

**WORLD BANK MIDDLE EAST AND NORTH AFRICA REGION**  
**A REGIONAL ECONOMIC UPDATE, APRIL 2012**

## **ENABLING EMPLOYMENT MIRACLES**



© 2012 The International Bank for Reconstruction and Development/The World Bank  
1818H Street, NW  
Washington, DC 20433  
Telephone: 202-473-1000  
Internet [www.worldbank.org](http://www.worldbank.org)  
E-mail [feedback@worldbank.org](mailto:feedback@worldbank.org)

All rights reserved.

This volume is a product of the Chief Economist's Office of the Middle East and North Africa Region and the Concessional Finance and Global Partnerships Vice Presidency of the World Bank. The findings, interpretations, and conclusions expressed herein are those of the author(s) and do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

*Rights and Permissions*

The material in this work is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The World Bank encourages dissemination of its work and will normally grant permission promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc, 222 Rosewood Drive, Danvers, MA 09123, USA, telephone 978-750-8400, fax 978-750-4470, [www.copyright.com](http://www.copyright.com).

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, World Bank, 1818H Street, NW, Washington, DC 20433, USA, fax 202-522-2422,  
e-mail [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

Photograph: © GETTYIMAGES

**A FREE PUBLICATION**



# TABLE OF CONTENTS

---

<b>ACRONYMS</b> .....	<b>I</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>III</b>
<b>MENA’S SHORT-TERM MACROECONOMIC OUTLOOK</b> .....	<b>1</b>
<i>A Two-Track Growth Outlook</i> .....	<i>1</i>
<i>Strong Growth in Oil Exporters Buoyed by Oil</i> .....	<i>2</i>
<i>Subdued Recovery and Growth in Oil Importers</i> .....	<i>4</i>
<i>Hit Hard by Political Turmoil, Tourism is Expected to Pick Up</i> .....	<i>9</i>
<i>Remittances Have Remained Stable but External Financing is Constrained</i> .....	<i>9</i>
<i>Risks to the Short Term Outlook</i> .....	<i>13</i>
<b>ENABLING EMPLOYMENT MIRACLES</b> .....	<b>19</b>
<b>A BIRD’S EYE’S VIEW OF LABOR MARKETS IN MENA</b> .....	<b>19</b>
<i>Low Participation, High Unemployment and Heterogeneity across Countries</i> .....	<i>19</i>
<i>Vulnerable Groups: Women and Youth</i> .....	<i>21</i>
<i>Growth and Strong Business Climate are Good for Jobs</i> .....	<i>22</i>
<b>EMPLOYMENT MIRACLES</b> .....	<b>24</b>
<i>What is an Employment Miracle?</i> .....	<i>24</i>
<i>How Often and Where Do Employment Miracles Happen?</i> .....	<i>25</i>
<i>What Happens During Employment Miracles?</i> .....	<i>26</i>
<i>What Conditions Enable Employment Miracles?</i> .....	<i>28</i>
<i>Which Aspects of Regulation Matter Most?</i> .....	<i>29</i>
<i>Asking the Experts: What Do Entrepreneurs Want?</i> .....	<i>32</i>
<i>Policy Priorities: Prudent Macroeconomic Management, Regulation and Governance</i> .....	<i>32</i>
<b>REFERENCES</b> .....	<b>35</b>

## LIST OF BOXES

Box 1.1	Short-Run Impacts of Oil Price Increases and Sluggish Growth in the EU on MENA .....	8
Box 1.2	the Impacts of Oil Price Spike on Growth .....	15
Box 1.3	Crude Oil and Food Prices .....	16
Box 2.1	MENA Region's Employment Miracles: Morocco (1995) and Algeria (2000).....	27
Box 2.2	Policy Implementation Uncertainty, Corruption and Private Sector Development in MENA	31

## LIST OF FIGURES

Figure 1.1	Global Growth Outlook.....	1
Figure 1.2	Growth Outlook in MENA.....	2
Figure 1.3	Industrial Production in Oil Exporters (Percent).....	3
Figure 1.4	Fiscal Outlook (in Percent of GDP) .....	4
Figure 1.5	Industrial Production in Oil Importers (Percent).....	6
Figure 1.6	Tourism Sector .....	9
Figure 1.7	Remittances Inflows to MENA (US\$ bn) .....	10
Figure 1.8	Credit Default Swaps (CDS).....	11
Figure 1.9	Official Reserves.....	11
Figure 1.10	Foreign Direct Investment.....	12
Figure 1.11	Inflation Rates in MENA (Percent).....	14
Figure 2.1	Employment to Population Ratios .....	19
Figure 2.2	Labor Force Participation.....	19
Figure 2.3	Unemployment.....	20
Figure 2.4	Unemployment Rates Across MENA .....	20
Figure 2.5	Changes in Youth vs. Aggregate Unemployment .....	21
Figure 2.6	Unemployment vs. GDP per Capita.....	22
Figure 2.7	Structural Transformation .....	22
Figure 2.8	Unemployment Changes vs GDP Per Capita Growth.....	23
Figure 2.9	Regulation and Unemployment.....	23
Figure 2.10	Incidence of Miracles by Region .....	25
Figure 2.11	The Evolution of Unemployment During Miracles .....	26
Figure 2.12	The Evolution of Growth During Miracles .....	26
Figure 2.13	Incidence of Miracles vs GDP Per Capita.....	28
Figure 2.14	Incidence of Miracles vs Initial Unemployment .....	28
Figure 2.15	Predictors of the Incidence of Miracles.....	30
Figure 2.16	Constraints to Doing Business .....	32

## LIST OF TABLES

Table 1.1	Macroeconomic Outlook.....	7
Table 1.2	Break Even Oil Prices (US\$) .....	18
Table 2.1	List of Employment Miracles by Region (Country and Year).....	33
Table 2.2	Initial Conditions and Descriptive Statistics .....	34

## LIST OF BOX FIGURES

Figure A1	Correlation of Oil Price and GDP Cycles, 1993-2012 .....	8
Figure A2	Correlation of EU and MENA GDP Cycles, 1993-2012 .....	8
Figure B1	Evolution of GDP Growth .....	27
Figure B2	Days to Get A Construction Permit .....	31
Figure B3	Corruption and Policy Implementation .....	31

## WORLD BANK MIDDLE EAST AND NORTH AFRICA REGION

### *A REGIONAL ECONOMIC UPDATE, April 2012*

## ENABLING EMPLOYMENT MIRACLES

### ACKNOWLEDGEMENTS

This report is a product of the Office of the Chief Economist for the Middle East and North Africa Region of the World Bank. It presents the short-term, regional macroeconomic outlook and offers analytical work on themes important for growth and development in the Middle East and North Africa. The report was prepared under the guidance of Caroline Freund, Chief Economist, Middle East and North Africa Region of the World Bank.

The first part of the report provides an overview of recent economic developments, the short-term macroeconomic outlook, and highlights uncertainties stemming from increased oil price volatility. The preparation of this part was led by Elena Ianchovichina (Lead Economist, MNACE), in close collaboration with Lili Mottaghi (Economist, MNACE) and Josef Loening (Consultant, MNACE). Valuable country-specific inputs and comments were provided by the following group of country economists: Sherine H. Al-Shawarby, Ibrahim Al-Ghelaiqah, Nancy Claire Benjamin, Kevin Carey, Jean-Pierre Chauffour, Wilfried Engelke, Chadi Bou Habib, Santiago Herrera, Sibel Kulaksiz, Wael Mansour, Khalid El Massnaoui, John Nasir, Antonio Nucifora, Stefano Paternostro, and Marc Schiffbauer. We are grateful to Manuela Ferro and Bernard Funck for their assistance and helpful suggestions. Isabelle Chaal-Dabi (MNACE) provided excellent administrative assistance and Malika Drissi (MNSSO) worked on the design of the report's cover.

The second part of the report focuses on unemployment in the region and employment miracles around the world. This part of the report was led by Caroline Freund and Bob Rijkers and was written based on their paper "Employment Miracles". Christina Wood contributed to this section. Steen Jorgensen (Sector Director, MNSHD), Andras Bodor and Stefanie Brodmann provided valuable comments.

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 GCC links (Djibouti, Jordan, and Lebanon) and those with EU links and located in North Africa (Egypt, Morocco and Tunisia). Developing MENA represents all MENA countries except the GCC oil exporters.





## ACRONYMS

---

ANIMA	Euro-Mediterranean Network of Players for Economic Development
BBL	Barrel
bn	Billion
CDS	Credit Default Swap
DB	Doing Business Indicators
DECPG	Development Economics Prospects Group, World Bank
EAP	East Asia and Pacific
ECA	Europe and Central Asia
EIA	Energy Information Administration
EIU	Economist Intelligence Unit
EU	European Union
FDI	Foreign Direct Investment
FIPA	Foreign Investment Promotion Agency
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
ILO	International Labor Organization
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
LNG	Liquefied Natural Gas
MENA	Middle East and North Africa
MIPO	Mediterranean Investment and Partnership Observatory
MNACE	Middle East and North Africa Office of the Chief Economist
MUV	Manufactures Unit Value Index
N	Observations
OECD	Organization for Economic Cooperation and Development
p/d	Per Day
RHS	Right-hand side
S&P	Standard and Poor
SA	South Asia
saar	seasonally adjusted annualized rate
SAR	South Asia Region
SD	Standard Deviation
SSA	Sub-Saharan Africa
UAE	United Arab Emirates
UNCTAD	United nations Conference on Trade and Development
UNWTO	United Nations' World Tourism Organization
US	United States of America
WDI	World Development Indicators
WDR	World Development Report
WGI	World Governance Indicators
WTTC	World Travel and Tourism Council



## EXECUTIVE SUMMARY

---

Political uncertainties in the Middle East and North Africa (MENA) continue to affect the short-term economic prospects in the region, while major developments in the global economy over the past six months have put the region on a two-track growth path for 2012. These developments include a significant rise in crude oil prices on fears of oil supply disruptions and weak economic activity in the Eurozone.

Economic growth of MENA's oil exporting countries will be strong as it rebounds from the average of 3.4 percent in 2011 to 5.4 percent in 2012. In contrast, oil importers in the region will grow at about half that rate, although the pace of economic expansion will accelerate slightly relative to 2011. Overall growth in the region is expected to be 4.8 percent in 2012, surpassing the 3 percent growth achieved in 2011.

Improvement in the growth prospects of oil exporters is due to strength in oil markets. Crude oil prices have been buoyed on the supply side by fears of oil supply disruptions and on the demand side by a pickup in economic activity in the US as well as the shift away from nuclear energy in Japan. Oil exporters with available capacity will expand output, while buoyant oil revenues will finance additional public spending expected to boost domestic demand and investment. If sustained, high oil prices will enlarge oil exporters' fiscal space, although not necessarily translate into increased fiscal surpluses. Many of the oil exporting economies will choose to scale up social programs; however, Iran, Syria and Yemen will be constrained by a difficult economic and political environment.

Oil importers, especially those recovering from political turbulence, remain in vulnerable positions with widening risk premia, diminished foreign reserves and increasing difficulty financing fiscal and current account deficits. Furthermore, net oil importers will be affected negatively by high oil prices, and those with strong EU links will be impacted by the weak growth expected in the Eurozone. Still, oil importers with GCC links will benefit from strong growth in the GCC group of countries through trade, investment and remittances.

Domestic and regional factors will also play a role and shape country-specific outlooks. In Egypt and Tunisia, the pace of recovery and its sustainability will depend largely on domestic political developments, while in Morocco growth will moderate due to an expected decline in agricultural production. Economic activity in Lebanon could be hurt through the trade channel if the situation in Syria deteriorates, while the situation in Jordan will reflect the ability of the government to convince investors of economic stability.

The fiscal situation is expected to remain tenuous for oil importing countries, especially those going through transitions. In Tunisia, the fiscal deficit will worsen as a result of the expected increase in public expenditures envisaged in the new supplementary budget law, expanding

social spending and public investment. In Egypt, the fiscal deficit in 2012 is unlikely to increase relative to 2011, but it is expected to exceed the budgeted target for the fiscal year 2012, due to increased public spending, especially on wages and social benefits, and a revenue shortfall as a result of economic weakness.

Overall, inflation is expected to remain subdued in 2012, with the notable exceptions of Iran and Egypt. Subsidies are currently dampening the effects of increased global food and energy prices in many MENA countries. However, the pass-through from global to domestic food prices has been sizable in some MENA countries over time, and increases in wages and salaries, could stoke inflationary pressure in the medium-run.

The macroeconomic outlook remains highly uncertain and is contingent on political developments in the region and beyond. While political transitions and economic challenges remain and continue to cloud the short-term growth prospects in parts of the region, external downside risks also alter the regional macroeconomic outlook. These include volatility in oil markets, a deeper than expected slowdown in Europe, and potentially weaker growth in the US and developing countries.

In sum, growth in MENA will rebound and approach 4.8 percent in 2012, rising by about 2 percentage points relative to growth in 2011. This aggregate outcome however hides a two-track growth forecast. Oil exporters will grow much faster relative to oil importers and relative to 2011, provided oil prices remain strong. Oil importers, especially those recovering after political turbulence, remain in vulnerable positions and will grow at half the pace registered by oil exporters. Risks are multiple and reflect the heterogeneous domestic conditions across MENA, especially in the oil importers, and in the global economy.

Following the discussion of the outlook for the region, the second part of the report focuses on the problem of unemployment in the MENA region, the most acute in the world. With youth unemployment above 25 percent in recent years, a top priority for governments is to create an environment where employment expands. The analysis compares MENA's labor market performance with the rest of the world and then examines how, historically, countries across the world have generated episodes of significant and sustained unemployment reductions.

Stage of development is part of the problem. In particular, the middle-income MENA countries are embarking on a process of structural transformation where unemployment tends to expand when labor shifts away from agriculture and industry and toward services. Still, many countries in the region record unemployment rates that are well above average for their level of development. So, while structural transformation helps explain their high rates of unemployment, it does not fully account for the observed rates, implying that there may be policy levers that can be used to stimulate employment growth.

The key question for policymakers is thus how to engineer enduring reductions in unemployment. This question is addressed head on by documenting the incidence and

determinants of employment miracles, defined as substantial and sustained reductions in unemployment, that have occurred throughout the world over the last three decades.

Employment miracles are found to be surprisingly common, often coinciding with an acceleration of growth. Miracles are much more prevalent in countries with higher levels of unemployment and, *ceteris paribus*, more likely in countries with better business regulations and stronger governance. Somewhat surprisingly, business regulation and governance are more important than labor regulations in generating miracles.

The dominance of the business environment and governance in predicting miracles may be related to the process of creative destruction that occurs in dynamic economies. Letting old businesses exit and new more productive firms grow happens more easily when regulations are lean and fair, property rights are respected, and government services efficient. Indeed, a growing literature on labor dynamics across firms finds that new businesses are a vital source of job growth. The results imply that a good investment climate pays a double dividend. It is associated with lower levels of unemployment more broadly, and when unemployment is high, it is less likely to remain high for long.



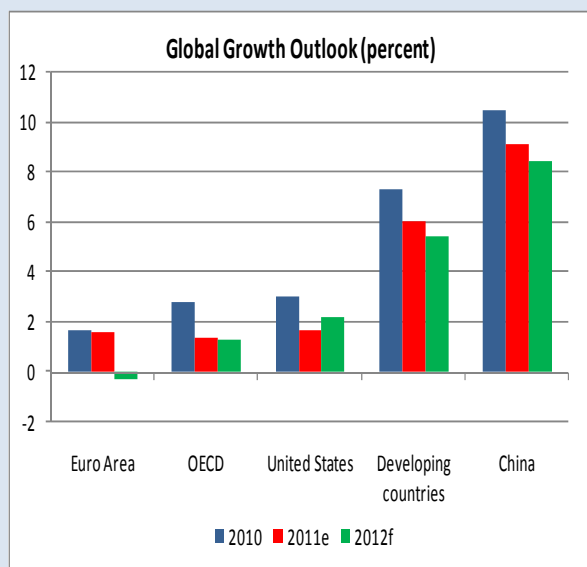
## MENA'S SHORT-TERM MACROECONOMIC PROSPECTS

### *A Two-Track Growth Outlook*

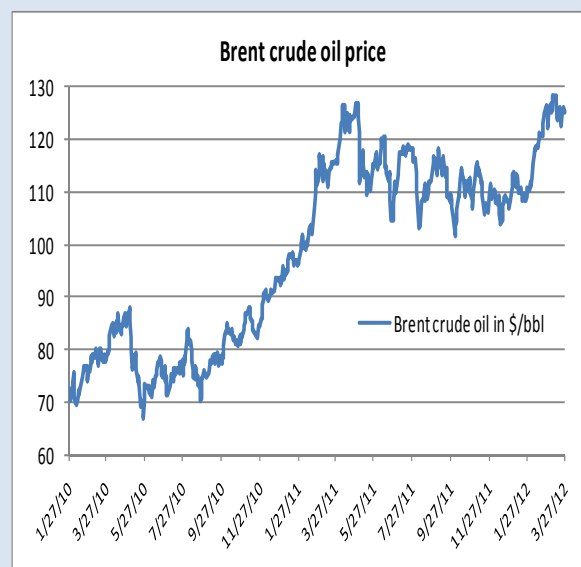
While political uncertainties in the Middle East and North Africa (MENA) region continue to shape the short-term economic prospects in the region, major developments in the global economy have put the region on a two-track growth path for 2012. These developments include a significant rise in crude oil prices on fears of oil supply disruptions<sup>1</sup> (Figure 1.1) and weak economic activity in the Eurozone.

Economic growth of MENA's oil exporting countries will be strong as it rebounds to 5.4 percent in 2012 from the average of 3.4 percent in 2011 (Figure 1.2). In contrast, oil importers in the region will grow at roughly half that rate, although the pace of economic expansion will accelerate slightly relative to 2011. Overall growth in the region is expected to reach 4.8 percent in 2012, surpassing the 3 percent growth achieved in 2011.

**Figure 1.1 Global Growth Outlook**



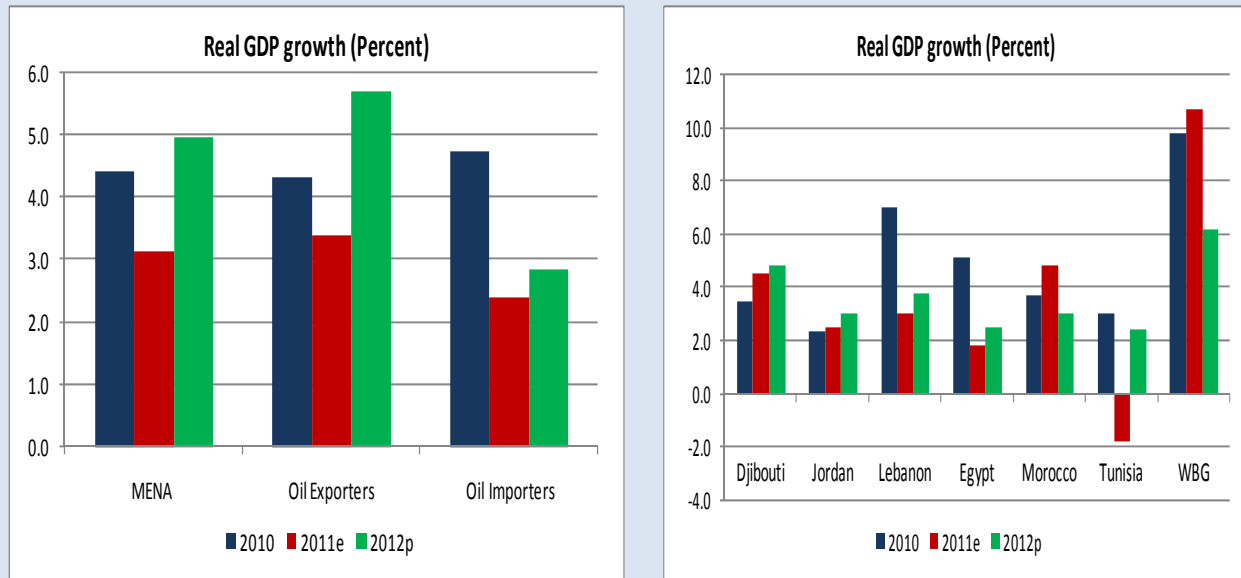
Source: World Bank



Source: EIA

<sup>1</sup> The price of Brent crude has jumped by 15 percent since February, averaging \$125 in mid March and surpassing its peak in April 2011. The regional forecast assumes that crude oil prices average \$115 throughout 2012.

**Figure 1.2 Growth Outlook in MENA**



Source: World Bank

***Strong Growth in Oil Exporters Buoyed by Oil***

The improvement in the growth prospects of oil exporters is due to rising oil prices. Crude oil prices have been buoyed on the supply side by fears of oil supply disruptions and on the demand side by a pickup in economic activity in the US, and the shift away from nuclear energy in Japan. Oil exporters with spare capacity will expand output and buoyant oil revenues will allow them to finance additional public programs that are expected to boost domestic demand and investment.

Growth in 2012 is expected to improve relative to 2011 in most of the GCC countries as oil prices remain strong and there is a shift in production away from Iran, Syria, and Yemen and toward the GCC (Table 1.1). In Saudi Arabia, economic growth will continue to be strong as a result of surging oil prices, higher oil production and rapid recycling of oil revenues into domestic spending. Growth in UAE is expected to strengthen in 2012 because of the combined impact of any oil production increases and continued stimulus spending by Abu Dhabi including a new investment program to help boost growth in lagging regions. Growth in Qatar is expected to decelerate sharply in 2012 as no further expansions in Liquefied Natural Gas beyond existing flows and confirmed projects are envisaged in the short term.

Growth of developing oil exporters is expected to improve significantly from the low rates of 2011 and reach 5.8 percent in 2012. The dominant factor shaping the growth forecast for this group is the positive impact of recovery in Libya, driven by the rapid revival of oil production (Figure 1.3). In addition, non-oil GDP is also expected to grow by 10 percent in 2012, as the economy recovers after a period of contraction during the civil conflict in 2011. In Algeria, GDP

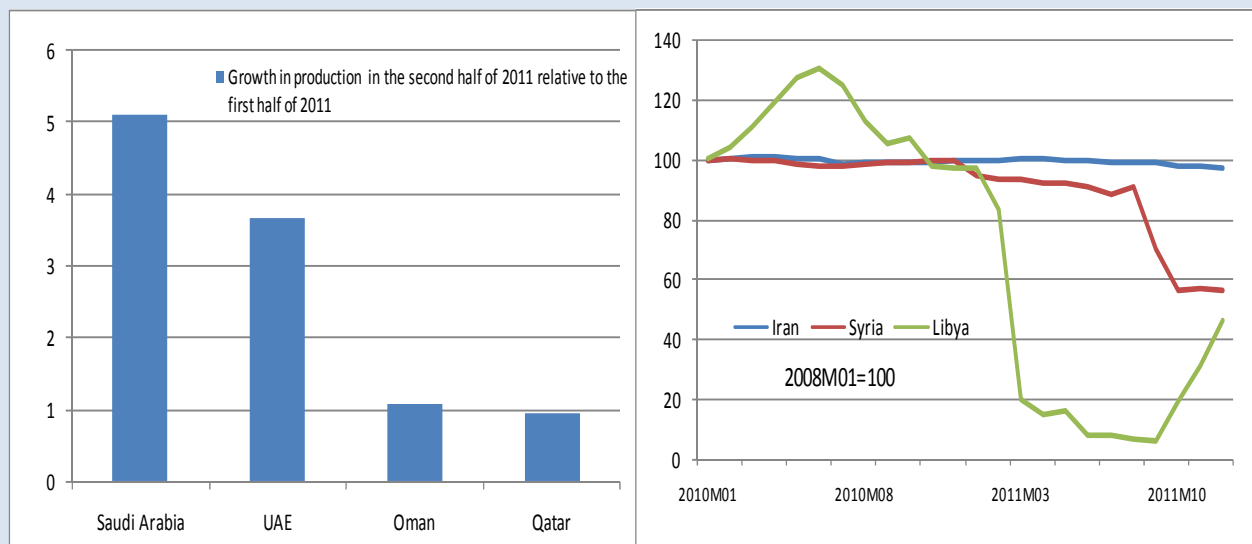


growth in 2012 will increase slightly due to increased government spending, but oil production is expected to remain stagnant because of the partial shutdown of Algeria’s largest refinery and low investment in the energy sector. An increase in oil production, together with surging oil prices, will support growth prospects of 11.1 percent in Iraq for 2012.

Macroeconomic conditions have worsened in Syria and Iran. Iran's real GDP is expected to contract by almost 0.8 percent in 2012, largely due to cuts in oil production and exports of crude oil mostly as a result of global sanctions over its nuclear program. In Syria, economic activity and trade have been disrupted because of civil unrest and foreign sanctions. Growth in Yemen remains slightly negative as a result of continued social and political tensions.

The pickup in industrial activity, particularly in Saudi Arabia and UAE, became evident in the second half of 2011, as oil production expanded to substitute for losses in Libya and fiscal spending kicked in (Figure 1.3). This is likely to continue into 2012. In Libya, oil production started increasing in 2011 from a low level of 22,000 barrels per day in July to about 1 million barrels per day in December 2011 (Figure 1.3). Oil production is expected to increase in 2012 and reach its pre-conflict level in 2014.

**Figure 1.3 Industrial Production in Oil Exporters, saar (Percent)**



Source: DataStream

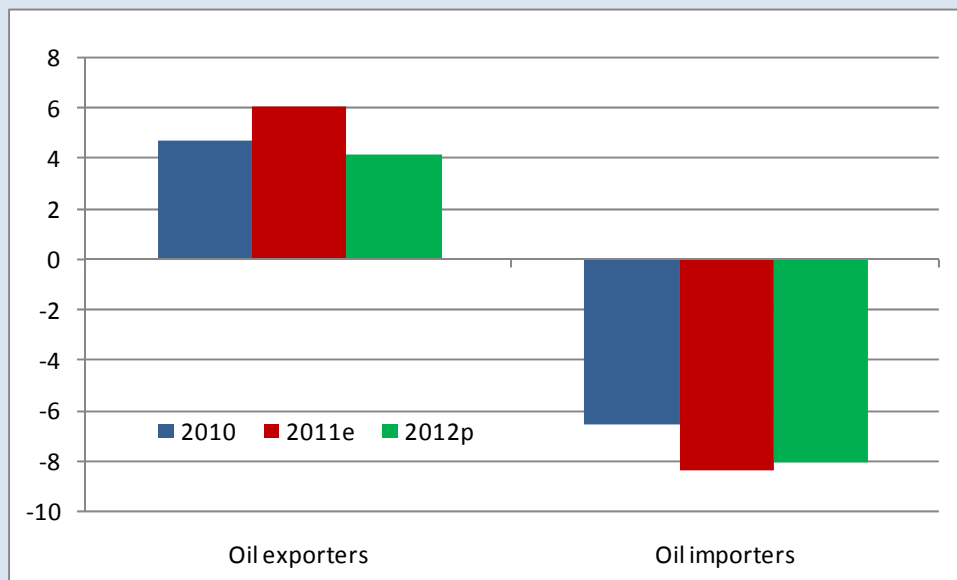
Source: DataStream

Industrial production declined over the same period in Syria and to a lesser extent in Iran (Figure 1.3). Foreign oil companies operating in Syria cut back production to prevent excess crude from filling the country’s storage capacity. In Iran, tightening of global sanctions over its nuclear program resulted only in a small drop in oil production by the end of 2011. However, recent data from the International Energy Agency (IEA) show that crude oil production fell by 50,000

barrels a day in February 2012 and oil shipments declined by 300,000 barrels per day in March 2012. Oil exports could fall even further when the European Union oil embargo comes into effect in July, unless exports can be diverted to other countries.

If sustained, high oil prices will expand oil exporters' fiscal space, although not necessarily translate into increased fiscal surpluses (Figure 1.4). Many of the oil exporting economies will choose to scale up social programs, but Iran, Syria and Yemen will be constrained by a difficult economic and political environment. In Syria, the fiscal deficit is expected to widen dramatically due to plummeting public revenue and increasing public spending related to commitments to increase diesel subsidies and public sector wages.

**Figure 1.4 Fiscal Outlook (Percent of GDP)**



Source: World Bank

### *Subdued Recovery and Growth in Oil Importers*

Growth of oil importers is expected to rise only slightly relative to 2011 and average 2.8 percent in 2012 (see Figure 1.2). Oil importers, especially those recovering from political unrest, remain in vulnerable positions because of global and domestic factors. Rising oil prices will hurt oil importers, but in countries with links to GCC economies impacts might be small and even positive. Tunisia and Morocco are particularly vulnerable to weak growth in the Eurozone (see Box 1.1), while Jordan and Lebanon may be vulnerable to spillovers from developments in Syria and Djibouti might be affected by social tensions in Yemen.

Country-specific growth outcomes reflect heterogeneous domestic conditions. Growth in Egypt is expected to average 2.5 percent in fiscal year 2012, up from 1.8 percent in fiscal year 2011.

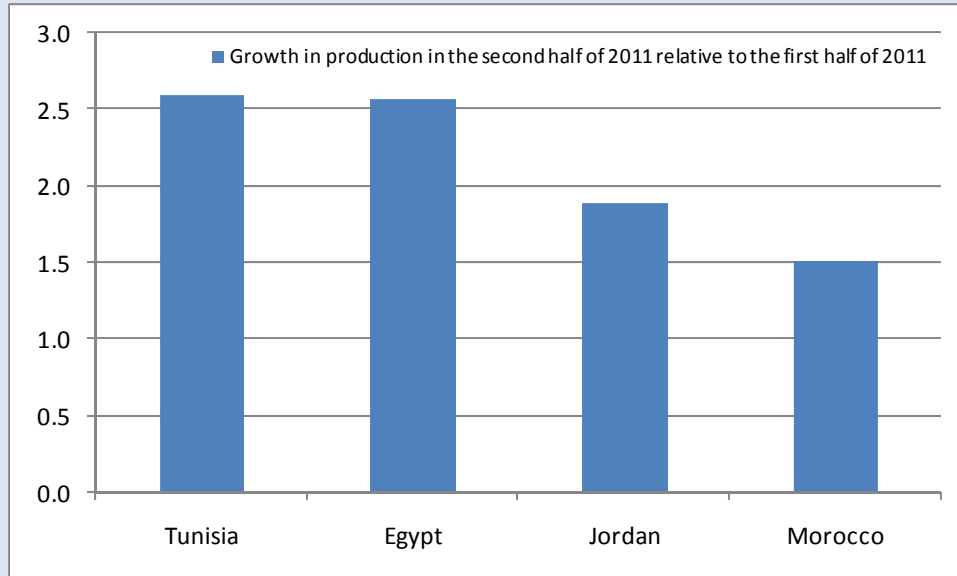
The sustainability of this outlook depends largely on developments on the domestic front, including the presidential elections and the economic policies adopted by the new government. In Tunisia, real GDP growth is expected to rebound to 2.4 percent in 2012 from a negative 1.8 percent in 2011, but the pace of recovery will depend on the government's ability to manage the social and political tensions, the impact of slow growth in the EU, and the effects of the fiscal stimulus. In Morocco, growth will be adversely affected by an expected decline of agricultural output and slow growth in Europe, while an increase in public investment is expected to play a positive role.

Growth of other oil importing countries, namely Djibouti, Jordan and Lebanon, is expected to increase in 2012 (Table 1.1). However, Jordan and Lebanon remain vulnerable to unrest in Syria. While trade in goods with Syria represents a small share of Lebanon's total trade, Syria is the main entry point for Lebanese exports to the Arab countries and for Arab tourists to Lebanon. In Djibouti growth is expected to increase in 2012 due to expansions of port activities and considerable increase in FDI.

In Egypt and Tunisia, the recovery in industrial production became evident in the second half of 2011 (Figure 1.5). Production growth in Egypt is expected to remain volatile in 2012 and dependent on domestic political factors as well as global demand. Importantly, the decline in private investment in 2011 is expected to constrain the recovery of industrial production in 2012. In Tunisia, industrial production rebounded in the second and third quarters of 2011, but the situation deteriorated substantially in the final quarter after the elections in October 2011. Still, the Tunisian export sector is expected to recover in 2012, led by manufacturing, especially the mechanical, electrical and textile sectors. Chemical industry and phosphate exports are also expected to slowly recover in 2012. In Jordan the recovery of industrial activity is strongly dependent on regional developments and the ability of the government to convince investors that Jordan remains a stable place for doing business.<sup>2</sup>

---

<sup>2</sup> Moody's and S&P's downgrades of Jordan's outlook rating have cast further doubt on the country's short-term recovery and investor confidence.

**Figure 1.5 Industrial Production in Oil Importers, saar (Percent)**

Source: Datastream

The fiscal situation is expected to remain tenuous in oil importing countries in 2012 (Figure 1.4). In Egypt, the fiscal deficit is unlikely to be higher in 2012 relative to 2011, but it is expected to exceed the budgeted target for fiscal year 2012, due to increased public spending, especially on wages and social benefits, and a revenue shortfall as a result of economic weakness. In Tunisia, the fiscal deficit will worsen by the expected increase in public expenditures envisaged in the Supplementary Budget Law, planned for adoption by the Constituent Assembly in April 2012. The law aims to implement measures that allow the country to cope with the social tensions and increase public investment in support of regional development. However, in 2011 only part of the public spending approved with the supplemental budget in June 2011 could be spent due to weak capacity at the local level. In Lebanon, the fiscal deficit will widen in 2012 compared to 2011 because of a sizable rise in public wages. In Jordan, the 2012 budget law aims to scale the budget deficit to 8.6 percent by increasing domestic revenue and scaling down expenditure growth. However, the risk of backsliding on the fiscal rates is very high. The government has already reconsidered increasing electricity tariffs.

Table 1.1 Macroeconomic Outlook

	Real GDP Growth					Fiscal balance					Current account balance					
	2010	2011e	2012p	2013p	2010	2011e	2012p	2013p	2010	2011e	2012p	2013p	2010	2011e	2012p	2013p
	(Annual percentage change)					(in percentage of GDP)					(in percentage of GDP)					
<b>MENA region</b>	4.4	3.1	4.8	3.7	2.4	3.1	1.7	2.1	8.7	9.9	7.8	7.2	8.7	9.9	7.8	7.2
<b>Oil Exporters</b>	4.3	3.4	5.4	3.6	4.7	6.0	4.1	4.2	12.1	13.8	11.3	10.0	12.1	13.8	11.3	10.0
<b>GCC</b>	4.9	6.5	5.2	4.3	4.8	9.4	8.7	6.8	15.4	19.6	16.4	14.8	15.4	19.6	16.4	14.8
Bahrain	4.1	-1.2	2.5	4.0	-7.8	-7.3	-5.3	0.0	4.9	5.9	5.9	5.9	4.9	5.9	5.9	5.9
Kuwait	3.3	5.0	5.5	5.0	20.7	26.1	25.0	12.5	27.8	33.5	32.7	26.7	27.8	33.5	32.7	26.7
Oman	4.1	4.8	4.9	3.8	6.2	10.1	7.7	3.5	11.4	11.0	9.0	7.1	11.4	11.0	9.0	7.1
Qatar	17.0	19.0	6.4	3.9	3.0	7.0	7.2	8.7	26.3	28.1	26.3	19.0	26.3	28.1	26.3	19.0
Saudi Arabia	4.1	6.5	5.9	4.5	5.2	8.1	6.8	5.5	14.9	20.6	14.2	14.6	14.9	20.6	14.2	14.6
United Arab Emirates	3.2	3.3	3.8	4.0	-1.3	6.5	6.9	6.2	7.7	10.4	10.5	9.5	7.7	10.4	10.5	9.5
<b>Developing Oil Exporters</b>	3.3	-2.1	5.8	2.2	4.5	1.3	-2.0	0.2	7.7	5.9	4.4	2.8	7.7	5.9	4.4	2.8
Algeria	3.3	2.5	3.1	3.5	-1.9	-4.0	-6.0	2.0	15.6	19.3	12.0	11.4	15.6	19.3	12.0	11.4
Iran, Islamic Republic of	2.9	2.0	-0.8	-0.7	10.6	6.8	1.6	-1.0	5.9	4.9	0.6	-0.8	5.9	4.9	0.6	-0.8
Iraq	0.8	9.9	11.1	13.5	-9.1	7.4	0.2	6.8	-1.8	7.9	9.1	10.7	-1.8	7.9	9.1	10.7
Libya	3.8	-59.9	63.3	8.6	10.8	-31.9	-3.1	7.0	23.0	-20.9	21.3	16.4	23.0	-20.9	21.3	16.4
Syrian Arab Republic	3.2	-3.0	-6.0	2.5	-4.8	-7.1	-18.6	-6.0	-5.1	-2.2	-16.3	-7.0	-5.1	-2.2	-16.3	-7.0
Yemen	7.7	-10.5	-0.9	2.9	-4.0	-4.3	-5.0	-5.9	-3.7	-3.4	-1.0	-3.9	-3.7	-3.4	-1.0	-3.9
<b>Oil Importers</b>	4.7	2.4	2.8	4.0	-6.6	-8.4	-8.1	-7.1	-5.0	-6.1	-6.3	-5.7	-5.0	-6.1	-6.3	-5.7
Djibouti	3.5	4.5	4.8	5.0	-0.5	-0.9	0.5	0.9	-5.8	-12.7	-12.0	-11.9	-5.8	-12.7	-12.0	-11.9
Egypt	5.1	1.8	2.5	3.5	-8.1	-9.8	-9.5	-8.3	-2.0	-1.2	-3.0	-2.5	-2.0	-1.2	-3.0	-2.5
Jordan	2.3	2.5	3.0	3.5	-7.7	-12.7	-9.2	-8.2	-5.0	-9.0	-7.3	-6.1	-5.0	-9.0	-7.3	-6.1
Lebanon	7.0	3.0	3.8	4.4	-7.0	-5.4	-7.0	-6.4	-19.1	-22.6	-18.0	-17.5	-19.1	-22.6	-18.0	-17.5
Morocco	3.7	4.8	3.0	4.8	-4.7	-6.8	-5.1	-4.4	-4.3	-8.0	-6.9	-6.0	-4.3	-8.0	-6.9	-6.0
Tunisia	3.0	-1.8	2.4	3.7	-1.3	-3.7	-6.6	-6.0	-4.8	-7.4	-7.7	-6.5	-4.8	-7.4	-7.7	-6.5
West Bank & Gaza	9.8	10.7	6.2	7.0	-17.6	-18.8	-13.7	-11.5	-25.9	-19.0	-18.0	-21.0	-25.9	-19.0	-18.0	-21.0

Source: World Bank. Note: Data for Egypt are for fiscal year.

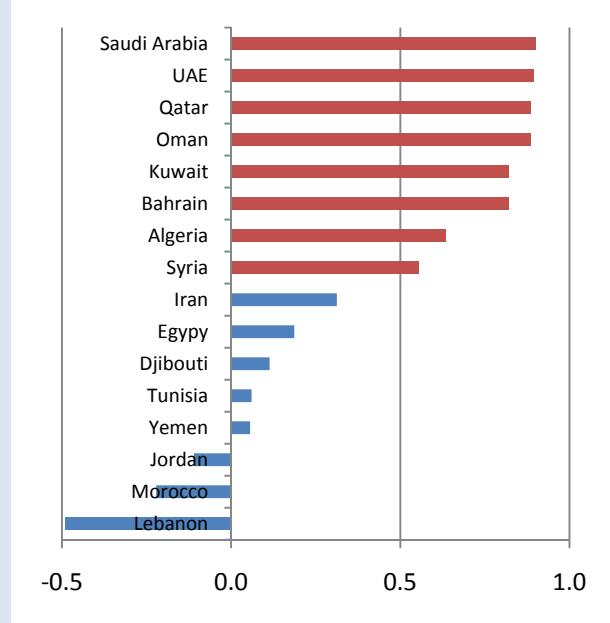
**Box 1.1 Short-Run Impacts of Oil Price Increases and Sluggish Growth in the EU on MENA**

The relative impact of increased oil prices, the economic slowdown in Europe and regional spillover effects on short-run growth for individual MENA countries can be gauged from correlation analysis. Figure A1 shows correlations of the cyclical components of annual GDP growth rates with oil price cycles over 1993-2012. Figure A2 shows correlations of the cyclical components of annual GDP growth rates with the GDP of EU.

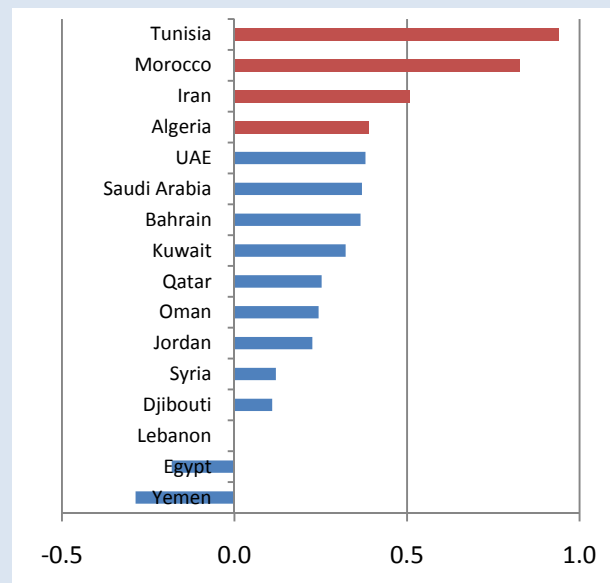
The correlation analysis suggests that:

- All GCC countries, followed by Algeria and Syria, benefit from higher international oil prices. Algeria and Iran additionally have strong EU linkages due to energy exports. Unless oil flows are redirected quickly, an effective EU oil embargo on Iran may thus have notable oil price effects and short-run growth impacts in Iran. These results suggest no strong positive link between output and oil price cyclical fluctuations in Lebanon and Jordan; although the literature finds that oil prices and capital inflows are positively related in these two countries. Cyclical correlations may be weakened by country-specific shocks – in the case of Jordan during the 1990s Gulf war, and in Lebanon during the mid 2000s.
- The EU growth slowdown will impact on short-run growth in Tunisia and Morocco. This is expected given strong linkages through goods and services trade, and remittances (Bock and others, 2010). For Algeria and Iran, the effect comes through the energy and others trade channels.
- Limited regional economic integration makes inter-Arab cyclical growth correlations typically weak. But there are exceptions. In particular, it appears that short-run growth cycles are highly correlated among Egypt, Syria, and Jordan. Spillovers from political transitions may thus affect short-run growth in Jordan.
- GCC countries show high correlations with cyclical growth in the US, the G7 and China due to crude oil linkages. By contrast, GCC cyclical growth rates do not appear to have significant and positive correlations with MENA oil-importers. This suggests that overall trade and financial linkages are either weak, or may be decoupled from short-run developments in the oil market.

**Figure A1 Correlation of Oil Price and GDP Cycles, 1993-2012**



**Figure A2 Correlation of EU and MENA GDP Cycles, 1993-2012**



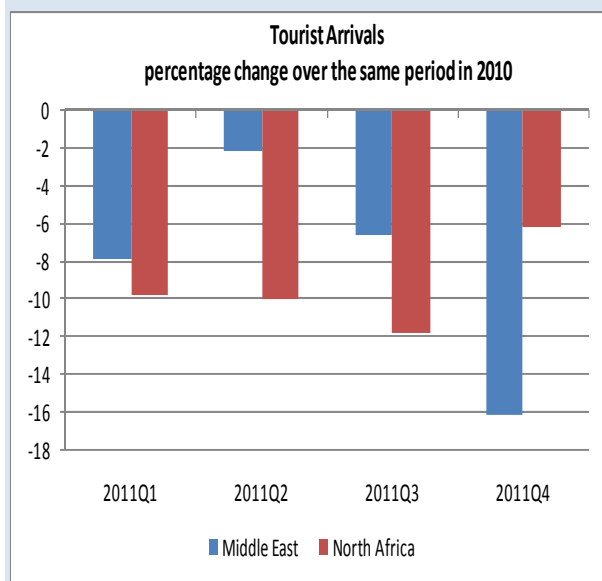
Source: Staff estimates based on IMF data.  
 Note: The graphs display band pass-filtered correlations of cyclical components. Red bars indicate significance levels of 10% or above. The Baxter and King bandpass filter is used to remove the slow moving components (trend growth) while keeping the high-frequency components (cycles or output gaps). Cycles are extracted from the logs of the series expressed in real terms. The duration of growth cycles is assumed to last between 2-8 years.

*Hit hard by political turmoil, tourism is expected to pick up*

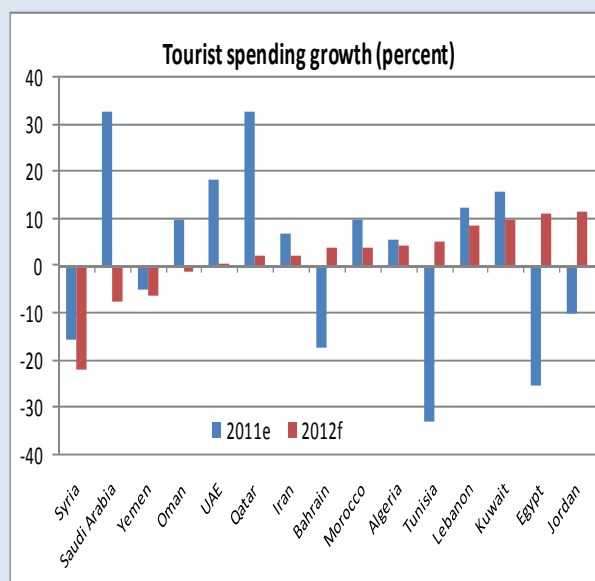
The tourism sector was booming prior to 2011, but concerns about security during the wave of uprisings in 2011 triggered a sharp contraction in tourism in major MENA destinations (Figure 1.6). Tourist arrivals declined dramatically in Syria, Egypt, Bahrain and Tunisia, and to a lesser extent in Lebanon and Jordan. In Morocco, the tourism sector remained stable in 2011 due to an increase in arrivals from Arab countries. Those arrivals rose by 14 percent in 2011 and compensated for lower tourist arrivals from Morocco’s main tourist markets in Europe.

The World Travel and Tourism Council (WTTC) expects tourist spending to pick up across MENA countries in 2012. Tourist spending in North Africa is expected to grow by 7 percent. In particular, spending in Egypt and Tunisia is expected to grow by about 10 percent and 5 percent, respectively, following sharp declines in 2011 (Figure 1.6). In the Middle East, tourist spending will slow down in 2012 although there will be stark differences across countries. After contractions in 2011, spending by tourists in Jordan and Bahrain is expected to grow at about 11 and 4 percent, respectively. Syria and Yemen will likely experience even larger declines in tourism revenue than the ones registered in 2011 (Figure 1.6).

**Figure 1.6 Tourism Sector**



Source: UNWTO



Source: WTTC

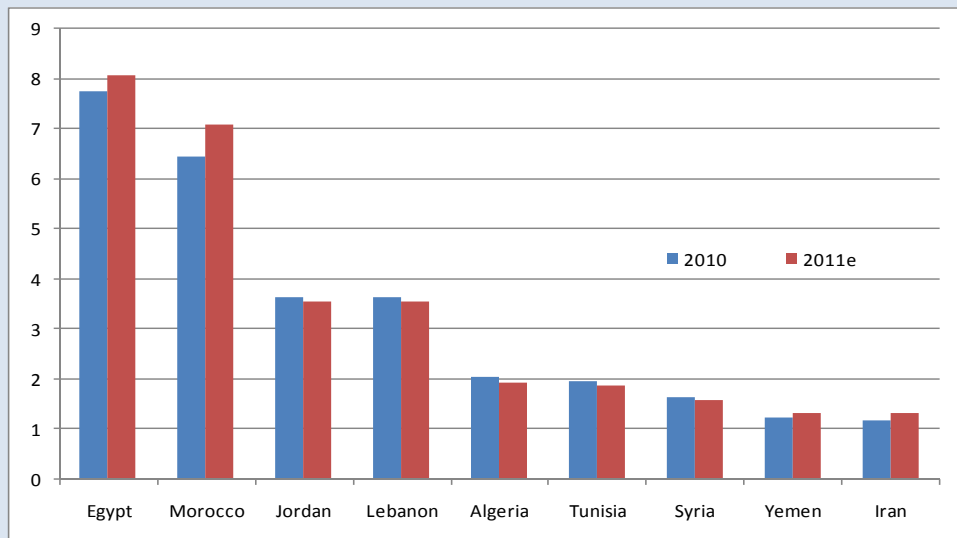
*Remittances have remained stable, but external financing is constrained*

Remittance inflows to the region grew in 2011, but at a slower pace than recorded in 2010. The ongoing political conflicts in the region and the economic slowdown in the Eurozone are two factors that reduced the ability of migrants to send money home (Figure 1.7). Tunisia and

Algeria, where remittance inflows declined by 5 percent in 2011, were hardest hit, due to the sluggish growth in Europe, where a large number of their migrants are located. Remittance inflows to Syria were adversely affected and declined by 4 percent in 2011 due to the deteriorating political situation in the country and the uncertain political outlook.

On the positive side, remittance inflows to Egypt increased in 2011 compared to 2010, reflecting increased inflows from GCC countries, in particular from Saudi Arabia which has remained resilient to global and regional crises. Remittances from GCC countries are expected to grow in 2012 as high oil prices will translate into higher demand for migrant workers, including those from developing MENA. Still, remittances to some countries may decline because of fear about developments in domestic financial markets.

**Figure 1.7 Remittance Inflows to MENA (US\$ bn)**



Source: World Bank

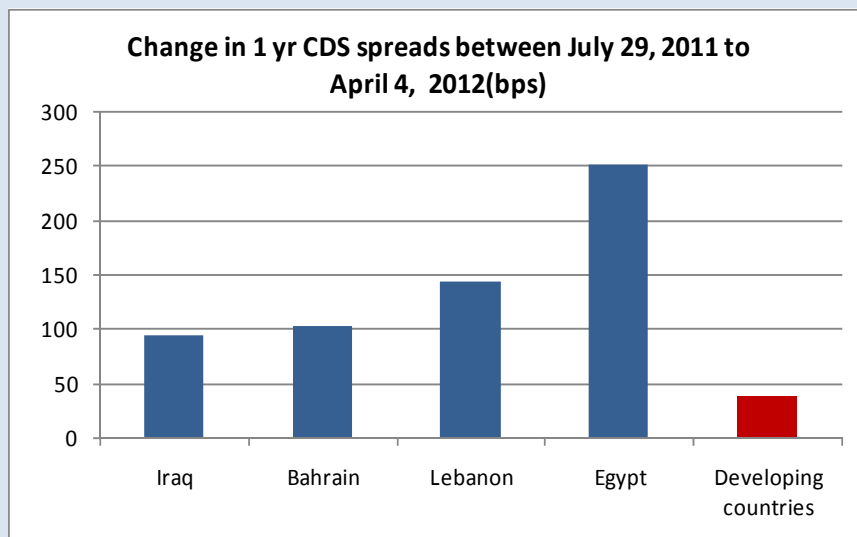
The uncertain political situation and fragile macroeconomic conditions in a number of countries have weakened investor confidence, leading to increases in risk premia and borrowing costs. The cost of insuring against credit default in Egypt, for example, jumped by more than 200 basis points in April 2012 relative to seven months ago. CDS spreads escalated also in Lebanon, Iraq and Bahrain, though by a smaller amount (Figure 1.8). In all these cases, increases were substantially larger than the increase in the developing countries' average CDS spread of about 40 basis points.

The increase in Egypt's borrowing costs reflects Standard & Poor's downgrade of Egypt's long-term foreign and local currency sovereign credit ratings to a negative outlook as foreign reserves plunged more than 50 percent during the past year (Figure 1.9). The increase in Lebanon's CDS



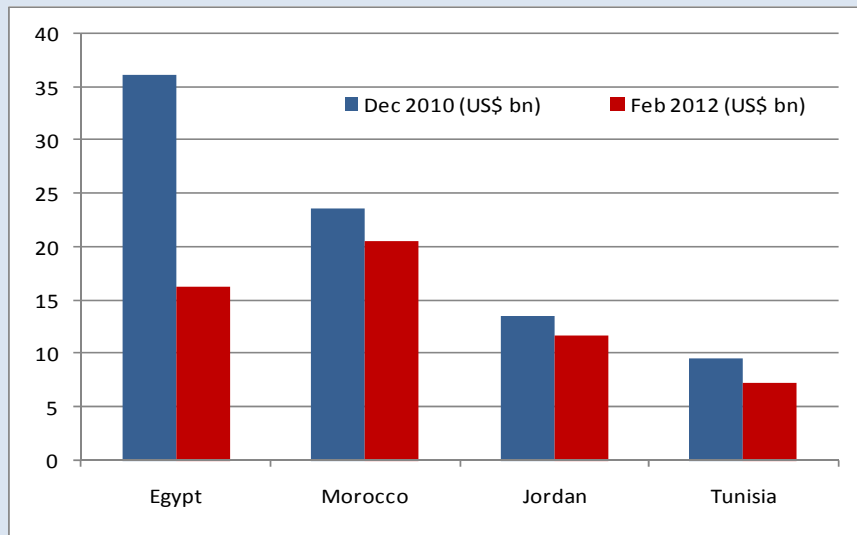
spread can be attributed to fears that violence will spillover from Syria into Lebanon while the increase in Bahrain can be linked to domestic political tensions.

**Figure 1.8 Credit Default Swaps (CDS)**



Source: Datastream

**Figure 1.9 Official Reserves**



Source: National statistical offices and IMF.

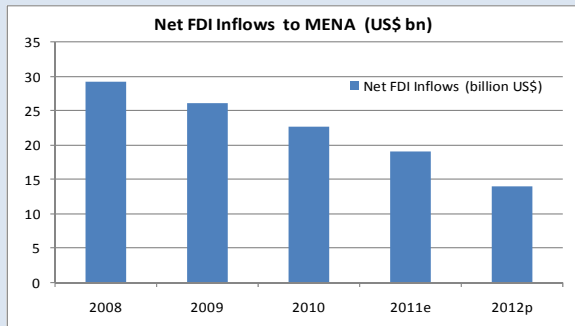
Note: For Morocco and Jordan, data refer to December 2011 and January 2012 respectively.

External financing has not only become more expensive but also more limited due to the ongoing deleveraging and sluggish growth in the Eurozone. Foreign Direct Investment (FDI) inflows to the region declined by about 35 percent in 2011. Egypt observed the largest decline of about 65 percent, followed by Lebanon, Jordan, Morocco and Tunisia (Figure 1.10). Countries with high levels of indebtedness, particularly Lebanon, remain highly vulnerable because they have

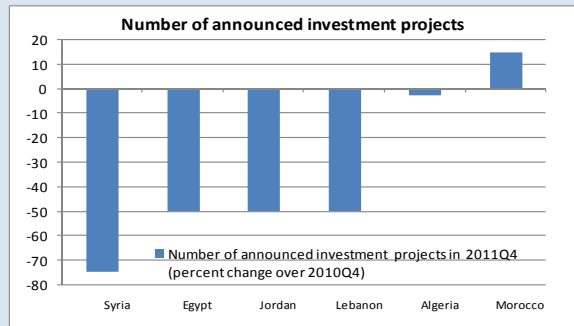
relatively high external financing needs and large current account deficits. For Egypt, aid from GCC and other countries is expected to restore a portion of lost liquidity, and more generally, help the public sector to fill the fiscal shortfalls. However, the actual amount of help received by Egypt from the GCC countries so far is negligible compared to the official promised amount, signaling that Egypt might have to reach out to international financial institutions to fill in its external financing gap.

The number of announced investment projects, which helps predict future FDI inflows, fell substantially over the first three quarters of 2011, except for Algeria and Morocco, signaling that FDI inflows to the region may continue their downward move in 2012.<sup>3</sup> The drop of FDI announcements was most pronounced in the countries undergoing political transformation namely Syria, Egypt, and subsequently countries in close proximity, such as Lebanon and Jordan. In Syria, the number of announced projects was down by 75 percent in the last quarter of 2011 compared to the same quarter in 2010. Announced investment projects declined by half in Egypt, Jordan and Lebanon (Figure 1.10). On the positive side, investors have started returning to Tunisia since February. The Foreign Investment Promotion Agency (FIPA) data show new foreign direct investment rose by 35.2 percent in the first two months of 2012 compared to the same period of 2011. Most of the investment has gone into energy, industrial activities and tourism.

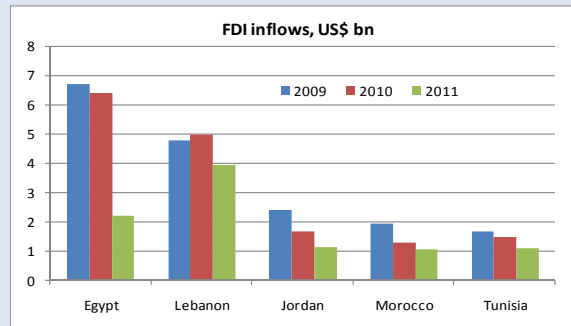
**Figure 1.10 Foreign Direct Investment**



Source: World Bank. Note: GCC excluded



Source: ANIMA-MIPO-Investment Observatory



Source: UNCTAD, International Investment database (update November 2011)

<sup>3</sup> ANIMA Investment Network. 2012. MIPO Reviews. <http://www.animaweb.org/>

### *Risks to the short-term outlook*

The baseline forecast presented in the report is subject to great uncertainty and contingent on developments in the region and beyond. While uncertainties about political transitions and economic challenges remain and could cloud the short-term growth prospects in parts of the region, external factors could alter the regional macroeconomic outlook. These include volatility in oil markets, a deeper than expected slowdown in Europe and a weaker than expected growth in the US and developing countries.

Domestic political developments are the most important factors in the countries in transition. Our outlook assumes slow but steady gains in political and economic stability, but this path is uncertain. There are some serious downside risks, especially in Egypt, as elections approach in the context of economic vulnerability.

Critical to the macroeconomic outlook in the rest of MENA are oil price developments. Continued geopolitical tensions over Iran's nuclear program have raised fears of disruptions to oil supplies and have added an "Iran" premium to global oil prices, stoking precautionary demand for oil (see Box 1.2). Violence in Syria and continued conflict in Yemen have added to these fears.

Predicting how oil prices will evolve in the future is challenging. At this time the market considers an oil price spike more likely than a decline or stagnation in oil prices. But, the upward pressure might be moderated by weakening demand in high income markets, notably the EU, and a possible release of strategic stocks in key developed markets.

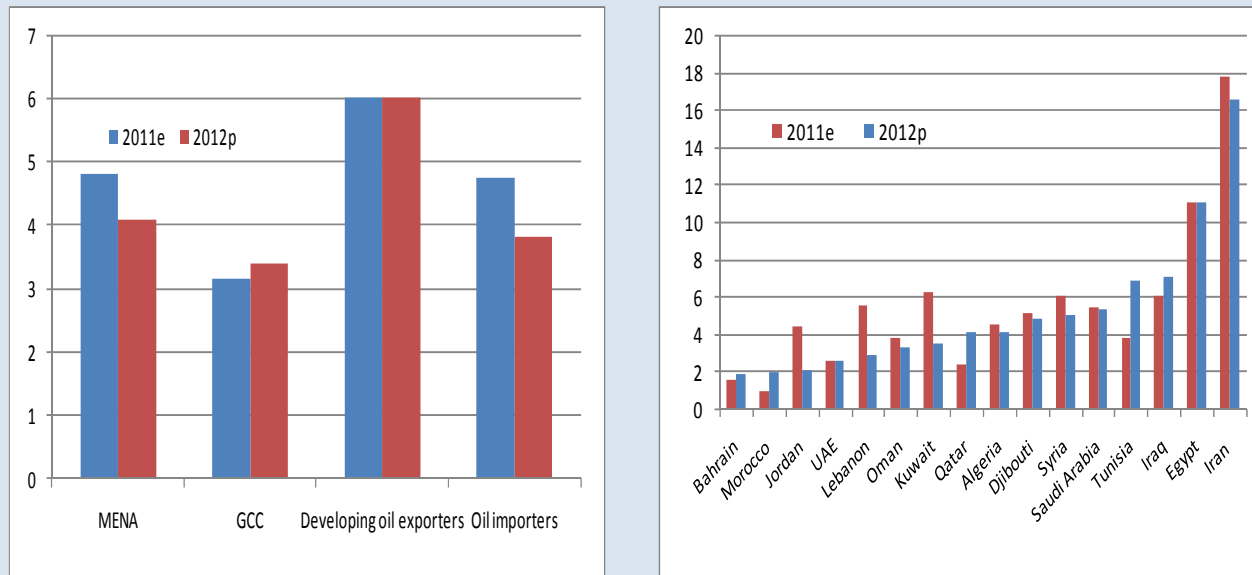
If the oil price shock stems mainly from a supply disruption, it is likely to be temporary (see Box 1.2). The price increase would dampen global growth, and in turn lower oil demand. However, if the supply disruption is accompanied by a precautionary demand shock, triggered by uncertainty about the resolution of geopolitical tensions, the spike may not fade quickly and oil price levels may stay high for some time. In this case the direct impact on some oil importers in the region will be negative and will be felt through increases in input costs that will slow down growth, and worsen fiscal and current account imbalances. These negative effects might be attenuated to some extent by a rise in remittance and investment inflows from oil-rich parts of MENA. Oil exporters, by contrast, will benefit as growth, fiscal and current account indicators improve.

The risk of high oil prices feeding into global food prices is also present (Box 1.3). This could happen because oil prices affect fertilizer, transport and farm machinery usage costs, and demand for biofuels. Historical data show that food prices have risen sharply in real terms in the past few years, although they are much lower today than in the 1970s. Since the 2007 global food crisis, the size of volatility spillovers from global crude oil prices to global food prices have increased markedly. This implies a risk to food-importing MENA, where despite the wide use of general food subsidies, the pass-through from global to domestic food prices is high in some countries.

Subsidies aimed to keep domestic food and energy prices stable are expected to dampen the inflationary effects of increased global food and energy prices, and inflation is expected to remain subdued in 2012 in much of the region. However, there will be significant differences across countries (Figure 1.11). Tunisia is expected to register increased inflation from expansionary fiscal and monetary policy. In Egypt, inflation is high due to rising food prices and expansionary fiscal policy.

Persistent high inflation rates have remained as one of the salient features of the economic environment for developing oil exporters. These rates were high in 2011 and are expected to remain at these levels in 2012 because of domestic factors affecting overall prices, particularly the removal of food and energy subsidies in Iran. Inflationary pressures are emerging in Algeria as food inflation surged by 8.1 percent between December 2011 and February 2012 as a result of poor weather that drove prices of fresh agricultural produce higher during the last trimester. Furthermore, higher public sector wages are also likely to spur inflation going forward. GCC countries have had the lowest inflation rates in MENA, and inflation is expected to remain low in 2012. There is some risk that high public spending could feed into prices later in the year.

**Figure 1.11 Inflation Rates in MENA (Percent)**



Source: National statistical offices, IMF and EIU. Note: The average inflation rates are median rates for the region and sub-regional groups. The GCC group includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE; developing oil exporters – Algeria, Iran, Iraq, and Syria; oil importers – Djibouti, Lebanon, Jordan, Egypt, Morocco, and Tunisia.

### Box 1.2 The Impacts of Oil Price Spike on Growth

Oil prices affect domestic price levels and economic growth. In addition, fluctuations in world oil prices can substantially affect current account balances and government revenues. Positive oil price shocks have different effects on economies depending on whether they are oil-rich or oil-poor. Oil price increases are typically considered “bad” news for oil importers, but “good” news for oil exporters.

Yet evidence of the effects of oil price shocks on macroeconomic aggregates, including growth, is often ambiguous. Despite high price levels, industrialized and emerging oil-importing nations have so far proven to be rather resilient to oil price increases. Rasmussen and Roitman (2011) typically find small effects across the world. Implicit in their approach is the idea that oil prices are exogenous. How can this puzzle be explained?

Kilian (2009) argues that it is essential to understand the underlying source of global oil price shocks. He distinguishes between (a) precautionary demand shocks associated with expectations of higher oil prices, (b) actual demand shocks associated with buoyant economic activity, and (c) supply shocks. Increases in the precautionary demand for crude oil cause an immediate, persistent, and relatively large increase in world prices. Actual increases in aggregate demand cause a delayed, but also substantial global oil price increase. By contrast, crude oil production disruptions typically cause a rather small, mostly transitory increase in the real price of oil.

World crude oil prices are thus fundamentally driven by demand shocks. For oil importers, oil supply disruptions cause a temporary and small decline in real GDP, but have little effect on the price level. The effects of aggregate demand shocks are ambiguous, as increased stimulus and higher energy prices work into opposite directions. By contrast, precautionary demand shocks cause persistent negative effects on growth and increase domestic prices.

These findings are mirrored by Berumet and others (2011) for MENA. In a simple empirical framework, they find positive effects of oil price increases on output growth, even for oil importing countries. Yet when distinguishing between aggregate supply and demand shocks, their findings are different. In oil-importing countries, output decreases with positive oil supply shocks, but is statistically insignificant. Yet output increases with positive oil demand shocks—possibly due to improved external conditions and revenue inflows, which offset increased energy costs. In oil-exporting countries, output increases, regardless of whether oil prices increases are associated with oil demand or supply shocks.

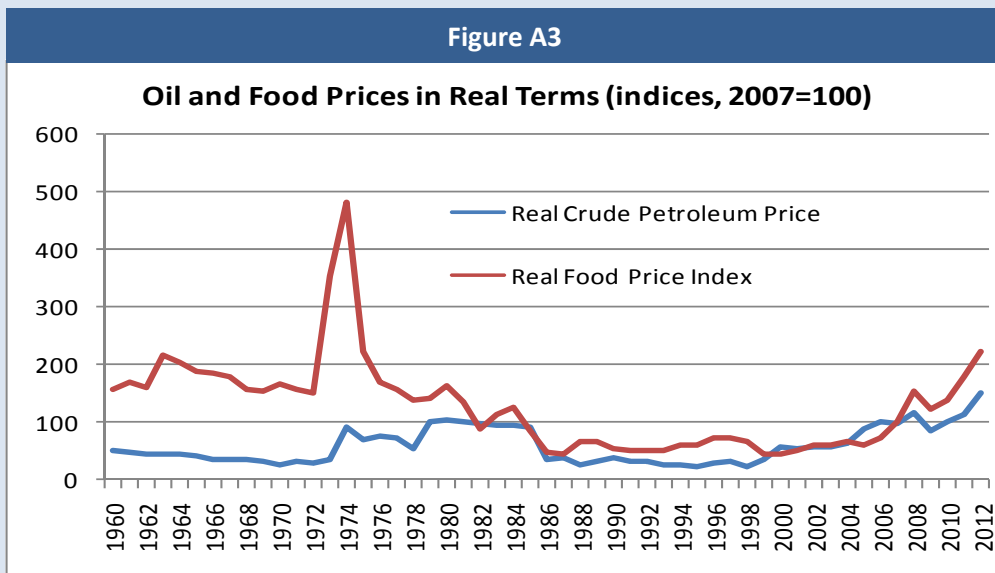
These findings have important implications. First, the current oil price spike could be different from previous price jumps. If it has elements of a precautionary demand shock, triggered for example by uncertainty of global economic prospects and continued geopolitical tensions, crude oil price levels might stay high for some time. Second, if the price increases turn out to be persistent, then they could entail stronger negative economic impacts on growth for MENA’s oil-importers than in previous periods, complicate fiscal policy, and put pressure on domestic currencies.

**Box 1.3 Crude Oil and Food Prices**

By historical standards, current crude oil prices of above 120 US\$/bbl are exceptionally high, while current food prices are still relatively low. The current petroleum price hike is well above the historical peaks in the 1970s. By contrast, the World Bank’s real food price index is lower than during the 1970s, but on a steeply increasing trend. In fact, nominal food prices increased by 2.9% in March 2012 when compared to February. This is the third consecutive rise of the World Bank's food price index since December 2011.

While many factors are important, there is evidence that since 2007 spillovers between international oil and food prices have been linked to changes in international energy prices (Baffes, 2010). These spillovers can be explained by market interdependencies, such as increased costs of fertilizer production, or by price changes in commodity markets, induced for example by ‘speculation’ or growing demand for biofuel production (Dua and others, 2011; Esmaili and Shokoohi, 2011).

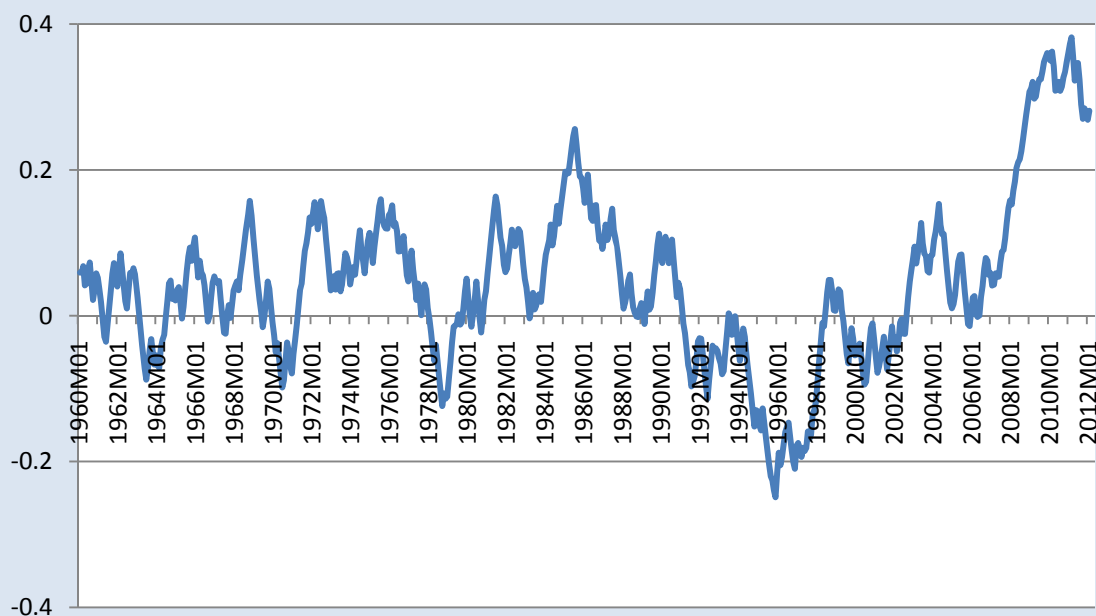
Since the 2007 global food crisis, the size of volatility spillovers has increased markedly, and remains at historically high levels. Volatile international crude oil prices, as predicted by many observers, may therefore feed into volatile food prices. Should international energy and food prices continue their upward trend, increased global food prices could put pressure on domestic MENA food markets. Should future oil prices move downwards, food prices may not immediately adjust because of suspected downward price rigidities (Ianchovichina et al. 2012). Given low stock levels for wheat and maize, prices will also be sensitive to weather conditions and policy reactions in large producing countries. On balance, this suggests an increased volatility risk for food commodities.



Source: World Bank DECPG. Note: The graph plots international crude petroleum price and the food price index in 2007 real terms.

## Box 1.3 (cont'd)

**Figure A4**  
**Volatility Spillovers between Crude Oil and Food Prices, 1960-2012**



Source: Staff estimates based on DECPG commodity price data. Note: The graph plots time-varying correlations between monthly changes in international crude petroleum prices and the World Bank's food price index. Estimates are based on a Dynamic Conditional Correlations GARCH model.

Fiscal vulnerabilities have increased, reflecting sustained, high public spending in the region over the last few years. Sharp increases in spending have made most oil exporters vulnerable to changes in oil prices. Recent estimates show that between 2008 and 2011 the break-even oil price - the price at which a country achieves a fiscal balance - jumped by between US\$20 and US\$60 (Table 1.2). The increase reflects fiscal stimulus and costs accumulated during the global financial and economic crisis of 2008. In some cases, it also reflects the impact of recent political upheavals. In Iraq, the budgeted oil price in 2008 was US\$57 per barrel, but the breakeven oil price was estimated to be twice as much at the end of the year. Should oil prices decline sharply, governments could be forced to cut into spending in a pro-cyclical manner.

The already weak fiscal situation for oil importing countries could further deteriorate as countries deal with the challenge of financing fiscal gaps in an environment of escalating borrowing costs. For example, Egypt has come under significant pressure and the government has been borrowing mainly in domestic financial markets at relatively high interest rates to meet its financial needs (Figure 1.8). Similarly, Tunisia, Morocco, Jordan, and Lebanon have limited fiscal space and extensive short-term financing needs.

**Table 1.2 Break Even Oil Prices, US\$**

	2011	Change in breakeven prices 2008-2011
Qatar	40	20
Kuwait	50	20
UAE	80	60
Iran	85	...
Oman	75	...
Saudi Arabia	80	30
Algeria	95	40
Iraq	100	...
Bahrain	100	25
Syria	100	...

Source: World Bank and IMF

### *Outlook Summary*

In sum, growth in MENA will rebound and reach 4.8 percent in 2012, rising by more than 2 percentage points relative to growth in 2011. This aggregate outcome however hides a two-track growth forecast. Oil exporters will grow much faster relative to oil importers and relative to 2011, provided oil prices remain strong. Oil importers, especially those recovering after political turbulence, remain in vulnerable positions and will grow at half the pace registered by oil exporters. Risks are multiple and reflect the heterogeneous domestic conditions across MENA, especially in the oil importers. They include uncertainties about political transitions, oil price developments, macroeconomic vulnerabilities, and geopolitical tensions.



## ENABLING EMPLOYMENT MIRACLES

The need for more and better jobs has been one of MENA’s longstanding development challenges. To help policymakers address this challenge, we examine how, historically, countries with high levels of unemployment have managed to escape from them, looking for lessons relevant for MENA. Prior to the analysis of such episodes of large and sustained reductions in unemployment, which are referred to as employment miracles, we first present an aggregate overview of MENA’s labor market performance.

### A BIRD’S EYE’S VIEW OF LABOR MARKETS IN MENA

#### *Low participation, high unemployment and heterogeneity across countries*

MENA faces an enormous employment challenge. Figures 2.1, 2.2 and 2.3 tabulate decadal average employment to population rates, labor force participation patterns, and unemployment across regions for the period 1999-2008, demonstrating that MENA’s has the lowest employment to population and labor force participation rates, as well as the highest levels of unemployment. The lack of employment opportunities in the region is also reflected in high levels of informality, manifested, inter alia, in more than a quarter of all output being produced informally, two-thirds of workers not having pensions, and self-employment accounting for approximately 28% of all employment (Gatti, Angel-Urdinola, and Silva 2012).

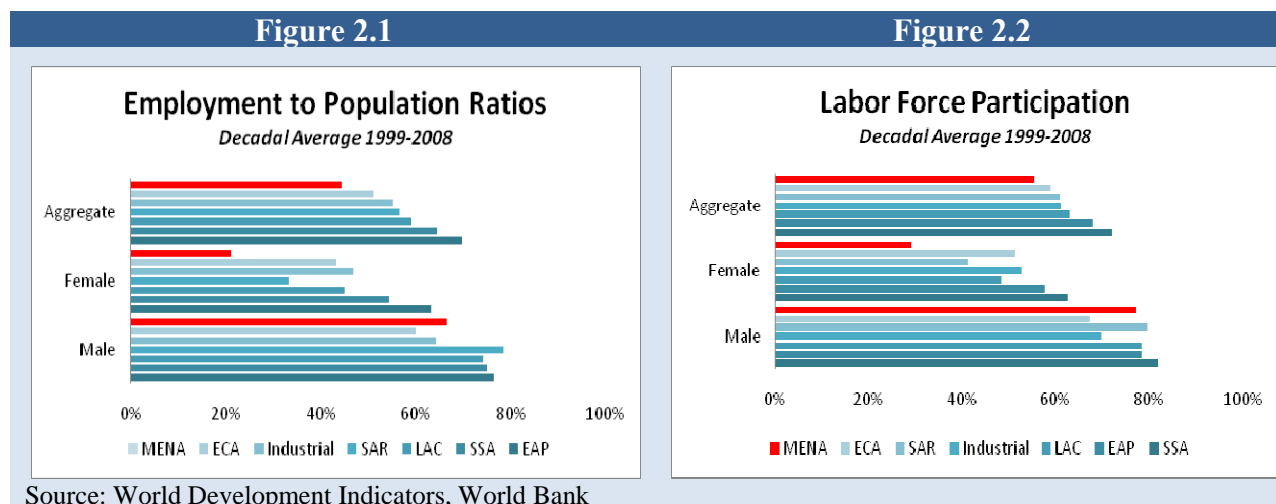
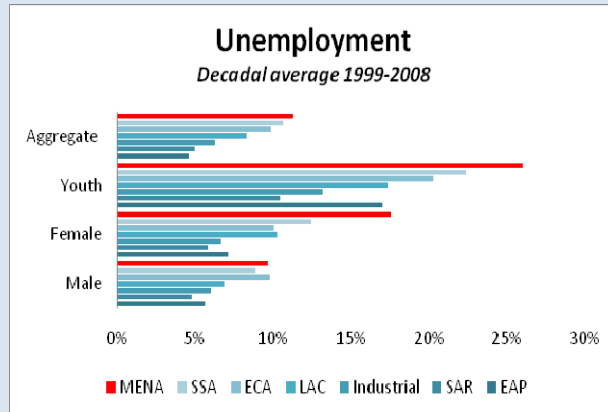


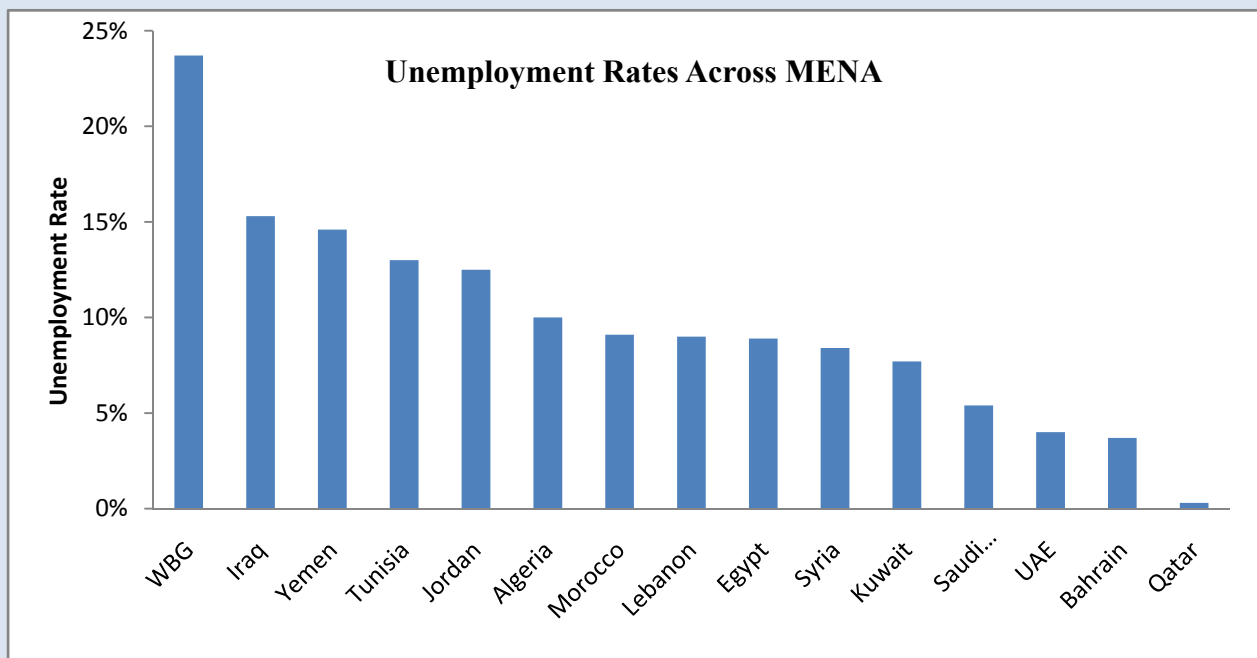
Figure 2.3



Source: World Development Indicators, World Bank

These broad averages mask substantial heterogeneity across countries. The large variability in labor market performance across MENA countries is illustrated in Figure 2.4, which plots national unemployment rates using recent ILO data. Unemployment rates are as high as 23.7% in the West Bank and Gaza, and as low as 0.3% in Qatar. That the West Bank and Gaza, Iraq and Yemen record the highest unemployment rates attests to the debilitating impact of conflict on labor market performance.

Figure 2.4

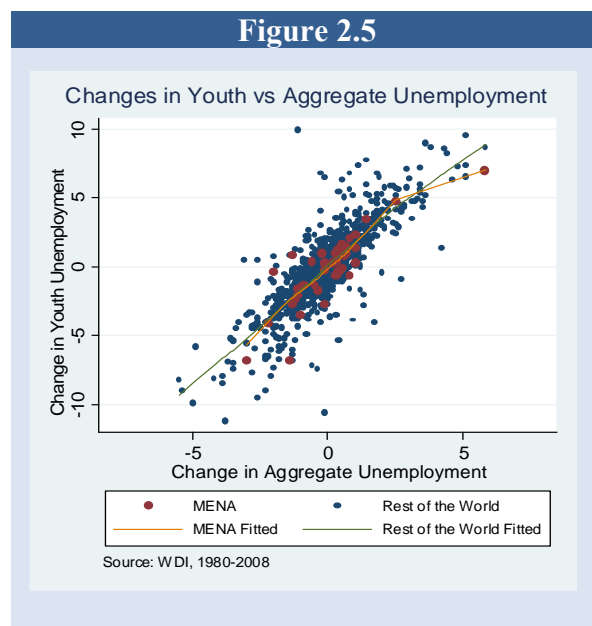


Source: ILO, “Statistical Update on Arab States and Territories in and North African Countries” – May 2011

### *Vulnerable groups: Women and youth*

MENA's employment problem is to a large extent one of substantial underutilization of women's economic potential. MENA's female employment to population ratios are the lowest in the world by a wide margin, and MENA simultaneously records the lowest female labor force participation rates as well as the highest female unemployment rates (see Figures 2.1-2.3); on average, over the past decade, more than two out of three women did not participate in the labor market. Moreover, of those that did, more than three out of 20 were unemployed. Thus, in terms of labor market prospects, women in MENA appear to face special challenges, which are documented in detail in a forthcoming report "Opening Doors: Gender Equality and Development in MENA" (World Bank 2012a). By contrast, men's labor participation rates are on a par with those prevailing in other regions, although they are at heightened risk of being unemployed relative to their peers in regions other than Europe and Central Asia. MENA's low aggregate labor participation rates are thus predominantly driven by limited female participation.

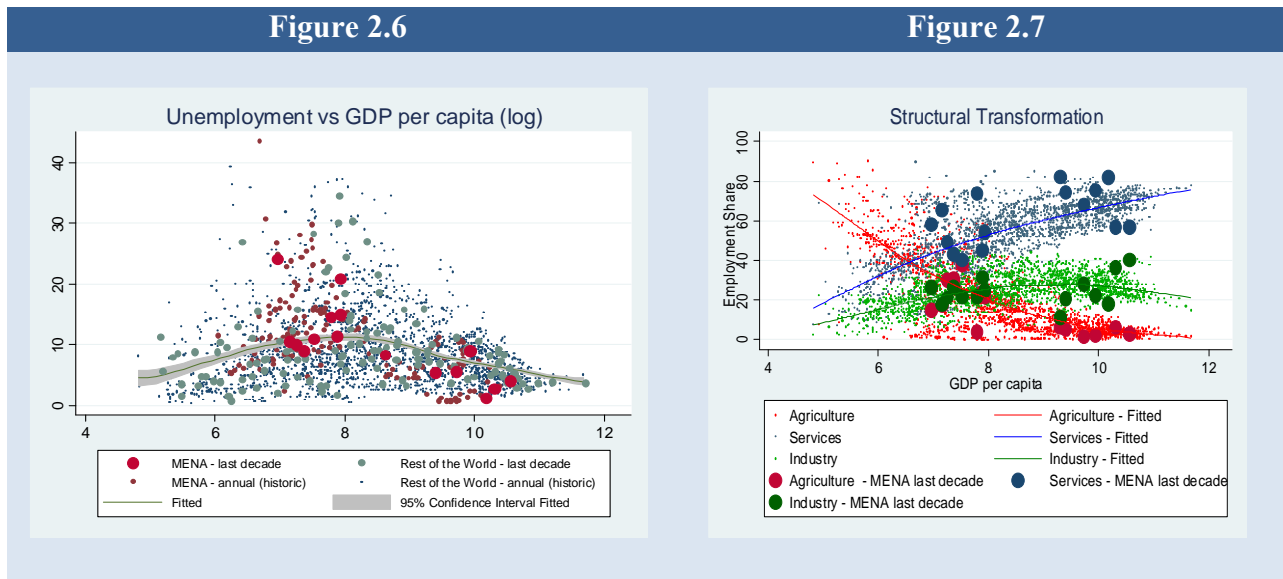
The region also records some of the world's highest levels of youth unemployment. This is troublesome because youth often lack the coping capacity to deal with even short-lived lack of income earning opportunities. They have not yet accumulated the assets required to weather income shocks and are consequently disproportionately dependent on labor income. Moreover, there may be path dependence in employment trajectories; those who are without a job, or in low-quality jobs, at the early stages of their careers are likely to have a harder time obtaining good jobs later in life. Last but not least, youth unemployment may spark social instability and unrest.



Youth unemployment not only tends to be higher, but also much more volatile than aggregate unemployment, as is illustrated in Figure 2.5, which plots annual changes in aggregate unemployment versus annual changes in youth unemployment; youth benefit more from aggregate unemployment reductions, but also appear to suffer more when things take a turn for the worse (again notice the differential scaling of the horizontal and vertical axes). The higher volatility of youth unemployment exacerbates the vulnerability of adolescents, but also means a boost to employment will be a boon for the youth.

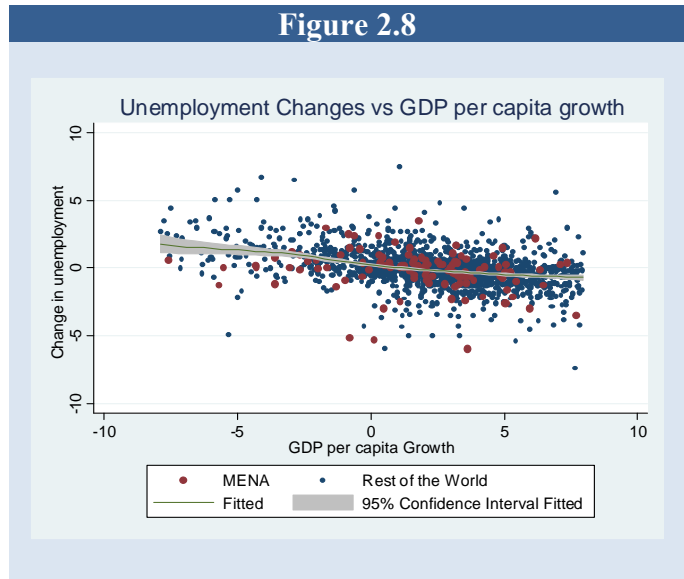
*Growth and a strong business climate are good for jobs*

MENA’s unemployment problem is partly explained by its level of development. Figure 2.6 depicts the relationship between unemployment and GDP per capita, showing that it is roughly inversely U-shaped, separately for MENA and non-MENA countries. It appears as though many of the less affluent MENA countries are at the level of development where unemployment tends to peak and suffer high unemployment. By contrast, the wealthier ones tend to have lower unemployment levels, consistent with the stylized inverse U-shaped relationship between development and unemployment.

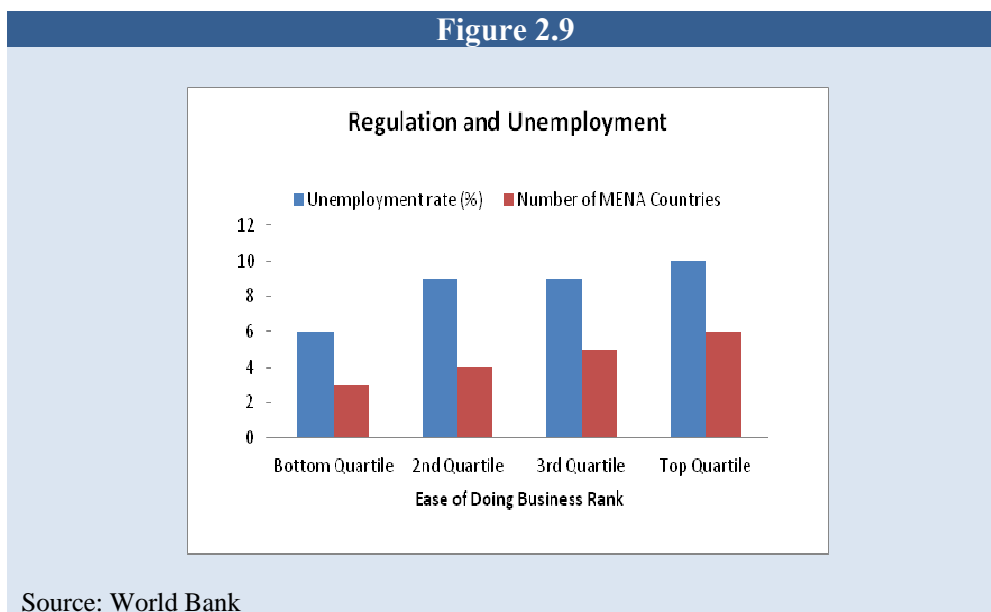


A substantial number of MENA countries are in the comparatively early stages of the process of structural transformation. Figure 2.7 documents the relationship between the sectoral composition of employment and GDP per capita, showing that the process of structural transformation that accompanies the development process coincides with a move of labor away from the agricultural sector into manufacturing and services; the inverse U-shaped association between unemployment and GDP per capita appears to be related to this process. Consistent with the graphs above, it appears as though many of the relatively less affluent MENA countries are still in the relatively early stages of this process. By contrast, in the richer ones agricultural production only accounts for a small fraction of overall employment.

Catalyzing this process of structural transformation by stimulating growth is likely to alleviate MENA’s unemployment challenge. Figure 2.8 supports this claim by demonstrating that growth is typically, but not always, associated with reductions in aggregate unemployment. Note that the relationship between GDP growth and unemployment in MENA countries appears to resemble that prevailing in the rest of the world. In other words, though this is far from a definitive test, the graph suggests that employment-growth elasticities, which measure the likely reduction in unemployment as a result of a change in



GDP, in MENA are not dramatically different from those found elsewhere. This is consistent with the results from the previous edition of this report, which demonstrated that over the period 2004-2008 MENA’s average employment-growth elasticities were comparable to those prevailing in OECD countries and relatively high compared with other regions, with substantial variability across countries. To what extent the relationship between growth and employment is stable over time and can be used for forecasting purposes is uncertain, yet crucially depends, inter alia, on the sectoral composition of growth and the structure of labor markets.



Burdensome business regulations constrain employment creation. Unemployment is substantially lower in countries with better regulation, as is demonstrated in Figure 2.9, which tabulates average unemployment for countries in different quartiles of the Ease of Doing Business rankings in 2008. Countries with better business regulations (i.e. a lower rank) are characterised by lower unemployment levels. Many MENA countries have relatively burdensome business regulations, although a few are found in the bottom quartile. These tend to have lower levels of joblessness. Moreover, regulatory reforms towards greater flexibility are likely to lead to reductions in unemployment; on average, a one standard deviation improvement in the Heritage's Foundation economic freedom index is associated with a 0.9% reduction in unemployment.

Thus, *prima facie*, growth and sound regulation appear important enablers of job creation. These results are confirmed by our in-depth investigation of the determinants of substantial, sustained reductions in unemployment presented in the next section.

## **EMPLOYMENT MIRACLES**

How can policymakers engineer enduring reductions in unemployment? In this section, we attempt to address this question by first examining the incidence, and subsequently the determinants of historical episodes of substantial and sustained drops in unemployment, which are referred to as employment miracles.

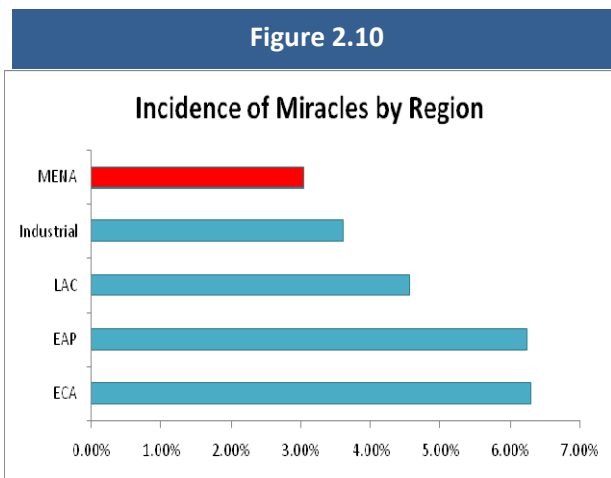
### *What is an employment miracle?*

Employment miracles are episodes of substantial and sustained declines in unemployment. More specifically, a protracted period of unemployment reduction qualifies as an employment miracle if the following conditions are met;

- (i) Unemployment declines at least 3 percentage points over a 4 year period
- (ii) The decline in unemployment over this 4 year period is at least 25% of total initial unemployment
- (iii) The drop in unemployment must remain below the critical unemployment reduction thresholds for at least another 3 years
- (iv) Unemployment strictly declines in the first year of the miracle
- (v) An employment miracle did not commence in the previous 7 years (e.g. in the previous 7 years there was no year in which conditions (i), (ii), (iii) and (iv) were simultaneously met that was not itself preceded by the onset of an employment miracle in the previous 7 years); employment miracles do not overlap.

Conditions (i) and (ii) ensure the reduction in unemployment is large, condition (iii) ensures it is sustained and condition (iv) ensures a miracles start with a decline, while condition (v) rules out overlap between miracles and double-counting the same unemployment reduction episode as two separate miracles.

Of course, this approach is crude, and does not take into account, for example, the quality of employment, nor the sources of employment growth. These issues are beyond the scope of this report and are discussed in a forthcoming volume on the employment challenge in MENA (World Bank 2012b). Moreover, unemployment rates may be affected by changes in labor participation. If labor force participation rises, for example because of demographic trends, unemployment may increase, even if the number of employment opportunities rises. However, the demographic structure of a country’s population appears to have little bearing on the likelihood of a miracle happening *ceteris paribus*. Alternatively, decreases in unemployment may be driven by reductions in labor force participation. Yet, the qualitative results presented below are robust to ruling out cases where labor force participation declines (for additional robustness checks see Freund and Rijkers, forthcoming).



### *How often and where do employment miracles happen?*

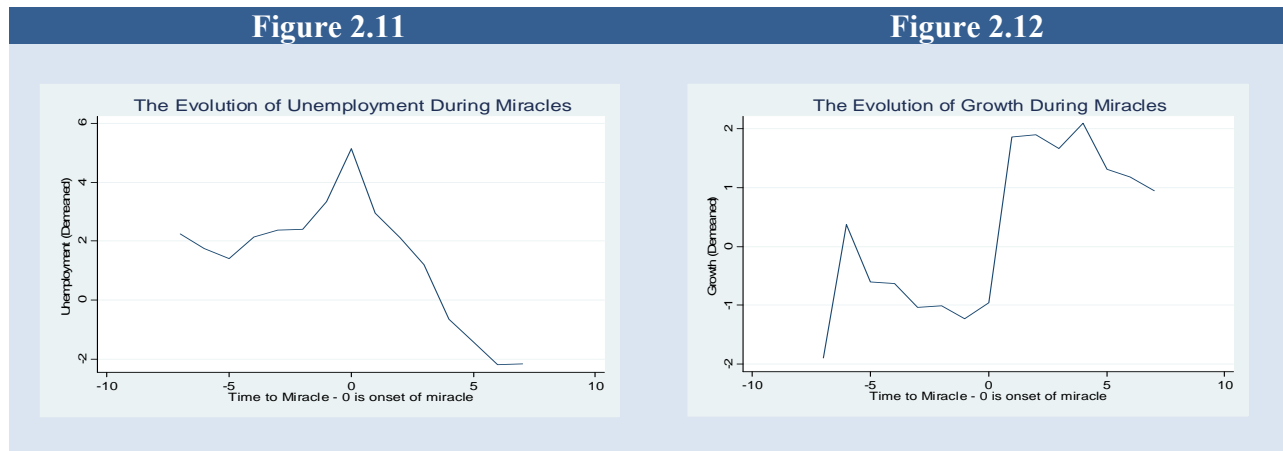
Employment miracles occur fairly frequently and, on average, halve initial unemployment. While the criteria we use to define an employment miracle are inevitably somewhat subjective, they allow us to identify 43 such episodes, using data from 1980-2008. A detailed list of such miracles is provided in the appendix. The table reveals that employment miracles are quite common; Almost half of all the countries in our sample (40 out of 94) have experienced at least one miracle. On average, each year, approximately one in 20 countries that are not in a miracle already embark on an employment miracle. Aside from the sheer number of miracles, the magnitude of the associated decline in unemployment is striking; unemployment declines from an initial average of 14.5% to 8.8% and then to 7.1%, 4 and 7 years after the onset of the miracle respectively. Thus, at the end of the miracle average unemployment was less than half of its initial value.

But employment miracles are not as prevalent in MENA as in other regions although employment miracles fairly common, Figure 2.11 shows that MENA has experienced the lowest incidence of employment miracles. The unconditional chance of a MENA country that is not already in a miracle embarking on one is approximately 3% in any given year. This is the lowest

incidence of miracles in any region for which we have a substantial number of observations.<sup>4</sup> Out of seven MENA countries in our sample, only two, Morocco and Algeria, experienced an employment miracle. And, in the case of Algeria, the expansion in employment was largely driven by public spending, making it unsustainable (Box 2.1).

### *What happens during employment miracles?*

The reduction in unemployment that characterizes employment miracles coincides with an acceleration of average growth. This is illustrated by Figures 2.11 and 2.12, which plot the evolution of unemployment and GDP growth, respectively, demeaned by the sample average. It is noticeable that unemployment tends to increase in the build-up to the onset of the miracle (Figure 2.12), reflecting the fact that miracles often involve a reversal of fortune, which is typically accompanied by a distinct jump in GDP growth (Figure 2.12) at the onset of the employment miracle.



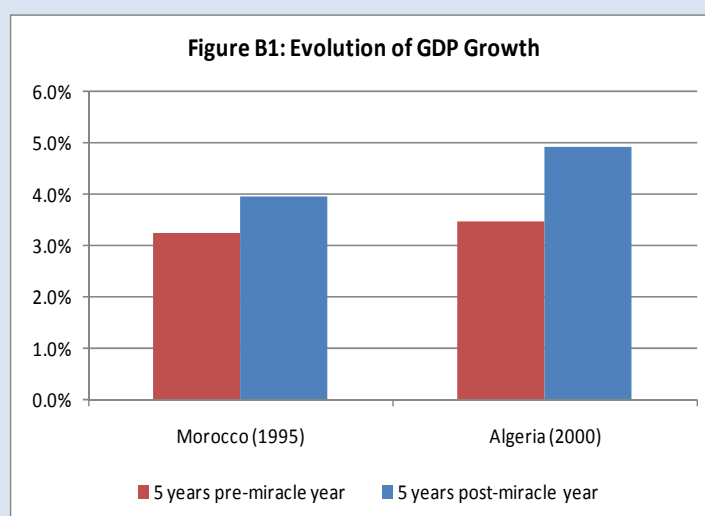
Overall macroeconomic conditions improve during employment miracles. The increase in GDP growth is accompanied by a significant increase in investment as a share of GDP, whereas government spending as a share of GDP declines. In addition, countries experiencing an employment miracle are significantly less likely to be experiencing a crisis than before the onset of an employment miracle, suggesting some miracles concur with recovery from crisis. Miracles are also accompanied by a significant surge in trade; exports and imports both increase significantly but roughly by the same magnitude. Prima facie, these findings lend some credence to trade-led employment creation strategies and underscore the importance of sound macroeconomic policy as an enabler of job creation (See Freund and Rijkers 2012 for details).

<sup>4</sup> The only region where there are fewer miracles is Sub-Saharan Africa, which does not experience any miracles. However, we do not present statistics for this region and for South East Asia, which experienced one miracle, since we only have respectively, 25 and 24 country-year observations in which a miracle could have been identified.



**Box 2.1 MENA Region’s Employment Miracles: Morocco (1995) and Algeria (2000)**

Algeria and Morocco are the only two MENA countries that experienced employment miracles in the last three decades. Both countries witnessed large drops in unemployment after a period of exceptionally high unemployment; In Morocco, unemployment declined from 23% in 1995 to 14% in 1999 and 12% in 2003. In Algeria, unemployment declined from 30% in 2000 to 18% in 2004 and 14% in 2007. These large reductions in unemployment were accompanied both by accelerating growth (Figure B1) and more flexible regulation.



Despite these commonalities, there were also country-specific drivers of the employment miracles. In Morocco, the decline in unemployment was the result of rapid reforms in the latter half of the 1980s including macroeconomic stabilization, devaluation, progressive economic liberalization and deregulation, and launch of a privatization program. Together, these reforms increased investment efficiency and laid a solid foundation for further private sector development, with the private sector share of GDP increasing from 64% in 1985 to 73% in 1997 (World Bank, 1999). A succession of severe droughts (in 1991-93, 1994-5, 1996-7 and 1998-2000), however, kept Morocco’s GDP growth modest and volatile during the decade, though growth still accelerated during the period of declining unemployment. After 2001, the pace of stabilization and structural reforms accelerated again and growth entered an expansive cycle (of about 4% due also to good agricultural seasons), enabling further declines in unemployment.

In Algeria, the improved employment trend was associated with a period of sustained GDP growth, buoyed by rising oil prices and following a decade-long conflict. Expanding oil revenues funded a sizable public investment program throughout the 2000s, enabling expansion of public services and large scale infrastructure development (World Bank, 2007). Public investment as a share of GDP trended upward since 2000, and the private investment share steadily declined. Thus, Algeria’s miracle is more of a reversal of fortune, and less likely to be sustainable than the more typical private-sector led employment booms that happened in other countries in the sample.

Despite these gains, unemployment concerns remain a key issue in both countries, especially in certain pockets. In Morocco urban unemployment rose particularly among women and first time job seekers, as severe droughts in the 1990s dampened the impact of agriculture and rural development reforms and spurred steady rural-urban migration. In Algeria unemployment is high for young graduates, women and people with higher levels of education (IMF, 2012).

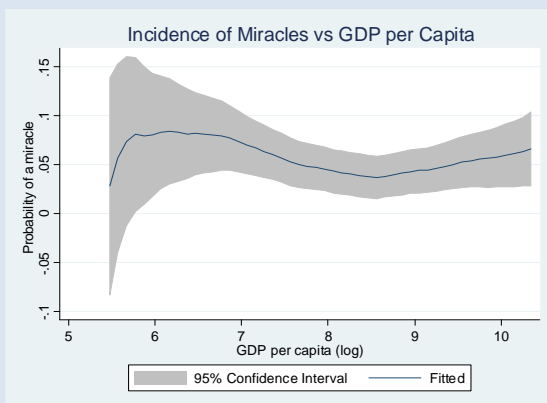
They also point towards the need for caution when considering the expansion of public sector employment as a job creation strategy; such programs tend to impose a substantial fiscal burden, be distortionary and difficult to retrench (See Paci et al., 2012).

During employment miracles, the quality of the regulatory framework, as proxied by the Economic Freedom Index (EFI), improves. Examining the evolution of the sub-components of this index during employment miracles reveals that the improvement in overall regulatory quality is predominantly driven by significantly improved regulation, improvements in the legal system and property rights and access to sound money (reflecting inflation, its volatility, money growth, and the ability to own foreign currency bank accounts). These beneficial changes appear to persist. By contrast, no significant changes in financial openness and labor regulations as proxied by minimum wage stringency, advance notice, severance pay and the generosity of unemployment benefits are detected.

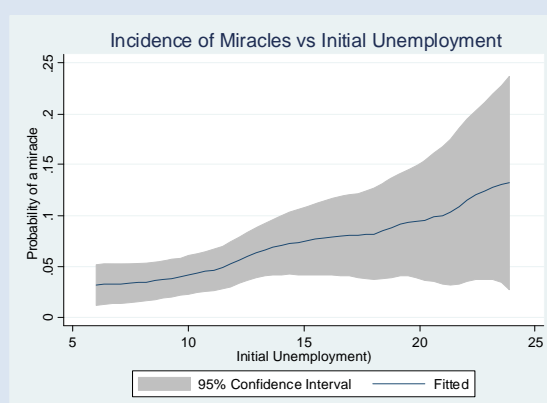
***What conditions enable employment miracles?***

Miracles are difficult to predict ex ante; Except for suffering higher initial unemployment, countries that embark on miracles are surprisingly similar to those that do not. Countries that embark on miracles do not on average differ from ones that do not in terms of their macro-economic pre-conditions, their governance, and their regulatory frameworks at the time of the onset of a miracle. Table 2.2 in the appendix demonstrates that differences in all of these domains at the time of onset of a miracle are typically statistically negligible; countries embarking on miracles are not on average richer, do not grow faster, do not differ in terms of average exports and imports, FDI, aggregate investment, or government consumption levels.

**Figure 2.13**



**Figure 2.14**



They are also not more or less democratic nor are they characterized by superior governance. In addition, they do not outperform countries that do not on a host of indicators of regulatory performance, with the notable exception of the amount of time it takes to enforce a contract. Instead, their main distinguishing feature is that they tend to suffer higher initial unemployment at the time of onset. Figures 2.13 and 2.14 illustrate these results graphically by depicting the relationship between GDP per capita and the incidence of miracles, showing that the level of development is not a potent predictor of the incidence of miracles. By contrast, the incidence of miracles rises with initial unemployment, as is demonstrated in Figure 2.15. That unconditional differences in initial conditions are small helps explain why miracles are difficult to predict ex ante. This is also evidenced by the low explanatory power of our models predicting the onset of miracles.

Nonetheless, good regulation is a critical enabler of employment miracles. According to our estimates, a 1 point improvement in economic regulation as proxied by the Economic Freedom Index increases the probability of the onset of a miracle by approximately 3.6% to 5.0% ceteris paribus.<sup>5</sup>

In terms of employment creation, good regulation pays a double dividend. The positive correlation between regulation and the incidence of miracles is a conditional association; it does not exist unconditionally (see Table 2.2) because countries with good regulatory frameworks are less likely to have high unemployment to start with. However, once they experience high unemployment spells, they are much less likely to get stuck with them for protracted periods of time than countries with more cumbersome regulations. Thus, good regulations appear both associated with lower initial unemployment, as well as better prospects for enduring employment creation in case unemployment is high. This is an important finding for it suggests that better regulation not only improves average labor market outcomes, but also minimizes vulnerability.

### *Which aspects of regulation matter most?*

Flexible business and trade regulations increase the likelihood of miracles. To help policymakers decide which should be their priority reform efforts, the association between various proxies for financial, labor, trade and business regulation is explored. Amongst these, business regulations, notably the time it takes to enforce contracts and to start a business, and trade regulation, proxied by the time it takes to clear customs when exporting and importing, appear to be the most important; reducing the time it takes to get these things done is associated with a strongly increased chance of miracles taking off. These results are displayed graphically in Figure 2.15,

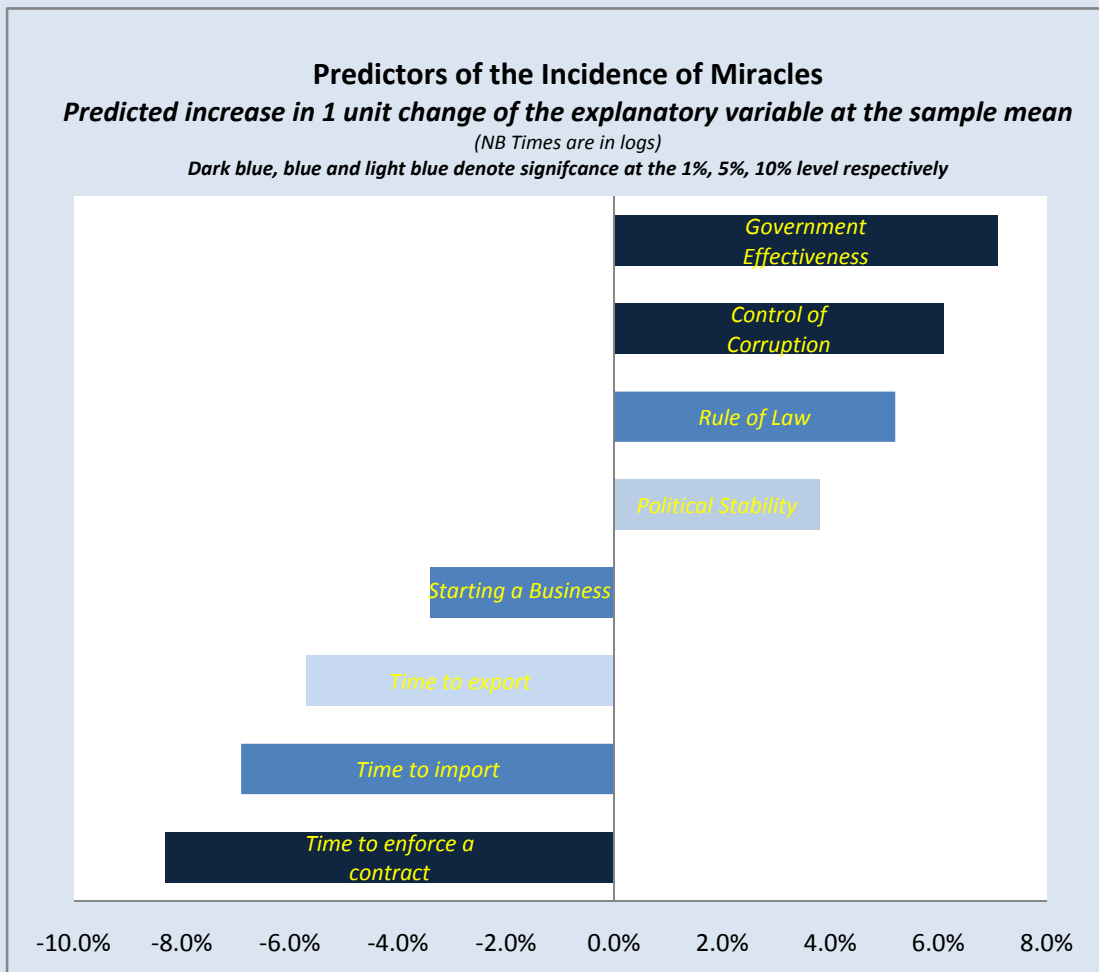
---

<sup>5</sup> This result obtains using various alternative indicators of regulatory quality, and is robust to using alternative definitions of the filter used to identify miracles, alternative parameterizations of the filter, alternative estimation methods, and excluding miracles that are driven by recovery from war or crisis (see Freund and Rijkers, forthcoming).

which plots the association between various proxies for regulation and governance, and the predicted incidence of miracles.

Moreover, the formulation and enforcement of regulation cannot be divorced from good governance, which appears an essential enabler of employment growth; Figure 2.15 and box 2.1 also demonstrate that countries with better rule of law, more effective governments and better control of corruption are more successful at escaping high unemployment. These conclusions should perhaps not come as a surprise, since good governance and sound regulations and enforcement thereof often go hand in hand.

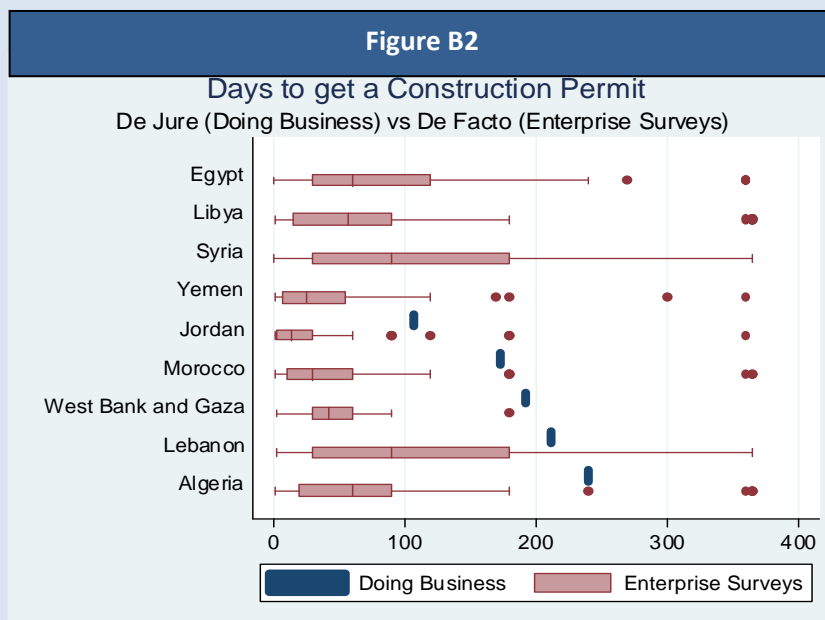
Figure 2.15



Note: These are marginal effects based on probit models of onset.

**Box 2.2 Policy Implementation Uncertainty, Corruption and Private Sector Development in MENA**

MENA entrepreneurs suffer from, and complain about, considerable policy implementation uncertainty. For example, Figure B2 demonstrates that the amount of time it takes to get a construction permit varies enormously across entrepreneurs. There is hardly any correlation between the time it should take to get these things done, as proxied by the *de jure* measures of policy implementation provided by the Doing Business Indicators (highlighted in blue, but not available for all countries in the same year in which the Enterprise Surveys were conducted), and the actual, self-reported policy implementation times documented in the Enterprise Surveys.



This variability in policy implementation is strongly correlated with corruption; our estimates, which are presented in Figure B3 below, suggest that demands for bribes delay policy implementation by approximately 41% when applying for an operating license, 61% when applying for a construction permit, and 24% and 31% when exporting and importing, respectively. These impacts are large, and, moreover, worrisome in view of the widespread prevalence of corruption, and the fact that protracted procedures have been demonstrated to obstruct employment growth.

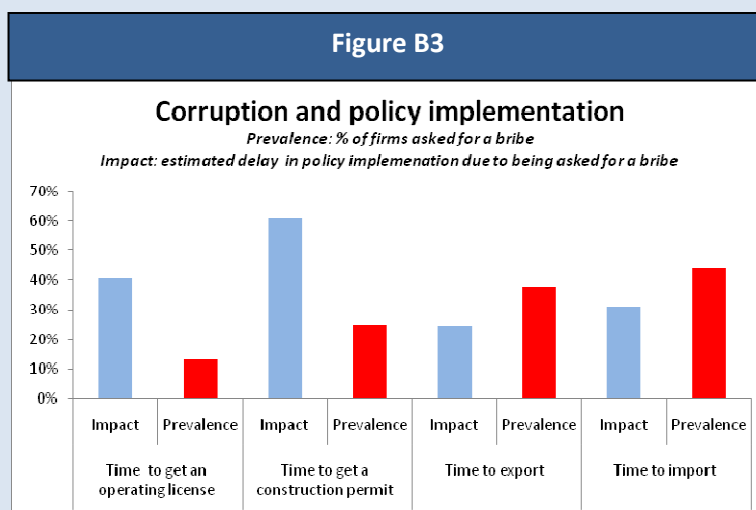
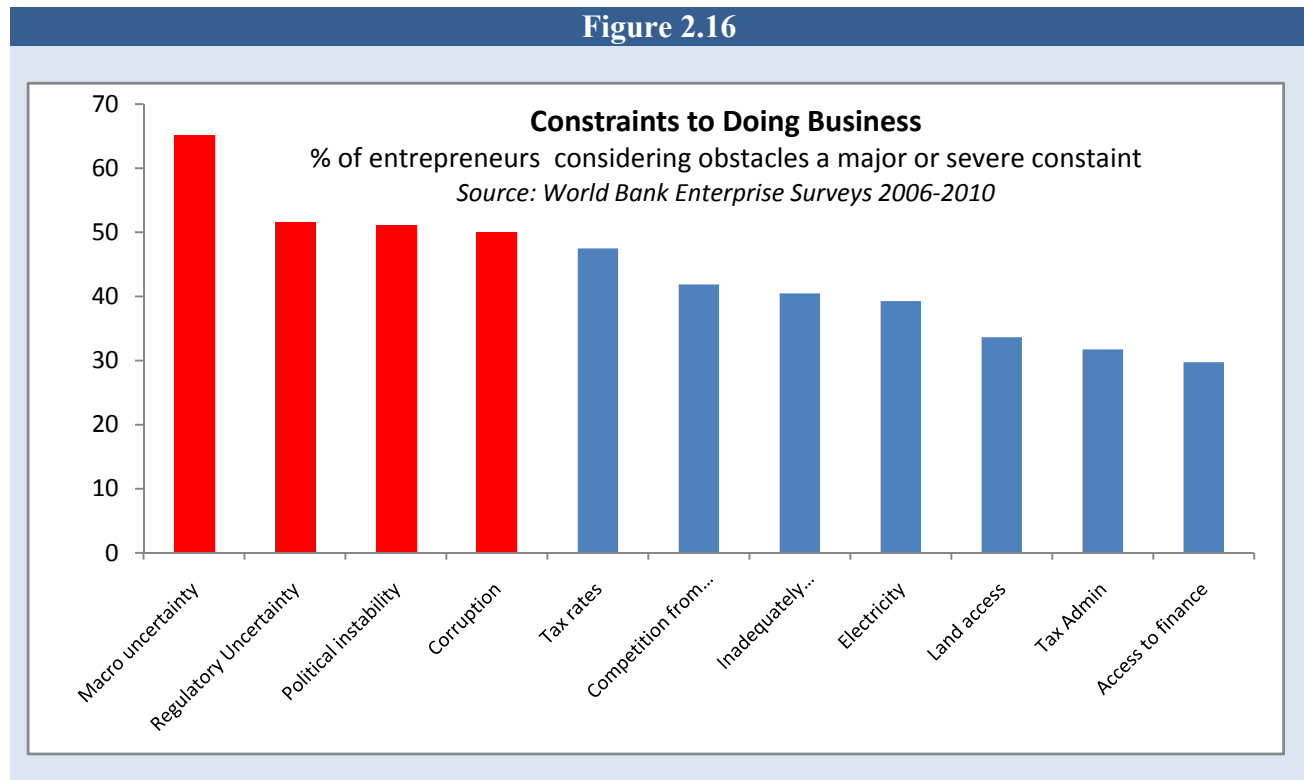


Figure 2.16



### *Asking the Experts: What do entrepreneurs want?*

The analysis thus far has relied on macro-economic data. It is re-assuring however, that our conclusions resonate with what MENA's entrepreneurs themselves consider to be key policy priorities. As is demonstrated in Figure 2.16 according to entrepreneurs who took part in the World Bank's Enterprise Surveys (2006-2010), macroeconomic (and political) stability, consistent enforcement of regulation and control of corruption should be policy priorities, as the absence of these are widely considered to be major impediments to doing business in MENA.

### *Policy priorities: Prudent macroeconomic management, regulation and governance*

This analysis points towards the importance of prudent macroeconomic management, sound regulation and good governance as crucial preconditions for employment growth. Sound business regulations, as well as policies that facilitate trade, are can catalyze the creation of enduring employment opportunities for those countries currently suffering high unemployment. However, when reforming, the devil is in the details, and consistent implementation critical for success. Overall, our findings suggest that the solution to MENA's employment challenge lies in good governance, and associated appropriate regulations and implementation thereof.

**Table 2.1 List of Employment miracles by Region, Country and Year**

Region (countries)	Miracles % (No./Obs)	Year	Country	Unemployment			ΔUnemployment	
				At onset	After 4 years	After 7 years	First 4 years	All 7 years
<b>EAP (9)</b>	6.3%	1986	Malaysia	8.3	5.1	3.0	-3.2	-5.3
		1986	Singapore	6.5	2.1	2.7	-4.5	-3.8
		1987	Thailand	5.8	2.7	1.3	-3.1	-4.5
		1988	Fiji	9.4	5.4	5.4	-4.0	-4.0
		1998	Korea, Rep.	7.0	3.3	3.7	-3.7	-3.3
<b>ECA (19)</b>	6.3%	1993	Hungary	12.1	9.0	6.6	-3.1	-5.5
		1996	Latvia	20.2	13.9	10.5	-6.3	-9.7
		1999	Russia	13.5	8.2	7.2	-5.3	-6.3
		2000	Ukraine	11.6	8.6	6.4	-3.0	-5.2
		2001	Bulgaria	19.4	10.1	5.7	-9.3	-13.7
		2001	Croatia	20.5	12.6	8.4	-7.9	-12.1
		2001	Estonia	12.6	7.9	5.5	-4.7	-7.1
		2001	Lithuania	16.8	8.3	5.8	-8.5	-11.0
<b>Industrial</b>	3.6%	1983	Canada	12.0	8.8	8.1	-3.2	-3.9
		1983	United States	9.6	6.2	5.6	-3.4	-4.0
		1984	Netherlands	14.2	9.1	6.9	-5.1	-7.3
		1986	Portugal	8.6	4.7	5.5	-3.9	-3.1
		1993	Denmark	10.7	5.4	4.5	-5.3	-6.2
		1993	Ireland	15.6	10.2	4.3	-5.4	-11.3
		1993	Britain	10.3	7.1	5.6	-3.2	-4.7
		1994	Finland	16.4	11.4	9.1	-5.0	-7.3
		1995	Netherlands	7.0	3.5	3.1	-3.5	-3.9
		1995	Spain	22.7	15.6	11.4	-7.1	-11.3
		1997	France	12.6	8.6	9.2	-4.0	-3.4
		1997	Sweden	10.0	5.0	6.5	-5.0	-3.5
		<b>LAC (26)</b>	4.6%	1982	Chile	19.6	8.7	5.3
1982	Costa Rica			9.4	6.3	3.7	-3.1	-5.7
1983	Uruguay			15.4	9.1	8.5	-6.3	-6.9
1984	Jamaica			25.6	18.9	15.7	-6.7	-9.9
1985	Colombia			14.0	8.9	9.5	-5.1	-4.5
1985	El Salvador			16.9	8.4	7.9	-8.5	-9.0
1987	Bolivia			20.5	5.9	3.1	-14.6	-17.4
1993	Barbados			25.6	14.6	9.3	-11.0	-16.3
1994	Bahamas, The			13.4	7.6	6.9	-5.8	-6.5
1995	Mexico			6.9	2.5	2.9	-4.4	-4.0
1995	Nicaragua			16.9	10.9	12.2	-6.0	-4.7
1996	Trinidad and			16.3	12.1	10.5	-4.2	-5.8
1997	Cuba			7.1	4.1	1.9	-3.0	-5.2
1999	Jamaica			15.7	11.7	9.6	-4.0	-6.1
2000	Colombia			20.5	13.7	10.9	-6.8	-9.6
<b>MENA (7)</b>	3.0%	1995	Morocco	22.9	13.9	11.6	-9.0	-11.3
		2000	Algeria	29.8	17.7	13.8	-12.1	-16.0
<b>SAR (2)</b>	4% (1/24)	1994	Sri Lanka	13.0	9.1	7.9	-3.9	-5.1
<b>SSA (5)</b>	0% (0/25)							

Notes: the number of observations refers to the number of country-year observations characterized by unemployment in excess of 3% that have not experienced the start of a miracle within the last 7 years. ΔUnemployment refers to the 4 year change in unemployment from the onset of the miracle onwards. \* indicates unemployment rates were imputed.

Table 2.2 Initial Conditions and Descriptive Statistics

	<i>Onset of Miracle</i>			<i>No Takeoff</i>		
	Mean	SD	N	Mean	SD	N
<b><i>Initial Unemployment</i></b>						
Unemployment	<b><u>14.69</u></b>	5.75	42	<b><u>11.67</u></b>	4.99	672
<b><i>GDP</i></b>						
GDP per capital (log)	8.25	1.19	41	8.38	1.10	668
GDP per capita growth	0.78	4.81	42	1.27	4.01	670
<b><i>Trade</i></b>						
Exports	38.66	17.09	40	35.33	19.22	665
Imports	37.75	16.35	40	38.27	20.15	665
FDI	2.67	2.42	41	2.14	5.60	644
<b><i>Core Macro</i></b>						
Investment	19.14	5.30	40	20.45	4.42	654
Government spending	17.21	4.60	42	16.85	5.77	658
Inflation	0.12	0.15	39	0.20	0.47	636
<b><i>Crisis</i></b>						
Crisis	0.14	0.36	35	0.12	0.33	478
<b><i>Democracy and Conflict</i></b>						
Polity Score	6.08	5.63	40	6.95	5.01	600
War	0.13	0.33	40	0.07	0.25	600
<b><i>Overall Regulatory Quality</i></b>						
Economic freedom	6.35	1.08	41	6.21	1.08	605
Ease of Doing Business -Rank	56.90	44.51	40	68.75	47.17	654
Regulation (WGI)	0.62	0.63	42	0.57	0.57	662
<b><i>Dimensions of Economic Freedom</i></b>						
Government Size	5.55	1.40	41	5.55	1.63	602
Legal System	6.15	2.26	40	6.20	2.00	592
Money	7.07	2.16	41	6.75	2.44	611
Free Trade	6.89	1.36	41	6.68	1.27	605
Regulation	6.17	1.01	40	5.90	1.12	598
<b><i>Labor Regulation</i></b>						
Rigidity of Employment DB	27.80	19.09	40	29.47	19.52	654
MW Stringency	0.34	0.20	29	0.40	0.19	415
Unemployment Benefits GRR	0.30	0.28	36	0.25	0.22	482
Severance Pay	1.14	1.69	36	0.96	1.33	489
Advance Notice	2.67	1.87	36	2.35	1.71	489
<b><i>Financial Openness</i></b>						
Financial Openness	0.64	0.29	36	0.63	0.25	495
Domestic Credit to the Private Sector	46.00	1.18	41	47.20	4.79	632
<b><i>Trade Regulation</i></b>						
Time to Export - log(Days) DB	2.85	0.64	40	2.98	0.57	640
Time to Import - log(Days) DB	2.77	0.58	40	2.87	0.51	640
<b><i>Business Regulations</i></b>						
Starting a Business - log(Days) DB	3.43	0.80	38	3.57	0.92	596
Closing a Business - log(Days) DB	1.11	0.35	39	1.24	0.43	633
Time to Enforce a Contract DB log(Days)	<b><u>6.20</u></b>	0.52	40	<b><u>6.41</u></b>	0.45	640
<b><i>Governance (WGI)</i></b>						
Rule of Law	0.49	0.98	42	0.47	0.87	664
Voice	0.53	0.81	42	0.54	0.73	664
Political Stability	0.29	0.91	42	0.18	0.86	664
Government Effectiveness	0.64	1.04	42	0.53	0.97	664
Control of Corruption	0.62	1.07	42	0.48	0.98	662

Notes: Table includes country-year observations that are characterized by unemployment in excess of 6% that have not experienced the start of a miracle within the last 7 years. **Bolded and underlined** coefficients indicate that mean differences in the explanatory variable between countries that experience a miracle and those that do not are significant at the 5% level.



## REFERENCES

---

- Baffes, J. 2010. “More on the energy / non energy price link.” *Applied Economic Letters* 17(16): 1555-1558.
- Berumet, M.H., M.B. Cylan, and N. Dogan. 2011. “The Impact of Oil Price Shocks on Economic Growth in Selected MENA Countries.” *Energy Journal* 31(1): 149-176.
- Bock, R. D. Florea, and J. Toujas-Bernat . 2010. “Spillovers from Europe into Morocco and Tunisia.” *IMF Working Paper* WP 10/238.
- Dua, X. C.L. Yub, and D. J. Hayes. 2011.” Speculation and volatility spillover in the crude oil and agricultural commodity markets: A Bayesian analysis.” *Energy Economics* 33(3): 497–503.
- Esmaeili, A. and Z. Shokoohi, 2011. “Assessing the effect of oil price on world food prices: Application of principal component analysis.” *Energy Policy* 39(2): 1022–1025.
- Freund C, and B. Rijkers, 2012. “Employment Miracles” Forthcoming in World Bank’s MENA Working Paper Series.
- Gatti, R., D. Angel-Urdinola, and J. Silva 2012. *Striving for Better Jobs: The Challenge of Informality in the Middle East and North Africa*, forthcoming World Bank: Washington DC.
- Ianchovichina, E., J. Loening, and C. Wood. 2012 “How Vulnerable Are Arab Countries to Global Food Price Shocks?” Policy Research Working Paper No. 6018, World Bank.
- IMF (2012). Algeria: Selected Issues Paper “Unemployment and Labor Market Issues in Algeria”. IMF Country Report No 12/22, Washington DC: International Monetary Fund.
- Kilian, L. 2009. “Not All Oil Price Shocks Are Alike: Disentangling Demand and Supply Shocks in the Crude Oil Market.” *American Economic Review* 99(3): 1053-1069.
- Paci, P. A. Revenga and B. Rijkers, 2012 “Coping with Crises: Policies to Protect Employment and Earnings” *World Bank Research Observer* 27(1): 106-141.
- Rasmussen, T.N. and A. Roitman. 2011. Oil Shocks in a Global Perspective: Are they Really that Bad? IMF Working Paper WP/11/194.

World Bank (1999). “Kingdom of Morocco - Private sector assessment update: Fulfilling the promise of private sector-led growth.” Private and Financial Sector Development Department, Middle East and North Africa Region. December.

World Bank (2007). “People’s Democratic Republic of Algeria: A Public Expenditure Review.” Assuring High Quality Public Investment (Report Number 36270-DZ), August.

World Bank (2011). *Middle East and North Africa: Investing for Growth and Jobs*, Economic Development s and Prospects Report, World Bank, Washington DC, September.

World Bank (2012a), *Opening Doors: Gender Equality and Development in MENA*, forthcoming, World Bank: Washington DC.

World Bank (2012b). *Bread, Freedom and Dignity: Jobs in the Middle East and North Africa*, forthcoming, World Bank: Washington DC.