page)

Table 3. New Social Measures in the Region (*Continued*)

	Wages	Subsidies	Tax cuts	Transfers	Infrastructure	Jobs	Total cost
Yemen	A 25% pay increase for government and military workers.	Increased food subsidies.	A 50% tax cut on salaries for government and military workers.	Up 4000 Riyals a month.		Creating jobs for 25% of new graduates.	Over 4% of GDP
Oil importers							
Jordan	Raised the salary of civil servants, the military, and retirees by JD 20 (US$28) a month for a cost of US$233 million.	New subsidies of US$550 million; allocating transfers to the state-run consumer corporations to subsidize the price of sugar, rice and frozen poultry, and to implement income-generating projects in poor areas.	Total of US$169 million. Suspending the special sales tax on kerosene and diesel; reducing the tax on gasoline from 18 to 12 percent.	Total of US$57 million, Allocating transfers to the state-run consumer corporations to subsidize the price of sugar, rice and frozen poultry, and implementing income-generating projects in poor areas.			2.1% of GDP
Egypt	15 percent increase in wages and pensions (LE2 billion or 0.17 percent of GDP)	Increase in subsidy of about 0.2 percent of GDP due to the rise in global food prices (LE2.8 billion)		Addition of 150,000 families to the social solidarity program (LE100 million)		To permanently hire the temporary contract employees (about 450,000)	0.8% of GDP.
Tunisia	Payment of 50 percent employer contribution to the mandatory regime of social security for the wages paid. Reduction in hours of work.		Postponement of the tax declaration and payment for 2010 to Sep. 2011.	Adding 15000 more young people to receive a monthly allowance of 80 dinars in 2011; expansion of direct cash transfers program to poor families, from 135,000 to 185,000 households; expansion of free medical insurance cards to an extra 25,000 individuals; provide microcredit or gifts to support home improvements for 20,000 households; one-off lump sum transfer of TDN 400 per person and TDN 600 per family to the Tunisians coming back from Libya.	Accelerating public infra-structure invest-ment project and support pilot projects in Telecommunica-tions sector.	Recruitment of 20,000 new civil servants and a plan to have private sector. Create an additional 20,000 jobs.	
Morocco		Injected approximately US$ 2 billion in subsidies to curb price hikes for staples.				Set up an employment program for educated unemployed. Half of 4303 graduates will be hired by the government, while the other half will be integrated into autonomous public establishments. The new budget law has provided 18,802 new job positions.	

Source: World Bank country teams, Reuters, and Bloomberg.

which will weaken the fiscal stance. For example, Egypt introduced supportive policies, such as subsidies on wheat, sugar and key staples, a hike in wage and pension increase for civil servants, and has effectively shelved plans to introduce new taxes, including a new property tax. These measures are expected to widen the budget deficit in 2011. In Tunisia, weaker tax revenues due to the economic slowdown combined with pressures to increase government spending to create new jobs and to maintain food and petroleum subsidies,[17] will most likely widen the fiscal deficit.

Oil exporters are not immune to the risk of worsening fiscal health as a result of increased spending. Indeed, increased spending in these countries has required an ever higher oil price to support the budget. The breakeven oil prices (those that allow a country to achieve a fiscal balance) have been rising over the past two years, mainly as a result of various stimulus measures undertaken by governments to mitigate the impacts of the 2008 financial and economic crises (Table 4). The breakeven oil price for GCC countries was at US$57 per barrel in 2009 and that has increased to average US$72 in 2011. With oil prices at current levels, Saudi Arabia can comfortably meet its fiscal spending, but its reliance on high oil prices presents a rising risk to its fiscal health. This also applies to other GCC countries that have been announcing extra spending. Moreover, higher spending requires more of the oil windfall to be spent domestically and less devoted to the sovereign wealth fund, reducing the fund accumulation and increasing risk of Dutch disease.

Table 4. Oil Price Breakeven Estimates

	Oil prices US$ p/b
Saudi Arabia	80
Oman	80
UAE	70
Qatar	55
Kuwait	45
Bahrain	100
Iran	80
Algeria	90
Syria	100
Iraq	90
Libya	55

Source: National authorities, IMF, RGE estimates, including off-balance-sheet revenues and spending.

The risk of negative ratings for several sovereigns in the near future is high, as uncertainty continues in the sub-region. Although the rating downgrades are a predictable response to the deteriorating fiscal positions, the higher financing costs that may result will add to the fiscal burden, and raise borrowing costs of governments attempting to tap international bond markets. Tunisia had its ratings downgraded, given the potential for fiscal and external accounts to deteriorate and economic growth to suffer as its political transition occurs. In Morocco, the government's efforts to reduce debt were rewarded with an upward ratings revision in 2010. However, regional conflict and higher commodity prices might have negative repercussions for the country's public finances. Credit risk would also increase further if more countries fall into turmoil**.**

In addition to political uncertainty, high commodity prices are of concern. Political tensions in the Arab world and the subsequent disruption of oil exports in Libya has forced oil prices to rise by more than 30 percent over the past four months. If oil prices rise further, this could widen current account imbalances and threaten the global recovery, as inflationary pressure on central banks to adjust interest rates upwards mounts.

High oil prices have triggered higher food prices (Figure 15). If the oil supply shock continues, food prices could increase even further since oil serves as an input to the production of agricultural commodities; agribusiness is largely driven by energy in irrigation, fertilizer production, and refrigeration, and the production of biofuels has raised the price of agricultural land. Food inflation therefore remains a risk to poverty and recovery in the region.

Given the risk of higher commodity prices affecting the most vulnerable part of the population, generating inflationary pressures, and possibly increasing fiscal burdens during these critical times, Part II of the report spends time analyzing MENA countries' vulnerability to food price increases and the accompanying macroeconomic effects.

17 Oil prices are above the budget assumption of US$83 per barrel. The government's assumption is that every dollar of increase in the cost of oil will cost the budget about TND23 million, assuming an exchange rate of 1.5 TND per U.S. dollar. While an adjustment mechanism has reduced fiscal vulnerability to fuel prices and basic commodities at 2010 levels (TND1.5 billion or 2.2 percent of GDP) until 2014, this commitment may be revised following the change in government.

MACRO-ECONOMIC PROSPECTS IN 2012

Looking forward, the forecast for growth in the MENA region in 2012 is only about half a percentage point lower than the January 2011 forecast. The increase in growth from 3.6 percent in 2011 to 4.2 percent in 2012 is based on the assumption that confidence will be gained over this period. If governments are able to make a few positive steps soon and gain trust, the momentum for change can propel growth. Of great importance going forward are citizen security, political stability, a move toward more transparent and accountable governance, and the provision of targeted social assistance. Security, stability and improved governance are vital to encourage investment, while social assistance will ease the burden faced by the poor and also help maintain support for governments.

There are significant challenges now and of course uncertainty around this forecast, but it must be underscored that tremendous opportunities are also present, and these must not be squandered.

III. MENA COUNTRIES' VULNERABILITIES TO COMMODITY PRICE INCREASES

Commodity prices have been on an upward trend since early 2009, following the sharp drop in late 2008 as the financial crisis unfolded. In the second half of 2010, commodity prices began rising rapidly, particularly for food and oil (Figure 15).

The most important factor underpinning the food price surges are weather-related supply shocks in key producing countries since June 2010. Production shortfalls in wheat, barley and other grains occurred in net cereals exporters such as Russia and Ukraine. Additionally, Russia imposed a wheat export ban in August, and yields were disappointing in Europe and North America which are major net cereal exporting regions. These factors, which outweighed favorable production outcomes elsewhere (e.g. Argentina and Australia), induced large draw downs in food stocks thereby tightening the global demand and supply balance. Another leading factor has been the weakening of the US dollar since mid-September, which continues to sustain the prices of nearly all agricultural and non-agricultural commodities. Strong economic growth, particularly in emerging economies during 2010, has also contributed to the rise in commodity prices.

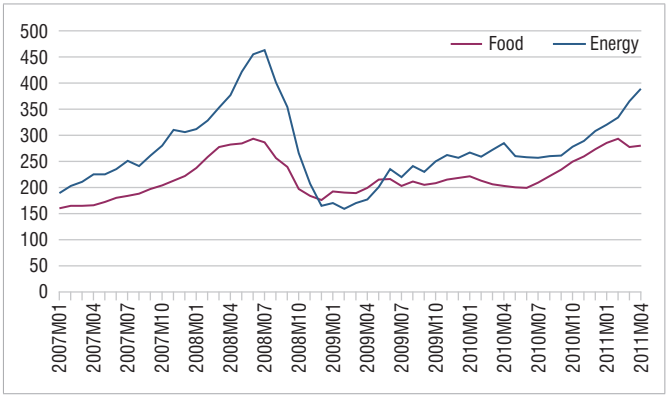
As with food prices, energy prices have also risen in the second half of 2010, notably since September (Figure 15). Oil supply disruptions in Libya have pushed oil prices up further in early 2011. The latter is contributing to sustaining food price increases given their high energy intensity and the fact that some foods (notably corn, edible oils and sugar) are used to produce biofuels, a key alternative to oil.

Agricultural prices reached 17 percent above their June 2008 peak in February 2011, but prices appear to have softened somewhat albeit with some markets experiencing volatility month-to-month. The food index as a whole has increased 40 percent since June 2010 through April 2011 despite a recent retreat after reaching its 2008 peak in February 2011 (Figure 15).[18] Food prices fell in March but rose again in April mainly due to a strengthening in grain markets.[19] In early May, prices fell for most agricultural products but, as stocks of major grains remain low, prices could rise again if the 2011/12 crop outlook deteriorates. Despite the magnitudes, however, the current price increases remain smaller than the 2007/08 increases (Figure 16).

Meanwhile, oil prices continued climbing up with the average oil price index rising almost 50 percent between June 2010 and April 2011. Ongoing political strife in the Middle East and North Africa suggests continued upward pressure on oil prices, although an expected temporary fall-off in demand from Japan (in the aftermath of the natural disaster) will likely help diminish pressures temporarily. However, demand for liquefied natural gas (LNG) will increase as it is one of the substitute energy sources for nuclear power generation in Japan. Some of

Figure 15. International Food and Energy Pricesl

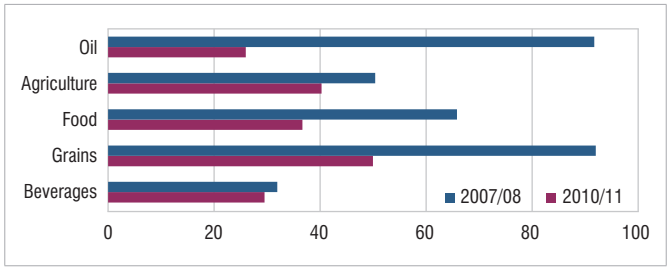
(Index, current, US$ 2000 = 100)



Source: World Bank, DEC prospects group.

Figure 16. Price Spikes of 2007/08 and 2010/11

(Percentage change, Apr-Jun 2008 from a year earlier, and Feb-Apr 2011 from a year earlier)



Source: World Bank, DEC prospects group.

18 Prices for wheat, maize, and soybeans fell by 25 percent, 14 percent, and 12 percent from recent peaks to mid March.

19 Wheat prices rose 6 percent due to drought affecting the winter crop in US, Europe and China; while maize and sorghum prices increased 9–10 percent due to wet-weather induced late plantings.

the MENA countries are large producers and exporters of LNG and are likely to benefit from the positive terms of trade shock. Others are likely to pay more for energy imports.

MACROECONOMIC IMPLICATIONS OF RISING GLOBAL FOOD PRICES

The recent price increases in international food prices have macroeconomic implications for the countries in MENA. They have increased import bills, and put pressure on inflation and government spending, in those cases when governments subsidize food. Recent food price increases have also affected poor households' ability to meet food requirements, increasing the chance of malnutrition in the region.

Wheat accounts for the largest share in the value of MENA's total grain consumption (see Annex Table 2). Wheat alone represents more than half of both domestic grain consumption and imports in market year 2010,[20] and nearly half of MENA's domestic wheat consumption was imported. Rice—the second most consumed grain—represents 16.7 percent of total grain consumption, followed by corn accounting for 15 percent of total grain consumption, and barley accounting for 10.2 percent. In terms of imports, corn takes the second place with 19.6 percent of total grain imports, followed by rice which represents 15.3 percent of the total (see Annex Table 2). At the regional level, the highest dependency on imports is for corn, with more than two thirds of domestic corn consumption being imported.

The assessment of ex ante vulnerability considers increases in international grains, oils, meat, and sugar prices in market year 2010 relative to the previous market year.[21] Over this period wheat prices surged nearly 30 percent, corn prices surged 53 percent, sorghum rose 32 percent, and barley prices rose 27 percent (Table 5). The increase in rice prices was more muted, at 7 percent. The increase in edible oil prices was also significant, with sunflower seed oil prices up 54 percent, rapeseed prices up 50 percent, soybean oil prices up 40 percent, and palm oil prices up 46 percent so far in the market year 2010. Sugar prices were up 39 percent, while beef prices rose 22 percent. The only prices that have declined in market year 2010 are olive oil and poultry prices.

Based on the increases in food prices for the market year 2010 above, the impact on the import bill as a share of GDP in the MENA region is estimated at 0.6 percent of GDP, and 1.4 percent of international reserves,[22] with grains making the largest contribution, followed by edible oils, sugar and meat (Table 6). Oil importers are expected to be hardest hit by the increase in food prices. The increase in the import bill is estimated to be 1.2 percent of GDP, with half of the increase attributed to the impact of higher grain prices. The expected increase in the import bill of the developing oil exporters as a result of higher food product prices is estimated at 0.8 percent of GDP and 2.3 percent of international reserves. Increases in prices of edible oils and sugar account for more than half of the increase in the import bill. The GCC countries are expected to be least impacted by the higher food prices at the macro level as they have small populations and high per capita incomes. The overall impact on the GCC is estimated to be 0.3 percent of GDP and 0.5 percent of reserves, with the largest shock coming from the increase in sugar prices.

Table 5. International Food Price Increases in 2010

	percent
Grains	
Barley	27.3
Corn	53.1
Rice, Milled	7.0
Wheat	29.9
Sorghum	31.6
Edible oils	
Olive	–5.3
Palm	46.1
Rapeseed	49.9
Soybean	39.9
Sunflower seed	54.2
Sugar	39.0
Meat	
Beef	21.5
Poultry	–0.9

Source: WB DECPG

A critical consideration in identifying the MENA countries most vulnerable to commodity price shocks at the macroeconomic

20 Market year refers to the 2010/11 market year which runs from July to June.

21 The assessment assumes that the 2010 market year average is equal to the average prices observed so far in the market year to February 2011.

22 International reserves exclude gold.

Table 6. Impact of International Food Prices on the Import Bill

(percent of GDP and international reserves)

	2010 GDP	International reserves		2010 GDP	International reserves
MENA			**GCC**		
Total	**0.62**	**1.44**	**Total**	**0.25**	**0.45**
Grains	0.27	0.63	Grains	0.07	0.12
Oils	0.17	0.40	Oils	0.06	0.12
Meat	0.04	0.09	Meat	0.02	0.04
Sugar	0.14	0.32	Sugar	0.09	0.17
Developing oil exporters			**Oil importers**		
Total	**0.78**	**2.28**	**Total**	**1.15**	**4.39**
Grains	0.33	0.98	Grains	0.59	2.32
Oils	0.22	0.61	Oils	0.35	1.23
Meat	0.05	0.14	Meat	0.05	0.24
Sugar	0.19	0.55	Sugr	0.15	0.59

Source: WB DECPG.

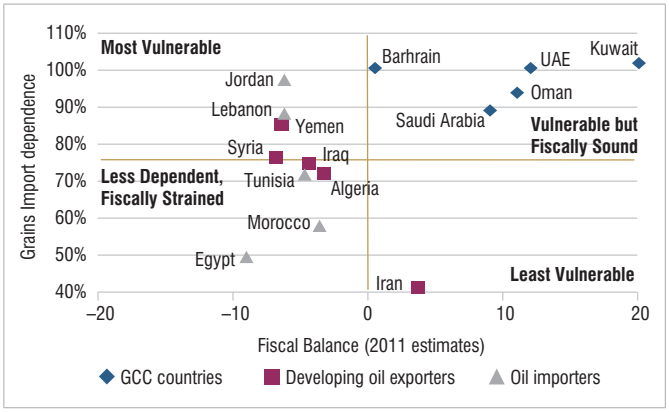
level is the country's relative exposure to food price and quantity risk as a function of fiscal balances and dependence on food imports.[23] A country's fiscal position determines its ability to cushion price shock impacts on the economy as well as on households. Grain imports are used as a proxy for food imports because MENA is the largest net grain importer in the world (13 million metric tons more than Asia in 2010) and because 50 percent of MENA's per capita daily caloric intake comes from cereals alone. Countries with high cereal import dependency and large fiscal deficits are found to be most vulnerable at the macroeconomic level a priori, assuming that the full import cost associated with the price increase is absorbed by the national budgets and there are no other fiscal shocks. The analysis suggests that the MENA countries most vulnerable to a sustained food price surge are largely among the MENA oil importers, notably Jordan, and Lebanon, and developing oil exporters, such as Yemen, Iraq and Syria (Figure 17). Less vulnerable are typically the GCC countries, with high quantity risk but currently low price risk as rising oil prices have eased pressure on fiscal balances.

Egypt and Morocco face high price risk, but their quantity risk is lower due to higher domestic production levels. Nonetheless, over the medium to long-run, water scarcity and climate change will stress domestic production, and thereby raise quantity risk. Iran appears least vulnerable among MENA countries because it has lower cereal import dependence and its fiscal position has improved as rising oil prices have increased its oil revenues, but the government's recent removal of widespread price subsidies on oil products, electricity, water, gas, bread and other basic products is expected to transmit commodity price increases to domestic consumer prices to a higher degree than in the past.

CONSUMER VULNERABILITY TO GLOBAL COMMODITY PRICE INCREASES

Food security has been featured prominently in public policy discussions in the MENA region, as food production in the region is far lower than domestic demand, making the region heavily reliant on imports, and malnutrition rates are high. According to data published by FAO in 2008, most MENA countries import at least 50 percent of consumed food calories. Of particular concern is the 40 percent rise in the cereal price index and the 77 percent rise in the sugar price index in the second half of 2010.[24] Together, these two commodities comprise roughly 61 percent of per capita caloric consumption in the region, which is seven percentage points higher than the worldwide average. At the same time, roughly 58 percent of consumed cereal and 75 percent of consumed sugar come from

Figure 17. Macro Level Vulnerability of MENA Countries



Sources: WB data and staff calculations from USDA data, based on World Bank (2011c).
Notes: Grains import dependence is measured as net grain imports as a share of total grains consumption, using USDA data for 2010.

23 The assessment is based on World Bank (2011c). Price risk is the risk that grain prices will be prohibitively high, making purchase difficult even though quantity is available on world markets. Quantity risk is the risk of food not being available, even if there are sufficient funds for purchase.

24 FAO Food Price Indices: Measured by percent change from June 2010–March/April 2011.

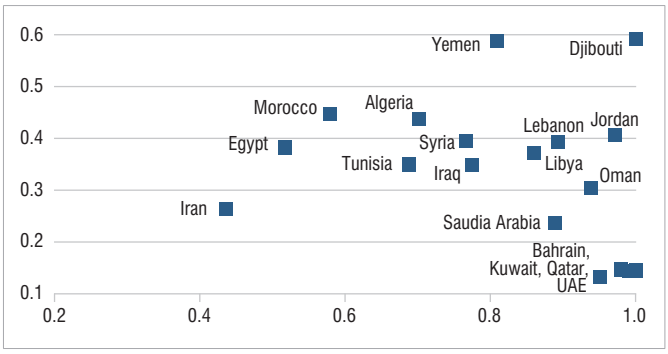
imports (Figure 18). In 2007, the MENA region was the largest net importer of cereals in the world.

Heavy dependence on imported food implies that surging international prices can place significant upward pressure on national and household budgets, depending on the level of domestic consumption subsidies and the pass-through from international to retail price.[25] Net food buyers, mostly the urban population and the rural poor, will likely be hardest hit because they typically spend anywhere from a third to two thirds of their income on food. Also, a sustained surge in prices is likely to lead to an increase in poverty because a large number of people live close to the poverty line. But the magnitude of the impact depends on the degree to which governments subsidize and regulate domestic prices of these food commodities,[26] and many other country-specific factors including domestic supply chain functioning, infrastructure and exchange rate movements.

With substantial increases in international prices of a broad range of foods,[27] and fast-growing domestic food demand,[28] some countries in MENA have been facing fiscal as well as domestic inflationary pressures (Crowley 2010). The fiscal pressures vary by country as some governments have been more successful than others in cutting consumption subsidies, and targeting the poor. Most MENA countries have introduced reforms since the 1980s. Some measures such as self-targeting, increasing prices by stealth, subsidy rationing and replacing subsidies with cash transfers, succeeded in reducing the subsidy burden, but many others failed and in some cases measures were withdrawn after public pressure. Even when changes were achieved, reforms remained partial, as all MENA countries still offer at least some consumer price subsidies,[29] and social assistance schemes remain poor at channeling resources to the needy. This year many governments responded to the political turmoil with further increases in food subsidies, further straining fiscal budgets (see Table 3).[30]

Price controls however have not been able to prevent the increase in domestic food prices. In a number of MENA countries, food and general inflation have been high over the past five years, and in most cases annual food price inflation surpasses CPI inflation (Figure 19). To help households deal with the burden of domestic food price increases MENA governments have relied on cash transfers and other forms of social protection measures (Lampietti *et al.* 2011). More recently, most governments

Figure 18. Household and Country Food Vulnerability



Source: National statistical offices, USDA, and other.
Notes: Share of household food expenditures in total household consumption (vertical axis) are from the latest available data often for urban centers. Shares of net cereal imports in domestic consumption (horizontal axis) are the averages from 2009–2010.

increased transfers and some of them increased wages of public servants and unemployment benefits (Table 3).

HOW EXPOSED ARE CONSUMERS TO INTERNATIONAL PRICE FLUCTUATIONS?

International food price shocks are a risk for consumers in MENA as these shocks have been transmitted to various degrees to domestic food prices in nearly all MENA countries (Figure 20, see Annex for details). The strongest pass-through effects[31] of an increase in world food prices have been observed

25 In MENA countries, the cost of importing grain sometimes does not fall upon the consumer because governments often regulate prices. Thus, part of the food-price risk is absorbed at the country-level as fiscal risk.

26 MENA governments use a variety of measures to control domestic prices of food (see Lampietti *et al*. (2011)). Consumer subsidies and price controls are widely used but so are tax cuts on food grains, food grain stock changes, and export restrictions or bans.

27 See most recent Global Economic Prospects (World Bank 2011b).

28 Due to high population growth, food consumption in MENA is growing at a faster pace than food demand of all other region except Africa. However, unlike Africa which can rely on domestic production of food, MENA is highly dependent on food imports. Furthermore, in the case of cereals, foreign supply is concentrated in five exporters—Argentina, Australia, Canada, EU and US.

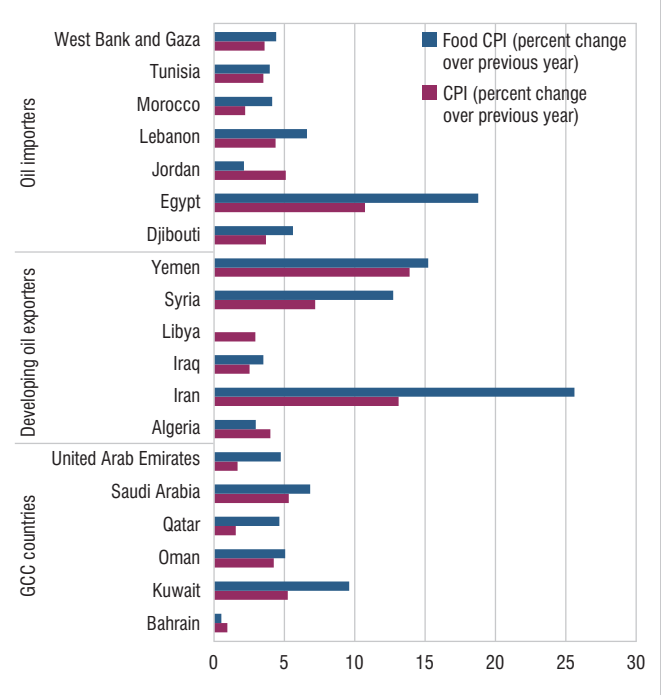
29 Jordan offers bread subsidies. In Egypt, wheat subsidies come in the form of bread sold by bakeries in predominantly urban areas and flour, sold from warehouses to rural households. Morocco subsidizes sugar, wheat and bread only. In Tunisia, the government subsidizes semolina, traditional bread, reconstituted packaged milk, and generic grain oil (see Kelly 2009).

30 Bahrain, Egypt and Algeria increased food subsidies. Kuwait offered free food for 13 months through a discount price program. Jordan offered new food subsidies worth $550 million.

31 It is worthwhile to highlight that there is not always a perfect one-to-one match between pass-through and actual observed inflation. This is because the methodology for estimating the pass-through uses historical time series data. The coefficients report 'average' pass-through effects over the past decade. But if a country is recently subsidizing or intervening in the food market, there will be a gap between the expected pass-through (coefficients) and the actual pass-through (observed food inflation).

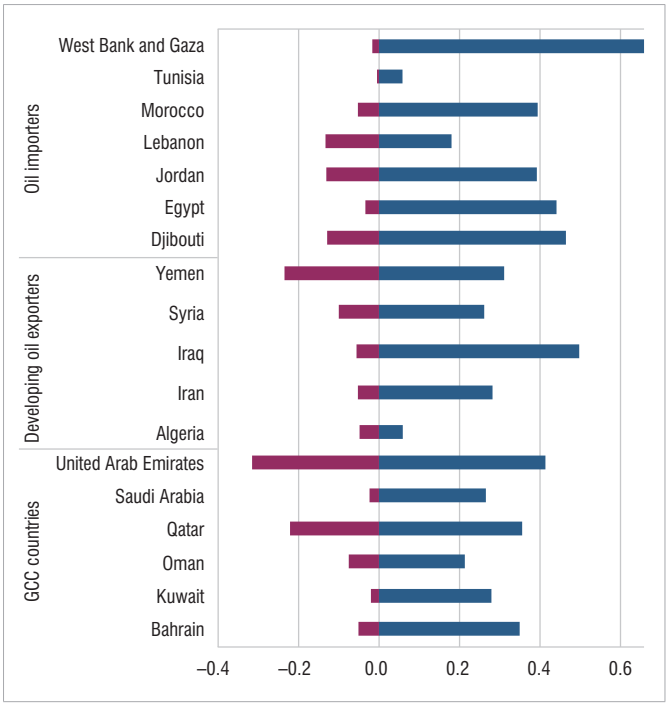
Figure 19. Annual Price Changes in MENA

(in percent)



Note: The annual inflation rates for most countries are until January or February 2011. Data for Oman, Iraq, and Iran are until December 2010; for Lebanon, Libya and West Bank and Gaza until November 2010; and for Yemen until October 2010. No food price data for Libya is available; however, anecdotal evidence suggests very high food inflation rates.

Figure 20. Pass-through of Food Prices into Domestic Food Prices in MENA



Note: The figure shows the percentage increase (decrease) in domestic food price growth for a one percent increase (decrease) in world food prices after 12-months. In most countries, the effect of a world food price shock fades out after one year. The time period for the estimates is from 2000–2011. The time period is shorter for Lebanon, Djibouti, Yemen, Syria, Iraq, Oman, Qatar, and UAE.

in West Bank and Gaza (WBG),[32] Iraq, Djibouti, Egypt, and the United Arab Emirates (UAE). In these countries the pass-through coefficients are above 0.4 percent, indicating high vulnerability of households to world food price shocks. The pass-through is smaller but still sizable, varying between 0.2 and 0.4 percent, for a large group of MENA countries, including Morocco, Jordan, Syria, Iran, Yemen, and all GCC countries other than UAE. This indicates a high degree of vulnerability of households to international food price increases in virtually all MENA countries. Only a few countries have low pass-through coefficients. In particular, in Algeria and Tunisia, international food prices have had little effect on domestic prices. Government policies including subsidies effectively safeguard against price transmission in Algeria, while domestic food inflation is contained by subsidies and appropriate monetary policy in Tunisia.

Analysis of price movements over the past 6 years finds that a decline in international food prices transmit slowly into domestic food markets in MENA. A common finding is that in virtually all countries prices are highly downwardly rigid, the only exceptions being UAE and Yemen. This downward rigidity is often a common feature of price transmissions for agricultural and other commodities, including energy (Peltzman, 2000). The reasons underlying the apparent asymmetric transmission of prices are often complex and require further study (Meyer and Cramon-Taubadel, 2004), but a number of factors highlighted in the literature could explain this phenomenon in MENA:

- An adjustment problem somewhere at the wholesale and retail level, causing domestic prices to be downwardly rigid;[33]
- Uncertainty over whether food price shocks are permanent or transitory, along with political uncertainty in some MENA countries, exacerbate market reluctance to respond to downward food price signals;

32 West Bank and Gaza's high pass-through in the context of currently low domestic food inflation (less than 5 percent) is likely due to the recent easing of restrictions on the entry of consumer goods.

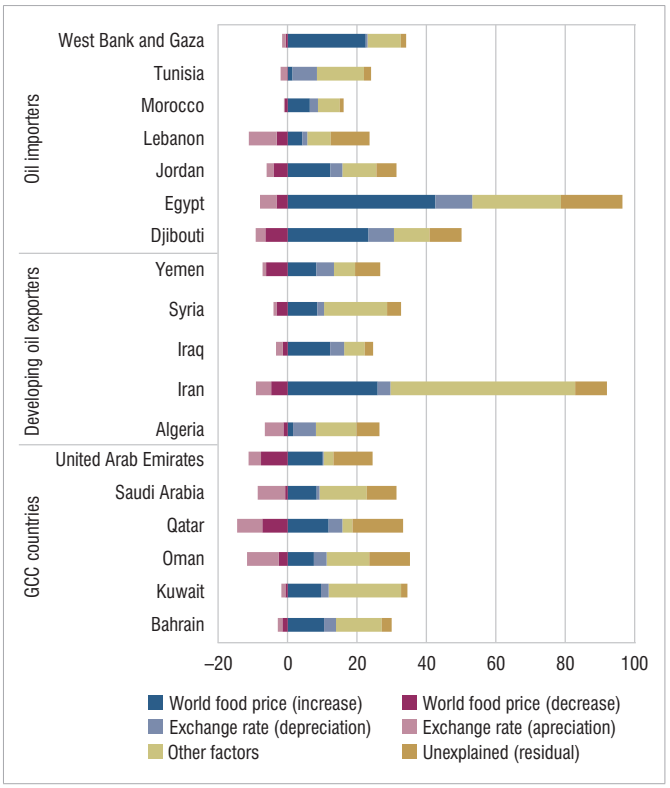
33 For example, in Iraq FAO (2009) finds that changes in the wholesale price are not met with proportional changes in retail price.

- Government interventions to support lower consumer prices and/or non-competitive practices in the domestic market;
- Price declines may be relatively rare, as prices may trend upward, making estimation of the impact of declines in international prices on domestic prices difficult.

Consumers in most MENA countries have been significantly affected by food price increases since the 2006 global food crisis. With the exception of Morocco, all countries have experienced an increase in their domestic food prices by more than 20 percent since December 2006 (Figure 21), and Djibouti, Egypt and Iran have experienced extreme (over 40 percent) food price increases.[34] Rising world food prices have been a major factor behind increases in domestic food prices, typically explaining some 20 to 30 percent of the variation in domestic prices. International prices have been a particularly strong driver of food inflation in Iraq and West Bank and Gaza, accounting for over 50 percent of the food inflation, followed by Egypt, Djibouti and the United Arab Emirates (over 40 percent of the food inflation). And except for Tunisia and Algeria, exchange rate depreciation has been a minor factor in domestic food inflation. However, other domestic factors also play a major role in explaining food inflation in nearly all MENA countries. These include procurement legislation and methods that are inflexible, outdated and costly in some countries; poor logistics that result in cost increases; lack of monitoring of supply-side developments; poor forecasting of prices shocks; inadequate stockpiling practices; and insufficient use of financial instruments to establish virtual stockpiles (Lampietti *et al.* 2011).

Investments in domestic market infrastructure may help to reduce domestic food prices in the medium-run. These investments would be very country-specific and depend on the local cost-build up of imported food commodities. It is likely that inefficiencies in the transport and handling infrastructure might contribute to the cost of imported food commodities. The country-specific identification of major infrastructural bottlenecks (such as ports, roads, or administrative barriers, including procurement) may therefore be advantageous. Other areas of focus include regional trade to smoothen supply and cereal stock shortages, improve overall supply chain efficiency, and eventually create instruments and build capacity to engage in modern price risk management (World Bank, 2009b). A review of successful examples and an assessment of the effective demand for these focus areas would be a useful first step.

Figure 21. Decomposition of Domestic Food Price Increase in MENA since December 2006 (pre 2007–08 food crisis)



Note: The figure shows accumulated percentage increase in domestic food prices since December 2006 until October 2009–February 2011 (depending on country data availability). The increase in domestic food prices is then decomposed into the effects of world food prices, the domestic exchange rate, and other factors using variance decomposition. The time period for most countries is 2000–2011. The time period for Lebanon, Djibouti, Yemen, Syria, Iraq, Oman, Qatar, and UAE is shorter.

34 As the price transmission mechanism typically takes about one year, some of the recent increases in international food prices may have not yet have been fully transmitted into domestic markets.

IV. KEY MESSAGES

By the end of 2010, countries in the Middle East and North Africa (MENA) had largely recovered from the global financial crisis, and growth rates were expected to reach pre-crisis levels in 2011. However, in early 2011, a series of Arab uprising began that resulted in swift regime change in Tunisia and Egypt, and spread to Bahrain, Libya, Syria and Yemen. These events have affected the *short-term* macroeconomic outlook and the status and speed of economic reforms in the region. The Arab uprisings also have important economic implications for global growth. Unrest in Libya, Yemen and Syria and the potential of further unrest in the oil-rich region has pushed up international oil prices over the past three months, threatening the global recovery.

While political change is associated with short-run challenges; in the medium run, the transition has the potential to significantly boost economic growth and raise living standards. If political changes lead to greater accountability and transparency in governance, countries could relax a key constraint to growth and steer resources more effectively to productive uses while reducing significantly unproductive rent-seeking behavior. Better rule of law and political stability will attract investment, facilitating more rapid growth in a sustainable way. More voice for civil society will prevent the unequal application of regulations, and can lead to more inclusive growth. While the challenges are many, the opportunities are more.

Evidence from other countries that have experienced political transitions implies that growth typically dips for one year, and then returns to or even exceeds pre-crisis levels. MENA countries experiencing regime changes may follow this path if new governments are able to gain public confidence and demonstrate commitment to more transparency, voice and accountability.

The short-term economic outlook is subject to uncertainty stemming from the unstable political situation in the region. Given these challenges, growth is expected to decline by about one percentage point in 2011. The decline is largely due to the sharp drop in Egypt's and Tunisia's economic activity, but also because of weaker expected growth in developing oil exporters. Growth effects differ by country depending on whether the country is an oil exporter or an oil importer, and the degree to which unrest and political changes disrupt countries' economic activities. Some countries will remain roughly on track of earlier forecasts; in particular, the GCC countries are expected to have robust growth this year, slightly above the previous forecast.

Financial market movements reflect a modest tightening of financing conditions for sovereigns as well as the corporate sector, which is expected to dampen regional growth. FDI inflows are likely to decline and short-term capital outflows to rise as investors liquidate their positions in local-denominated investments putting downward pressure on exchanges rates. Because of lack of clarity about the future political developments in the region, the extent to which investment will decline is difficult to quantify.

On the demand side, government spending is expected to rise in 2011 as MENA governments have moved quickly towards expanding supportive policy measures and social transfers to ease the burden of unemployment and reduce the impact of high commodity prices. Supportive measures are desirable, but many of these measures have been in the form of increased subsidies, wages, and expanded public employment, where transfers targeting the poor would have a smaller fiscal cost and could take more of the burden off those most affected by unemployment and higher prices.

The Arab uprisings are expected to worsen the fiscal stance of oil importers in North Africa in 2011, as revenues decline in response to reduced business activity and expenditures increase reflecting the supportive social policy measures provided by governments. Oil exporters will also see increased expenditures, but these will be offset by higher oil revenues, leaving the fiscal balance little changed from the pre-unrest forecast.

Partly because of the expanded government spending, but also because of rising fuel and food prices, inflation rates are expected to increase in many MENA countries in 2011. Unemployment is also expected to increase in developing MENA in 2011.

The most serious risk to the forecast is prolonged instability resulting from unmet political and social targets or spillover

effects, and lack of clarity about the future political transition. Stability is needed in order to bring investors, tourists, and consumers back.

The report also discussed commodity prices, which have increased sharply since mid-2010. Country-specific impacts are heterogeneous and determined by the country's dependence on food and oil imports, and the extent of the pass-through from international to domestic prices. While MENA includes some major oil exporters that are benefiting from the oil price increases, it is also home of a number of countries that rely on imported oil. Jordan and Lebanon stand out as most vulnerable to both food and oil price increases, but most MENA countries are highly dependent on imported food. Estimates of pass-through coefficients for the MENA countries indicate that a rise of global food prices is transmitted to domestic food prices to a significant degree, so further increases will feed into inflation.

In the next year or so, assuming governments are able to gain credibility and move forward with reform, improved growth prospects are anticipated. Of utmost importance in the short run are citizen security and political stability. Indications of reform on government accountability and transparency will encourage investors and boost growth. Short-run targeted social policies to ensure that the most vulnerable are protected are also desirable.

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ANNEXES

Annex Table 1. Macro Outlook Published in January 2011 Excluding Libya

	Real GDP growth					Fiscal balance					Current account balance				
	2008	2009	2010 est.	2011 proj.	2012 proj.	2008	2009	2010 est.	2011 proj.	2012 proj.	2008	2009	2010 est.	2011 proj.	2012 proj.
	(Annual percentage change)					(in percentage of GDP)					(in percentage of GDP)				
MENA region	**5.4**	**2.0**	**3.9**	**4.8**	**4.8**	**12.3**	**–2.6**	**0.0**	**2.2**	**3.6**	**15.0**	**1.4**	**5.1**	**6.4**	**7.4**
Oil Exporters	**4.9**	**1.1**	**3.6**	**4.6**	**4.5**	**15.7**	**–1.8**	**1.8**	**4.3**	**5.9**	**18.7**	**2.9**	**7.7**	**9.0**	**10.2**
GCC Oil Exporters	**6.0**	**0.5**	**4.2**	**5.0**	**4.8**	**24.2**	**0.8**	**5.4**	**8.3**	**9.7**	**23.9**	**6.7**	**10.8**	**12.7**	**14.0**
Bahrain	6.1	2.6	3.5	3.9	4.9	4.9	–8.7	–5.2	–2.4	–0.3	10.6	1.6	3.6	6.1	7.4
Kuwait	5.6	–4.4	1.9	4.5	5.0	19.9	19.3	16.5	17.2	20.9	40.7	29.2	29.3	30.2	31.7
Oman	12.3	3.6	4.8	4.7	3.9	13.9	2.2	6.9	7.6	6.5	9.1	–2.2	2.6	3.3	3.6
Qatar	15.8	9.0	18.5	14.3	9.2	10.9	13.0	9.4	12.2	14.3	33.0	15.7	22.7	38.0	34.9
Saudi Arabia	4.2	0.6	3.7	4.2	4.4	32.5	–6.1	–0.8	2.7	3.3	27.8	6.1	6.7	5.6	7.2
United Arab Emirates	5.1	–1.0	1.0	3.1	4.0	20.4	0.4	9.9	13.4	15.0	8.5	–2.7	7.3	7.7	10.7
Developing Oil Exporters	**2.9**	**2.1**	**2.5**	**3.9**	**3.9**	**1.2**	**–5.5**	**–3.7**	**–1.5**	**0.3**	**9.8**	**–2.4**	**2.9**	**3.8**	**4.6**
Algeria	2.4	2.4	2.4	4.1	4.1	7.7	–6.6	–8.0	–7.0	–3.4	20.2	0.3	5.6	5.4	5.9
Iran, Islamic Republic of	2.3	1.4	1.5	3.0	3.0	0.0	–2.7	0.4	2.3	2.0	7.2	2.6	6.7	7.2	7.3
Iraq	9.5	4.2	2.6	11.5	11.0	–3.3	–14.2	–12.2	–8.2	3.3	12.8	–25.7	–13.5	–9.2	–3.0
Syrian Arab Republic	5.2	4.0	5.0	5.5	5.6	–2.8	–5.5	–4.4	–3.4	–3.5	–1.9	–2.4	–2.3	–3.5	–3.6
Yemen	3.6	3.9	8.0	4.1	4.2	–4.5	–10.2	–5.6	–5.0	–4.7	–4.6	–10.7	–5.2	–4.8	–4.6
Oil Importers	**6.8**	**4.9**	**4.9**	**5.3**	**5.7**	**–4.6**	**–5.7**	**–6.8**	**–6.2**	**–5.5**	**–3.9**	**–4.4**	**–4.8**	**–4.1**	**–3.8**
Oil importers with GCC links	**8.6**	**6.5**	**6.5**	**6.3**	**5.8**	**–8.6**	**–8.9**	**–7.9**	**–7.1**	**–6.0**	**–15.8**	**–11.5**	**–13.1**	**–11.9**	**–12.0**
Djibouti	5.8	5.0	4.5	5.4	6.0	1.3	–4.9	–0.5	0.0	0.0	–27.6	–17.3	–14.5	–19.4	–25.4
Jordan	7.6	2.3	4.0	5.0	5.5	–8.8	–10.3	–7.4	–5.0	–4.0	–9.6	–5.1	–9.5	–6.5	–6.6
Lebanon	9.3	9.0	8.0	7.0	6.0	–8.8	–8.1	–8.5	–8.7	–7.5	–19.8	–15.5	–15.4	–15.2	–15.1
Oil importers with EU links	**6.5**	**4.6**	**4.6**	**5.1**	**5.7**	**–3.9**	**–5.1**	**–6.6**	**–6.0**	**–5.4**	**–1.8**	**–3.2**	**–3.2**	**–2.7**	**–2.3**
Egypt	7.2	4.7	5.1	5.5	6.0	–6.8	–6.9	–8.2	–7.9	–7.3	0.5	–2.3	–2.0	–1.7	–1.3
Morocco	5.6	4.9	3.5	4.4	5.1	0.4	–2.2	–5.0	–3.3	–2.4	–5.2	–5.0	–5.3	–4.4	–3.9
Tunisia	4.5	3.1	3.8	4.8	5.0	–1.0	–3.0	–3.0	–2.8	–2.6	–3.8	–2.9	–4.5	–4.1	–3.7

Source: World Bank data.

ANNEX I: CALCULATING MENA FOOD PRICE VULNERABILITY

To assess the food security of the MENA countries we assess the dependency of MENA countries on imports to satisfy domestic demand. For this purpose we use the ratio of net imports of food to domestic consumption. To gauge the impact of the recent sharp increases in key food prices we also compute the increase in the import bill as a share of 2010 GDP and as a share of international reserves, excluding gold.

We use USDA data for supply and demand of food; World Bank DECPG international commodity prices; IMF data on international reserves; and World Bank DECPG data for 2010 GDP. We assume that import prices are the prices prevailing in major international markets for each commodity, expressed in USD. Only first round effects are being estimated as we assume demand (supply) does not respond to changes in prices.

Dependency ratios presented in Annex Table 2 are calculated as:

$$D_i = \frac{M_i}{C_i}$$

where M_i are the imports of food product i, C_i is domestic consumption of food product i.

Dependency ratios (D_i) are aggregated across food groupings (grains, edible oils) for a particular country using a weighted sum of individual dependency ratios. The weights are the share of imports of a particular commodity in the total imports of that particular group of commodities.

$$\mathrm{D}_j = \sum_i \frac{\mathrm{D}_i}{\mathrm{M}_{jT}}$$

where j = grains, edible oils, meat, sugar; and i = barley, corn, rice, sorghum, wheat in the case of grains; olive oil, palm oil, rapeseed oil, soybean oil, sunflower seed oil in the case of edible oils;beef and poultry in the case of meat.

Dependency ratios across country groupings are aggregated using simple averages. The analysis looks at the most important food products for MENA countries including grains, edible oils, sugar, beef, and poultry.

Annex Table 2. Shares of grain products in total grains consumption and imports, and import dependency ratios

	Domestic consumption	Imports	Dependency on imports
Algeria			
Barley	7.7	0.1	–0.9
Corn	19.4	29.8	98.4
Oats	0.0	0.0	0.0
Rice, Milled	1.9	3.0	99.2
Wheat	71.0	67.1	60.2
Bahrain			
Wheat	100.0	100.0	60.2
Egypt			
Barley	0.3	0.2	15.8
Corn	31.8	34.9	44.6
Rice, Milled	18.3	0.2	–10.0
Sorghum	1.8	0.0	0.8
Wheat	47.8	64.8	55.3
Iran			
Barley	7.4	4.7	19.1
Corn	17.9	38.7	65.5
Rice, Milled	21.6	25.1	35.1
Sorghum	0.0	0.0	0.0
Wheat	53.0	31.5	14.6
Iraq			
Barley	6.4	0.5	6.1
Corn	2.8	1.4	35.0
Millet	0.0	0.0	0.0
Rice, Milled	27.6	36.3	92.6
Sorghum	0.0	0.0	0.0
Wheat	63.2	61.7	68.8
Jordan			
Barley	16.5	16.4	95.6
Corn	18.0	18.5	100.0
Rice, Milled	15.2	16.2	103.4
Wheat	50.2	48.9	93.8
Kuwait			
Barley	15.1	15.1	100.0
Corn	12.1	12.1	100.0
Rice, Milled	37.6	37.6	100.0
Wheat	35.1	35.1	100.0
MENA			
Barley	10.2	10.0	50.5
Corn	15.0	19.6	67.1
Millet	0.0	0.0	0.0
Oats	0.0	0.0	2.9
Rice, Milled	16.7	15.3	43.4
Sorghum	1.3	0.1	5.9
Wheat	56.8	54.9	47.6
Oil Exporters			
Barley	17.5	4.4	13.8
Corn	39.8	55.3	79.3
Millet	0.0	0.0	0.0
Oats	0.0	0.0	0.0
Rice, Milled	39.54	0.3	58.2
Sorghum	1.3	0.0	0.0
Wheat	1.8	0.0	40.8
Lebanon			
Barley	5.7	4.4	67.2
Corn	29.6	33.9	100.0
Rice, Milled	8.8	10.1	100.0
Wheat	56.0	51.7	80.6
Morocco			
Barley	16.4	3.1	7.6
Corn	15.4	34.4	89.7
Oats	0.0	0.0	14.3
Rice, Milled	1.0	1.0	40.7
Sorghum	0.6	1.3	85.1
Wheat	66.76	0.2	34.9
Oman			
Rice, Milled	38.9	25.2	85.1
Wheat	61.1	74.8	100.0
Saudi Arabia			
Barley	42.3	46.0	99.0
Corn	15.0	15.8	95.9
Rice, Milled	17.9	20.0	99.8
Sorghum	1.3	0.0	2.5
Wheat	23.6	18.1	69.8
Syria			
Barley	10.5	4.1	21.2
Corn	23.9	42.9	97.6
Millet	0.0	0.0	0.0
Rice, Milled	7.2	15.3	114.8
Wheat	58.4	37.7	35.1
Tunisia			
Barley	13.7	6.6	29.5
Corn	16.9	27.6	100.0
Wheat	69.4	65.8	56.6
United Arab Emirates			
Barley	8.5	5.8	100.0
Rice, Milled	50.3	34.3	100.0
Wheat	41.2	59.8	100.0
Yemen			
Barley	0.5	0.0	0.0
Corn	12.0	12.9	88.4
Millet	0.0	0.0	0.0
Rice, Milled	15.0	18.2	100.0
Sorghum	7.8	0.0	0.0
Wheat	64.8	68.9	87.5
GCC			
Barley	35.5	35.8	99.1
Corn	12.7	12.5	96.2
Rice, Milled	23.5	23.9	98.9
Sorghum	1.0	0.0	2.5
Wheat	27.3	27.7	79.2
Oil Importers			
Barley	5.3	2.6	22.0
Corn	26.7	32.9	55.0
Oats	0.0	0.0	14.3
Rice, Milled	13.0	1.8	–3.5
Sorghum	1.3	0.3	9.3
Wheat	53.6	62.4	51.7

Source: USDA.

ANNEX II: FOOD PRICE PASS-THROUGH METHODOLOGY

Empirical Approach

Recent analysis on food-price pass-through (e.g. Ferrucci *et al*. 2010) finds that international commodity prices were the main determinant of producer and consumer food price inflation in the Euro area. Albers *et al*. (2011) find evidence of positive food price pass-through into consumer prices for a number of South Mediterranean countries. Crowley (2010) analyses structural determinants of inflation in the Middle East, Northern Africa and Central Asia. He finds that commodity prices exhibit a strong and mostly significant impact on domestic inflation. By contrast, international fuel prices do not explain the rising inflation trend.

Methodologically, analyzing food price pass-through is related to the broader literature of energy prices or exchange rate pass-through (see for example Chen, 2009; Campa and Goldberg, 2005; De Gregorio *et al*., 2007; McCarthy, 2007). The empirical strategies typically focus on the estimates and interpretation of *short-run* coefficients. Long-run co-integration evidence is rare, particularly evidence on the relationship between international and domestic food prices. One reason may be that food items are typically not perfectly arbitraged. Not only are the costs of arbitrage high, but also institutional factors and policy influences domestic prices, rendering long run relationships unstable (Ardeni, 1989).

Thus, for the present analysis, we explicitly focus on the short-run correlations between international and domestic food prices. As a baseline model for the calculations of the pass-through effects, we consider the following autoregressive model:

$$\Delta p_t = \alpha + \sum_{i=1}^{k} \beta_i \Delta p_{t-i} + \sum_{i=1}^{k} \gamma_i \Delta wfp_{t-i} + \varepsilon_t$$

where Δp is the annual percentage change of the food consumer price index, Δp_{t-i} represents lagged annual percentage changes of the food prices, to account for domestic factors and expectations, and Δwfp_{t-i} is the annual percentage change of the World Bank's international food price index, which is calculated from food prices measured in current US$. The pass-through from an international food price shock to inflation, denominated as θ, can be obtained by inverting the equation as follows:

$$\theta = \frac{\sum_{i=1}^{k} \gamma_i}{1 - \sum_{i=1}^{k} \beta_i}$$

The logic behind the equation is to discount for the effects of domestic inflation, including inertia or expectations. For example, in the case of strong domestic factors or expectations driving inflation ($\beta \approx 1$), the role of world food price transmission would be small. On the other hand, if there are insignificant domestic factors ($\beta \approx 0$) then the pass-through can be measured by simply summing up the coefficients.

In addition to world food prices, exchange rate shocks are important in determining inflation. If the domestic currency depreciates (appreciates), international food price increases will have a stronger (weaker) pass-through effect. This is a significant consideration, because some of the inflationary effects could be due to domestic currency devaluations, rather than a direct effect of an increase in world food prices.

A second consideration is to take advantage of findings on food price transmission (Vavra and Goodwin, 2005). One particularly important area is asymmetric food price transmission, wherein increases or decreases in commodity prices are considered as separate variables. Albers *et al.* (2011) provide evidence of non-linearity of international food price transmission into domestic prices for a number of South Mediterranean countries.

Based on these two considerations, the baseline model is transformed into a threshold regression, which controls for lagged annual percentage changes in the domestic exchange rate, Δe_{t-i}, and allows studying asymmetric food price transmission:

$$\Delta p_t = \alpha + \sum_{i=1}^{k} \beta_i \Delta p_{t-i} + \begin{cases} \sum_{i=1}^{k} \gamma_i^p \Delta wfp_{t-i} + \sum_{i=1}^{k} \delta_i^p \Delta e_{t-i} & \text{if } \Delta wfp_{t-1} > 0 \\ \sum_{i=1}^{k} \gamma_i^n \Delta wfp_{t-i} + \sum_{i=1}^{k} \delta_i^n \Delta e_{t-i} & \text{if } \Delta wfp_{t-1} < 0 \end{cases}$$

To facilitate a consistent interpretation across MENA countries, we derive estimates of the pass-through coefficients from cumulative impulse response functions and forecast error variance decompositions to assess their relative magnitude.

The coefficients show the model's predicted adjustment of domestic food prices to changes in world food prices and the exchange rate. In most countries, the food price pass-through effects fade out after about one year. Our pass-through coefficients are therefore identical, or very similar, to those that can be directly obtained from the equation.

When estimating the model, we use monthly data from December 1998 to early 2011 for most countries, allowing for lags. The cumulative lag structure is chosen to minimize the Akaike Information Criterion (AIC) and by means of lag exclusion tests. The optimal lag length is found to be $k = 12$. In a few cases, different lag structures are suggested, but for simplicity and comparability we use the same lag length.The overall results are robust to changes in the lag structure. For Lebanon, Djibouti, Yemen, Syria, Iraq, Oman, Qatar, and the UAE, the estimation period is shorter, which forces us to use less lags because of data restrictions. For these countries, the results are sensitive to outliers. We selectively employ impulse dummies to correct for outliers. We also use time trends when significant. Because we estimate the model in annual growth rates, we explicitly control for seasonal factors.

Food Price Data

Historical price data for MENA is scarce and for some countries not readily available. Monthly consumer price index (CPI) and food consumer price data were compiled from various sources for 18 MENA countries. The primary sources of data are the national statistical offices, and collected over time by the World Bank staff. The consumer price data was also complemented with information from the International Labor Organization (ILO), and updates provided by the statistical offices themselves.

Efforts were made to ensure data accuracy. Specifically, we compared trend and annual growth consistency for the different series. The data has also been corroborated with market information on food prices and field documentation from the United States Department of Agriculture (USDA). In general, preference was given to the original data provided by the national statistical offices. For Lebanon, data collected by World Bank staff was utilized. For Iran, food price data compiled from the Central Bank was used. There is no information available on food prices for Libya.[35]

In some cases, specifically Djibouti, Jordan, Lebanon and Tunisia, the data in different series shows small divergences from the original series due to rebasing. For example, the CPI data for Tunisia is rebased to the year 2005, to make it consistent with the data available from the national statistical office. Similarly, for Djibouti, the data has been re-based to March-April 1999, to ensure consistency with official data. In a few cases, missing observations were interpolated.

Transmission of Food Price Shocks in MENA is Relatively Fast

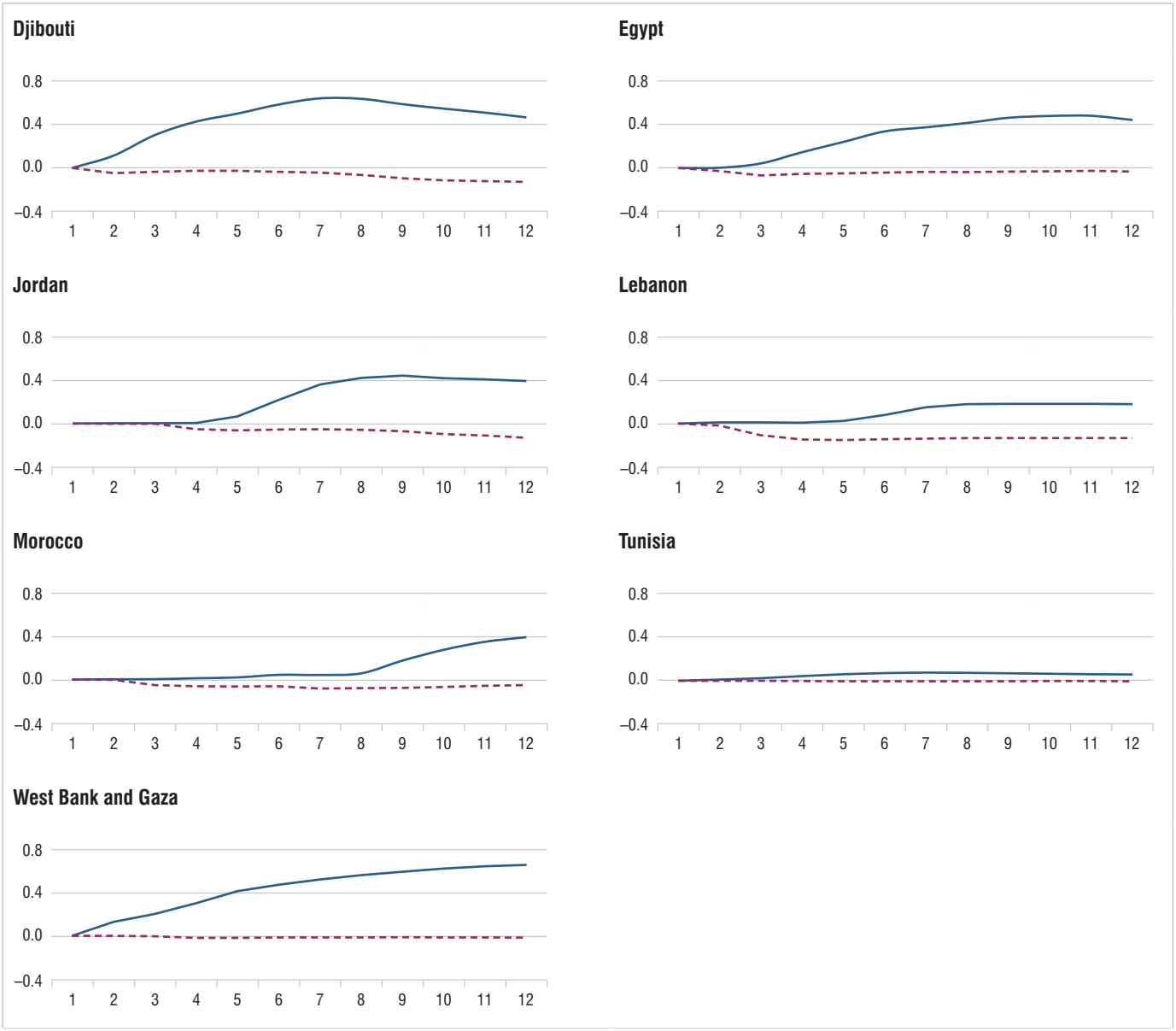
In MENA the dynamics and the magnitude of the food price pass-through largely vary by country, but the overall transmission of international food prices into domestic food prices is relatively fast. The transmission takes about one year to reach full impact, but in many cases is already apparent after about 3–6 months. Annex Figure 1a-c plot the percentage change in domestic food prices to a one percent increase in international food prices by MENA country group:

In oil importers, pass-through effects appear relatively pronounced, but the speed of transmission varies (Annex Figure 1a).

- Djibouti, one of the poorest countries in the region with a fragile food security situation, shows the strongest pass-through effects both in terms of magnitude and transmission speed. Nevertheless, overall food inflation has remained relatively low because of an awareness campaign aimed at inducing wholesalers and retailers to limit their margins thereby insulating domestic prices from international price movements. Furthermore, production from government-owned farms in Ethiopia and Sudan has helped stabilize wheat and bread prices.
- In Egypt, food price pass-through is significant and visible after a few months. After about one year an international price shock reaches its full strength. A one percent increase in international food prices increases the domestic price of food by more than 0.44 percent. In contrast, a decrease in international food prices has little effects on domestic prices. The relatively high levels of food inflation are also

35 The Consumer Price Index (CPI) is available until November 2010 in the International Financial Statistics (IFS) database.

Annex Figure 1a. Oil Importers' Food Price Pass-through Dynamics



Note: The figure shows the percentage increase (decrease) in domestic food prices for a one percent increase (decrease) in world food prices over a 12-month window. Data for most countries are for 2000–2011. In the cases of WBG, Djibouti and Lebanon however we rely on shorter time series.

due to domestic factors, such as pressure from growing demand and unfavorable weather events.

- In Jordan, food price transmission starts to pick-up after about 6 months. The overall effects after one year are strong. A one percent increase in world food prices increases the domestic prices by more than 0.39 percent. The currently low levels of food inflation, despite high-pass through effects, can be explained by a number of government interventions, such as consumer subsidies, release of grain reserves, and tax reductions of several agricultural inputs, including fuel.
- In Lebanon, a one percent increase in world food prices translates into a 0.18 increase in prices of domestic foodstuff; high government subsidies for food and fuel (Albers and Peeters, 2011) that absorb international shocks may help to explain these pass-through effects.
- In Morocco, food price transmission typically builds up after about 8 months, reaching magnitudes similar to those

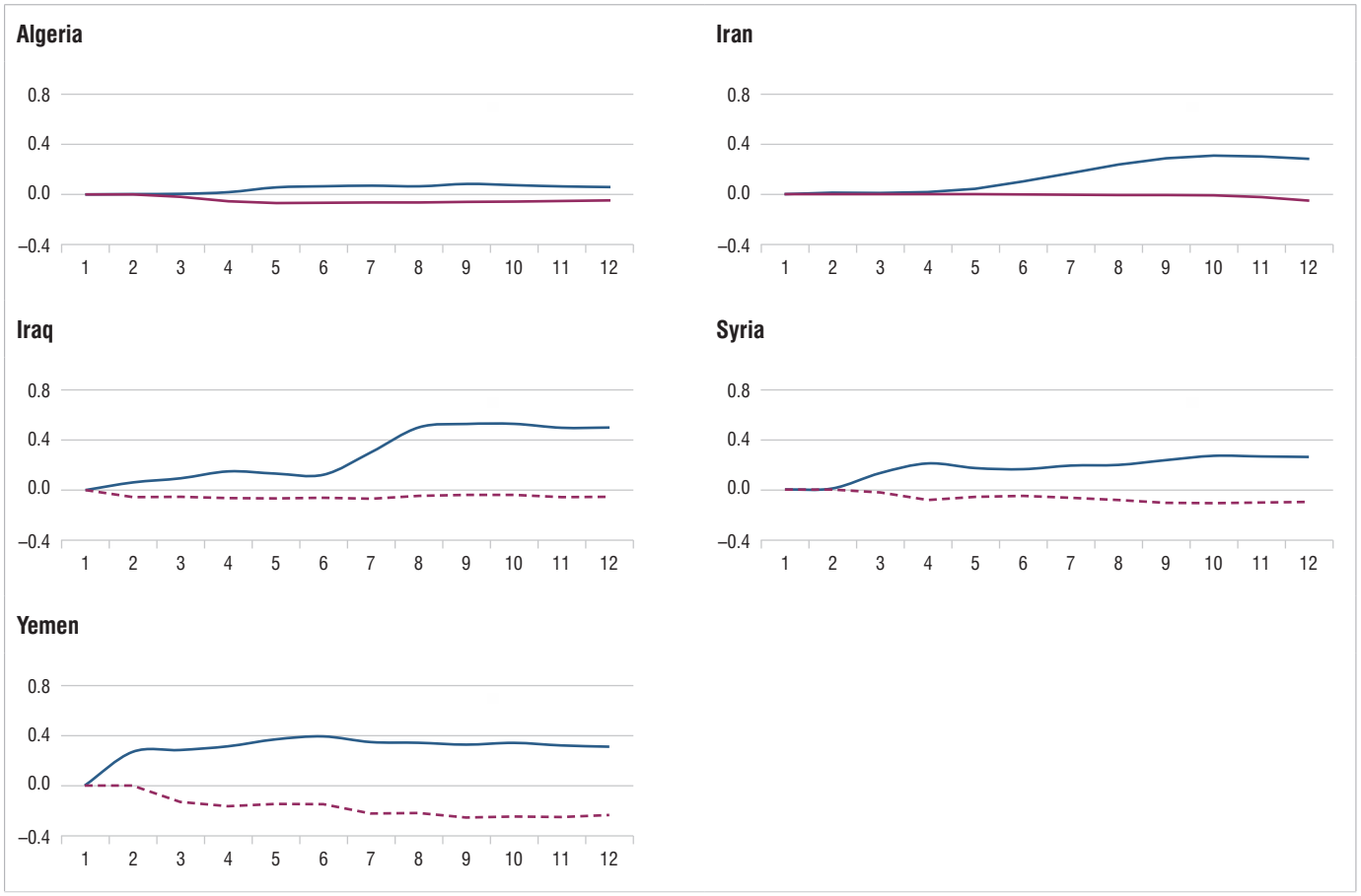
observed for Egypt and Jordan. A one percent increase in world food prices lifts domestic prices by some 0.39 percent. The fact that food inflation currently remains subdued can be attributed to a number of factors: the government's decision to use subsidies to regulate domestic food prices, suspension of customs duties on cereal imports, suspension of local tax collection targeting fresh food traded in wholesale markets, and price control operations to contain price increases resulting from speculation.

- In Tunisia, food pass-through is small. Price controls and food subsidies seem to effectively undermine the transmission of international food prices into domestic prices. A one percent increase in international food prices increases the domestic price of food by only 0.06 percent.
- Finally, in WBG food price transmission both in terms of speed and magnitude appears as one of the strongest in the region reaching above 0.6 percent after 12 months. Nevertheless, loosening of restrictions on the entry of consumer goods along with government and donor interventions may help to curb domestic food prices.

In developing oil exporters, the pass-through effects range from small in Algeria to large in Iraq (Annex Figure 1b).

- In Algeria, rising international food prices have little overall effect on domestic prices. Algeria's food subsidies and other government interventions effectively protect the consumers from food price shocks.
- In Iran, food price transmission is gradual and reaches its peak after 10 months. A one percent increase in international prices translates into a 0.3 percent increase in domestic food prices. A more significant agricultural sector may explain the weaker price transmission. The pronounced increase in overall food inflation is attributed to reform of the local subsidy system, which increased

Annex Figure 1b. Developing Oil Exporters' Food Price Pass-through Dynamics



Note: The figure shows the percentage increase (decrease) in domestic food prices for a one percent increase (decrease) in world food prices over a 12-month window. Data for Algeria and Iran are for 2000–2011; other countries use shorter time series.

consumer and transport costs of food, as well as to international price increases.[36]

- In Iraq, food price transmission appears to have a step-wise effect. Pass-through is relatively slow during the first 6 months, but becomes quite significant after 12 months. The country has in effect one of the strongest pass-through effects in the region. A one percent increase of world food prices increases domestic prices by almost 0.5 percent. The stepwise effects might be explained by the fact that Iraq is a net food importer but partly relies on a food ration system.
- In Syria the pass-through is relatively fast, but appears less pronounced than for other countries, which can be attributed to domestic policies. In Syria, transmission is determined not so much by cereals, but by sugar and oil foodstuff. Syria is quasi self-sufficient in wheat production and the government controls the domestic price of wheat.
- Similarly, in Yemen, the pass-through is relatively fast. Yemen is among the ten countries in the world with the highest rates of food insecurity thus explaining the rapid transmission. To address the looming impact of food price increases the government decided to subsidize seed. In Yemen a decline in world food prices appears to transmit into the domestic market.

In GCC countries, world food price pass-through to domestic prices is relatively slower when compared to other countries in the region (Annex Figure 1c):

- In Bahrain, Kuwait, Qatar, and Saudi Arabia, pass-through effects become visible after about 7 month. By contrast, in Oman pass-through effects appear after just 3 months. In all these countries, food price pass-through is typically below 0.4 percent.
- In UAE pass-through effects are relatively fast and stronger than the GCC average. UAE is also among the few countries where a world food price decline rapidly transmits into the domestic market.

Robustness

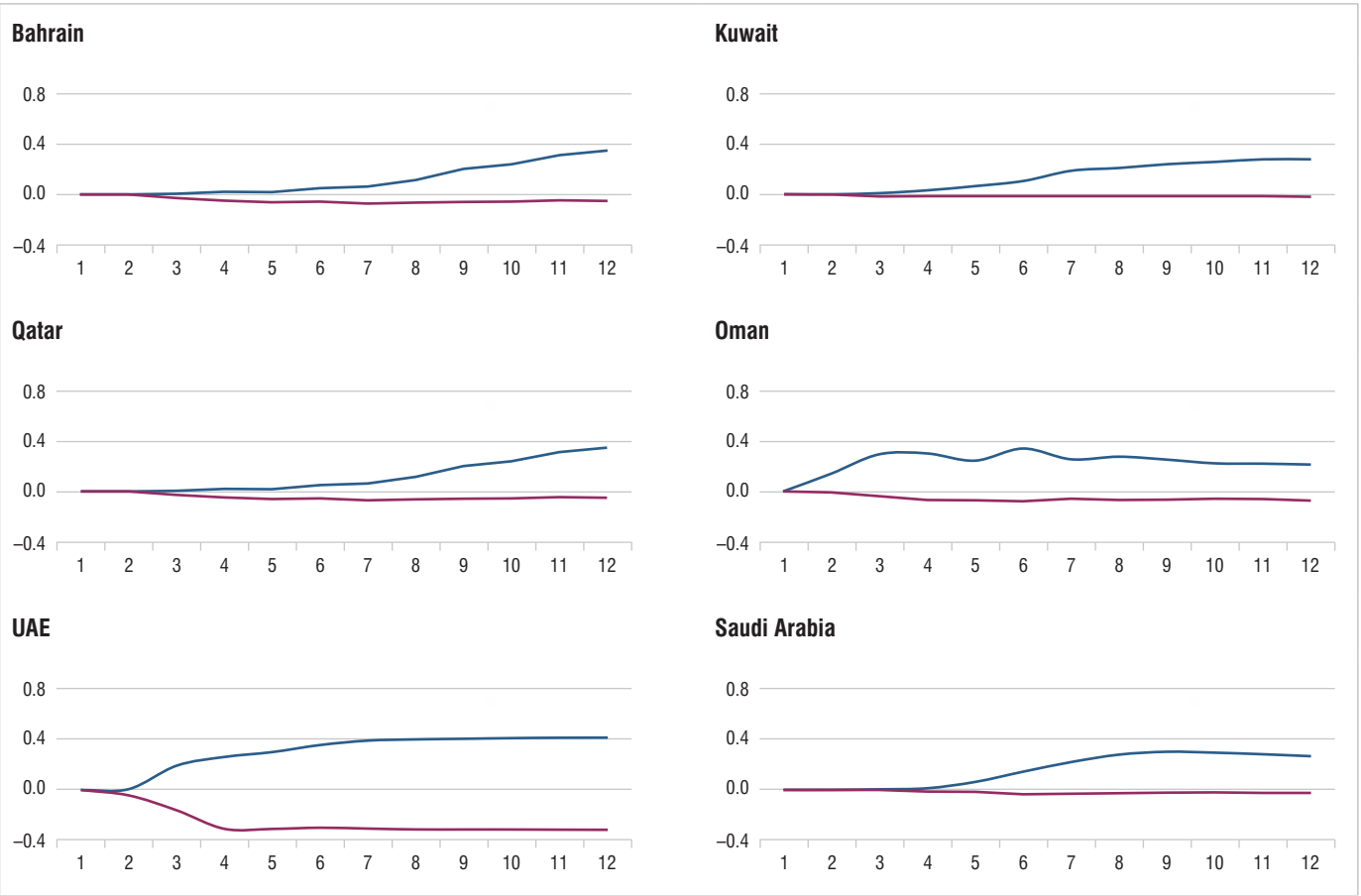
To get a sense of the robustness of the estimates, we use Monte Carlo simulation (1,000 iterations) and bootstrap standard errors for the 6 and 12-month food price pass-through coefficients. The results are displayed in Annex Table 3. For many countries (Bahrain, Kuwait, Qatar, UAE, Iraq, Syria, Egypt, Jordan, Morocco and WBG) the estimated 12-month pass-through elasticities are statistically significant at the 5-percent level. For the other countries the pass-through coefficients are not significant (which may either be attributed to limited price transmission because of policy interventions, or short time-series, particularly relevant in the case of Lebanon, Djibouti, and Yemen).

As an alternative to the World Bank's Food Price Index, we also used the FAO world food price index. Both indices are similar, however, the FAO index shows higher peaks in 2011. The main effect of using the FAO index is that the pass-through coefficients remain of similar magnitude, while the standard errors of the coefficients increase. Using disaggregated world price index data both from the FAO and World Bank also works for cereals, but produces lower pass-through coefficients than those obtained from aggregated indices (which is consistent with a lower share of cereal than total food consumption in household expenditures).

The market rate vis-à-vis the euro works better empirically than the US$ market exchange rate, or the nominal effective exchange rate. We suspect that this is because even in oil-producing MENA countries, a significant share of food imports is denominated in Euro. We suspect that the nominal effective exchange rate (which is a trade-weighted average of the nominal exchange rate) may not be a good proxy for import prices because it also contains export data. We do not find the type of exchange rate choice significantly impacting the size of the pass-through coefficients.

36 In December 2010, the Government of Iran removed widespread subsidies on oil products, electricity, water, gas, bread and other basic products.

Annex Figure 1c. GCC Food Price Pass-through Dynamics



Note: The figure shows the percentage increase (decrease) in domestic food prices for a one percent increase (decrease) in world food prices over a 12-month window. Data for Saudi Arabia, Bahrain, and Kuwait are for 2000–2011. In the cases of Oman, Qatar, and UAE we rely on shorter time series.

Annex Table 3. Food Price Pass-through Coefficients in MENA

		6-month food price pass-through		12-month food price pass-through	
Country and group		World price increase	World price decrease	World price increase	World price decrease
GCC countries	Bahrain	0.050	0.057	**0.349**	0.051
		(0.057)	(0.036)	(0.113)	(0.034)
	Kuwait	0.107	0.016	**0.279**	0.020
		(0.081)	(0.029)	(0.128)	(0.029)
	Oman	**0.341**	0.079	0.213	0.075
		(0.142)	(0.063)	(0.130)	(0.074)
	Qatar	**0.286**	**0.182**	**0.355**	**0.220**
		(0.125)	(0.085)	(0.161)	(0.099)
	Saudi Arabia	0.144	0.033	0.266	0.023
		(0.278)	(0.024)	(0.232)	(0.021)
	UAE	0.355	**0.298**	**0.413**	0.315
		(0.178)	(0.143)	(0.202)	(0.163)
Developing oil exporters	Algeria	0.065	0.066	0.059	0.048
		(0.077)	(0.048)	(0.072)	(0.037)
	Iran	0.103	0.003	**0.282**	0.052
		(0.081)	(0.026)	(0.116)	(0.043)
	Iraq	0.122	0.062	**0.497**	0.055
		(0.131)	(0.083)	(0.158)	(0.100)
	Syria	**0.163**	0.052	**0.261**	0.100
		(0.097)	(0.053)	(0.114)	(0.067)
	Yemen	**0.393**	0.147	0.311	0.234
		(0.161)	(0.177)	(0.166)	(0.192)
Oil importers	Djibouti	**0.583**	0.037	**0.464**	0.129
		(0.180)	(0.078)	(0.183)	(0.106)
	Egypt	**0.336**	0.041	**0.441**	0.034
		(0.124)	(0.032)	(0.140)	(0.031)
	Jordan	**0.219**	0.054	**0.392**	0.130
		(0.102)	(0.047)	(0.118)	(0.069)
	Lebanon	0.080	0.145	0.180	0.132
		(0.172)	(0.096)	(0.209)	(0.093)
	Morocco	0.044	0.061	**0.394**	0.052
		(0.063)	(0.050)	(0.121)	(0.042)
	Tunisia	0.070	0.004	0.058	0.005
		(0.092)	(0.022)	(0.092)	(0.025)
	WBG	**0.475**	0.015	**0.658**	0.017
		(0.123)	(0.034)	(0.134)	(0.040)

Note: Bootstrapped standard errors in parenthesis; bold numbers indicate significant at the 5 percent level.

WORLD BANK **MIDDLE EAST AND NORTH AFRICA REGION – A REGIONAL ECONOMIC UPDATE**, MAY 2011

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