



Annual Meeting of Arab Ministers of Finance

April 2016

Manama, Bahrain

Economic Diversification in Oil-Exporting Arab Countries

Prepared by Staff of the International Monetary Fund

I N T E R N A T I O N A L M O N E T A R Y F U N D

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EXECUTIVE SUMMARY

Despite their diversity in size, demographics and wealth, most oil-exporting Arab countries face similar challenges to create jobs and foster more inclusive growth. The current environment of likely durable low oil prices has exacerbated these challenges.

- **The non-oil private sector remains relatively small and, consequently, has been only a limited source of growth and employment.** While some countries have made more headway than others in diversifying their economies, the energy sector, typically highly capital intensive, remains dominant in many economies. However, it creates few jobs directly, while oil revenue is often used to finance an oversized public sector. Still, the employment situation varies greatly across countries: some GCC economies rely on foreign labor to fill private-sector jobs while other Arab oil exporters need to meet the needs of a fast-growing domestic labor force.
- **Because oil is an exhaustible resource, new sectors need to be developed so they can take over as the oil and gas industry dwindles.** While some countries have ample reserves, hydrocarbon resources in a number of Arab countries could be depleted in the foreseeable future. However, even non-oil activities in many oil-exporting Arab countries are to some extent dependent on funding from oil revenues. The challenge therefore is to grow truly self-sufficient non-oil sectors that will provide a sustainable source of growth and employment even when oil resources are depleted. Moreover, even countries with large proven reserves need to save a larger share of their current oil income to promote greater intergenerational equity.
- **Over-reliance on oil also exacerbates macroeconomic volatility.** When oil prices drop, as is presently the case, the related decline in fiscal revenue often requires cuts in public spending, which dampen growth in the non-oil sector and strain the sustainability of public employment.

Greater economic diversification would unlock job-creating growth, increase resilience to oil price volatility and improve prospects for future generations. It would also broaden the base for government revenue thereby reducing the reliance on oil and making the economy more resilient to oil price shocks.

Macro-economic stability and supportive regulatory and institutional frameworks are key prerequisites for economic diversification:

- **Insulating the economy from the impact of oil price volatility is necessary to lay a sound foundation for economic diversification.** It requires sound fiscal policy and framework, effective liquidity management and prudent monetary policy, supportive financial sector policies and a fairly valued exchange rate.
- **Strong regulatory and institutional frameworks are also needed to unlock private sector potential.** Improving the business environment, including streamlining procedures, strengthening economic governance and transparency, and reducing regulatory barriers to

competition are needed for the private sector to grow. Labor market reforms and better access to finance are also necessary.

The public sector should enable, not compete with, the private sector to support economic diversification. Public employment and wage policies need to be tailored to improve incentives and help raise the supply of highly-skilled labor for the private sector. Public spending needs to focus on investment in infrastructure and human capital to improve competitiveness. Reducing excessive monopoly rents in the nontradable sector by increasing competition and enhancing bidding procurement processes would also help boost the private sector.

Policies and strategies to foster the emergence of dynamic new tradable sectors could accelerate economic diversification. Economic diversification requires innovation in processes (to enhance productivity), products (to sustain growth in new sectors), and organizations (to produce more efficiently). Strategies could involve seeking to foster horizontal and vertical diversification, diversifying manufacturing away from oil production, further integrating into the global value chain, and attracting FDI into the non-oil sector.

The appropriate policy package and the sequencing of reforms need to be designed carefully, taking into account each country's specific circumstances and capacities. While the challenges are similar, the diversity in size, demography, wealth, and economic structure of oil-exporting Arab countries will warrant tailored responses. Specific recommendations will therefore vary across countries.

It is acknowledged that economic diversification will not happen without security. Some countries (Iraq, Libya, and Yemen) are affected by wars that severely disrupt economic activity and weaken investor confidence. While this paper does not explicitly discuss this issue, it is understood that restoring political stability and security is a necessary precondition to economic diversification.

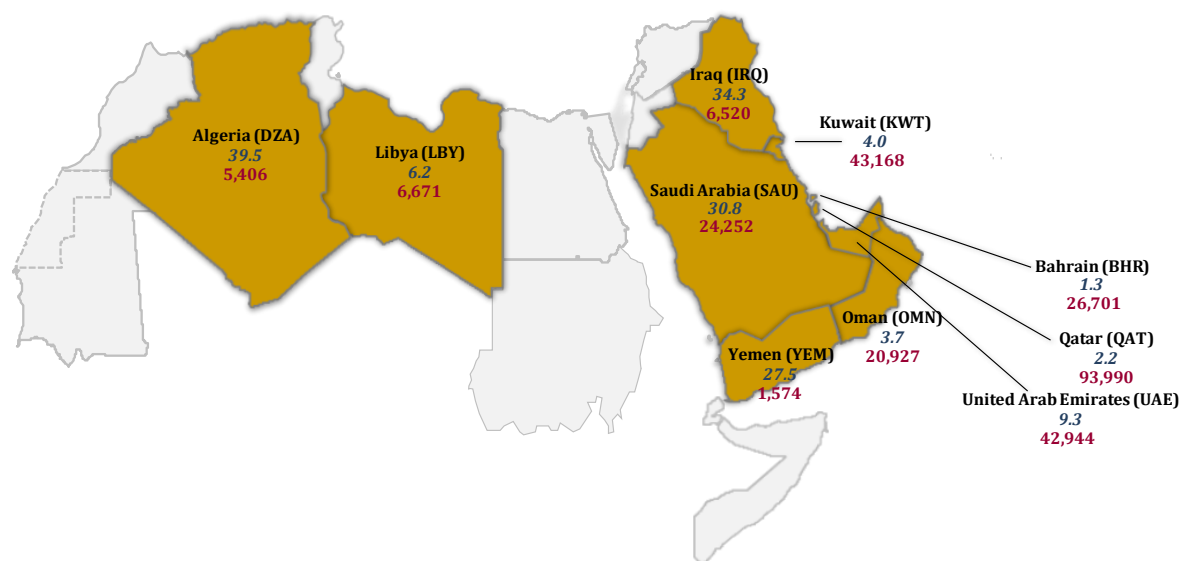
Key Recommendations to Economic Diversification
<i>The table lays out the key policy recommendations to promote economic diversification in oil-exporting Arab countries. Despite commonalities, these countries are diverse in size, demography, wealth and economic structure. Therefore, the appropriate policy package and the sequencing of reforms need to be tailored to country circumstances and capacities, drawing from the recommendations that are the most relevant to each case.</i>
Macroeconomic Pre-Conditions to Economic Diversification
Develop a robust fiscal framework, based on a fiscal rule, to help achieve short and long-term objectives.
Ensure that the use of oil funds is governed by clear and transparent rules.
Improve liquidity management, including liquidity forecasting and the interbank market operations.
Develop strong regulatory, supervisory and macro-prudential frameworks to enhance resilience of the financial sector to the volatility of oil prices.
Promote a fairly valued real effective exchange rate.
Regulatory and Institutional Framework Conducive to Private Sector Growth
Streamline government bureaucracy.
Reduce regulatory barriers to competition, including reviewing competition policy laws and their implementation.
Promote greater trade integration
Review labor regulations to enhance labor market flexibility where needed (e.g., streamline regulations, facilitate labor dispute resolution, and set incentives for higher women participation in the labor force) while fostering better working conditions.
Reduce directed lending and develop domestic securities markets to increase access to finance.
Improve creditor assessment tools and infrastructure and creditor rights to enhance access to credit, especially for small and medium enterprises (SMEs).
A Public Sector that Enables Private Sector Growth
Reduce the size of the public work force and the premium of public over private sector wages for comparably qualified employees. Implement civil service review.
Increase public spending on education if it is low.
Enhance the quality of education, including orienting education and vocational training towards skills needed by the private sector.
Introduce/improve unemployment insurance schemes to ensure the unemployed receive minimum income but have proper incentives to look for work.
Invest in infrastructure while increase the efficiency of public investment.
Enhancing bidding procurement processes.
The Road to a More Diverse Economy
Improve the climate for FDI, including in non-oil industry, by lowering entry requirements, creating investment promotion intermediaries and streamlining tax structures.
Promote deeper integration in global value chains by enhancing efficiency in production, bolstering managerial quality, improving technological capacity and ensuring wage competitiveness.
Support horizontal diversification by enhancing allocation of government oil revenues in a manner that reduces production costs in new sectors and raises their efficiency while encouraging entry of new investors.
Enhance vertical diversification in existing sectors by focusing on moving into higher value-added products in the mineral and chemical industries.
Enhance labor market competitiveness through greater focus on wage growth in line with productivity.

INTRODUCTION

1. This paper was produced at the request of the Arab Monetary Fund to support a discussion among Arab Finance Ministers on the key challenges and policy issues related to economic diversification in oil-exporting Arab countries.^{1,2,3} The paper is organized in two parts. The first part lays out the stylized facts on oil-exporting Arab countries as well as the motivation for economic diversification. It underlines the heterogeneity in conditions across oil-exporting Arab countries and therefore the need to tailor policy advice to country circumstances. It emphasizes that the current context of likely durably lower oil prices increases the need for economic diversification while reducing the means to promote it. The second part discusses the policies to support greater economic diversification. It argues that macroeconomic stability and a supportive regulatory and institutional framework are necessary, but not sufficient conditions for diversification. It then discusses how the public sector can enable, rather than compete with, private sector development. Finally, it sketches how the road to a more diverse economy may look like, drawing from other country experiences.

Population, millions (2014)
GDP per capita, U.S. dollars (2014)

Arab Oil Exporters



Sources: IMF Regional Economic Outlook database; and Microsoft Map Land.

Note: The country names and borders on this map do not necessarily reflect the IMF's official position. Country ISO-3 codes are in brackets.

¹ The paper focuses on the countries in the Middle East and North Africa region that export oil. These are: Algeria, Bahrain, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen.

² The paper was produced by a team led by Jean-François Dauphin and comprising Jean-Frédéric Noah Ndela, Xiangming Fang and Greg Auclair, under the supervision of Aasim M. Husain. Kadia Kebet and Geraldine Cruz provided editorial support.

³ The paper benefited from suggestions made by participants at the meeting of Arab deputy finance ministers that took place in Abu Dhabi on January 13, 2016.

BACKGROUND

Oil-exporting Arab countries face three-pronged policy challenges: creating jobs in line with rapidly growing population, sheltering their economy from volatility of oil prices and ensuring sustainable growth once oil resources are depleted. This section lays out key stylized facts about oil-exporting Arab economies and makes the case that greater economic diversification would help address these challenges.

A. Stylized Facts About Oil-Exporting Arab Countries⁴

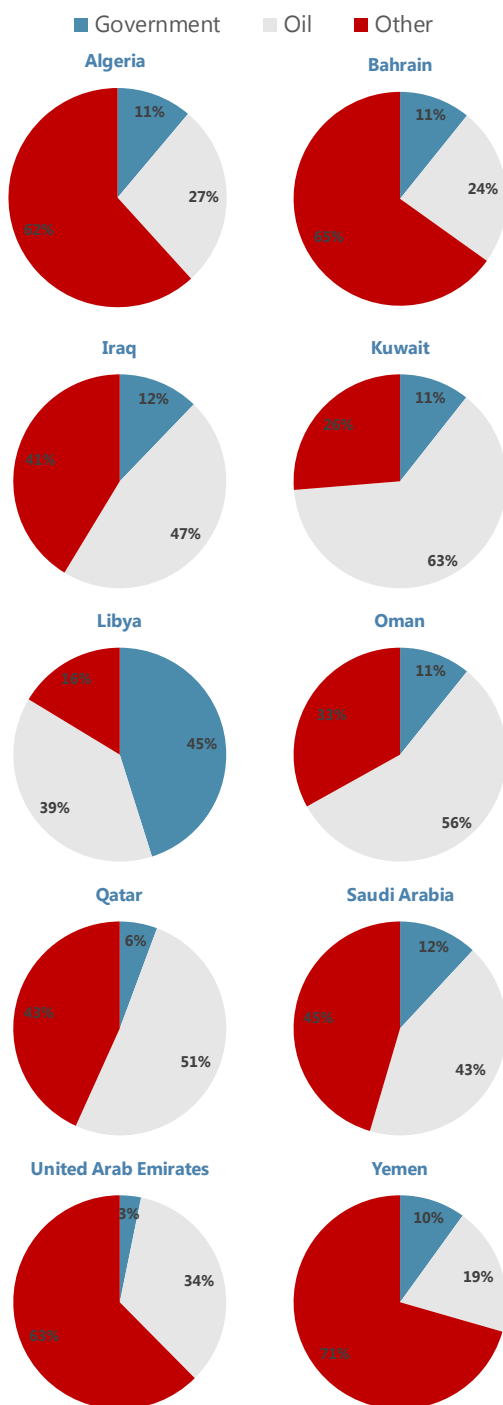
2. Oil-exporting Arab economies are all heavily dependent on oil. In all of these countries, economic activity, fiscal revenue, export earnings and foreign exchange are directly and indirectly dependent on oil production to a large extent (Figure 1).⁵

- **Activity.** Hydrocarbon and government activities (which are heavily funded by oil revenues) account for the majority of total GDP in all countries, except in Algeria, Bahrain and Yemen and the UAE. In Libya for example the non-oil and non-government share in GDP accounts for just about $\frac{1}{6}$ th of total GDP. Furthermore, activity in non-government, non-oil sectors is itself often dependent on oil as the main sources of manufacturing value-added in Arab oil exporters tend to include refinery, chemical, and other mining/extractive industries, i.e. activities that derive from the oil industry and some non oil sectors (e.g., construction in some countries) depend heavily on government contacts (Table 1).
- **Fiscal revenue.** Oil is the primary source of government revenue in all countries. In 2014, the share of oil revenue in total revenue ranged from 47 percent in Yemen to 94 percent in Iraq and averaged 77 percent across the group.
- **Exports.** Similarly, in all countries except the UAE, oil is the main export good. Oil accounts for above 80 percent of total exports in half of the countries in the group, and above 60 percent in all of them except the UAE. In the UAE (as in Bahrain), non-oil exports include a large share of re-exports.⁶

⁴ For cross-country consistency, the data used in this paper draws where available on the October 2015 Regional Economic Outlook and World Economic Outlook. More recent data vintages may be available for particular countries and particular data.

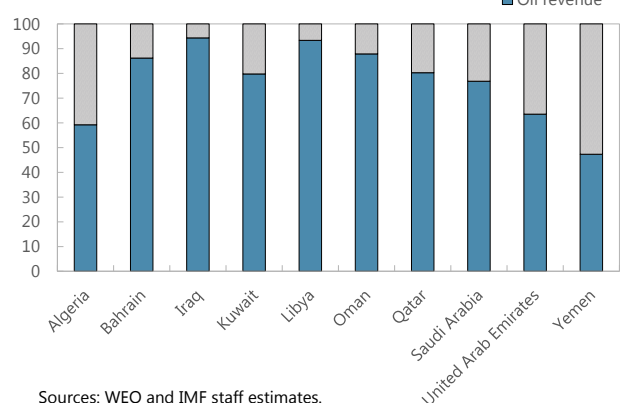
⁵ For simplicity, the paper uses the term “oil” to mean hydrocarbons. In some countries (e.g., Algeria, Qatar), hydrocarbon production includes a significant share of gas.

⁶ Re-exports accounted 24 percent of total non-oil exports of the UAE in 2014 according to the UN Comtrade database.

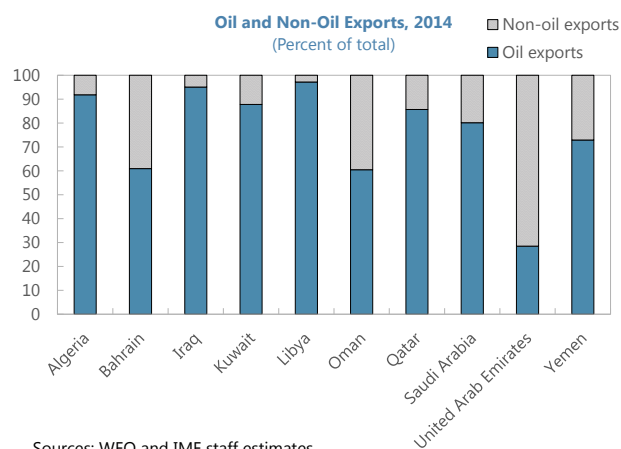
Figure 1. Selected Indicators for Arab Oil Exporters**GDP Composition of Arab Oil Exporters, 2014 ^{1/}**

Sources: WEO; and IMF staff estimates.

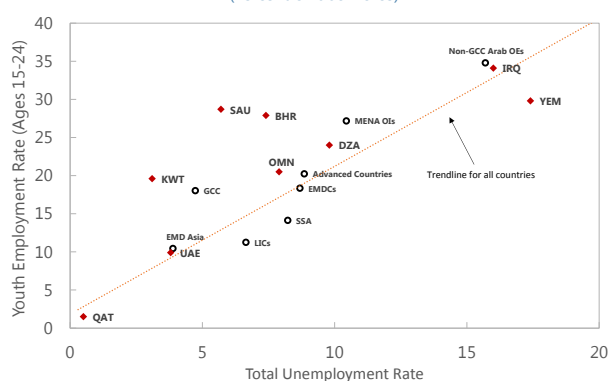
1/ In absence of consistent data public administration value added, government GDP is proxied in this graph by the government wage bill. See Appendix 1.

**Oil and Non-Oil Fiscal Revenue, 2014
(Percent of total government revenue)**

Sources: WEO and IMF staff estimates.

**Oil and Non-Oil Exports, 2014
(Percent of total)**

Sources: WEO and IMF staff estimates.

**Total Unemployment vs. Youth Unemployment, 2013
(Percent of labor force)**

Sources: ILO; World Bank; and IMF staff estimates.

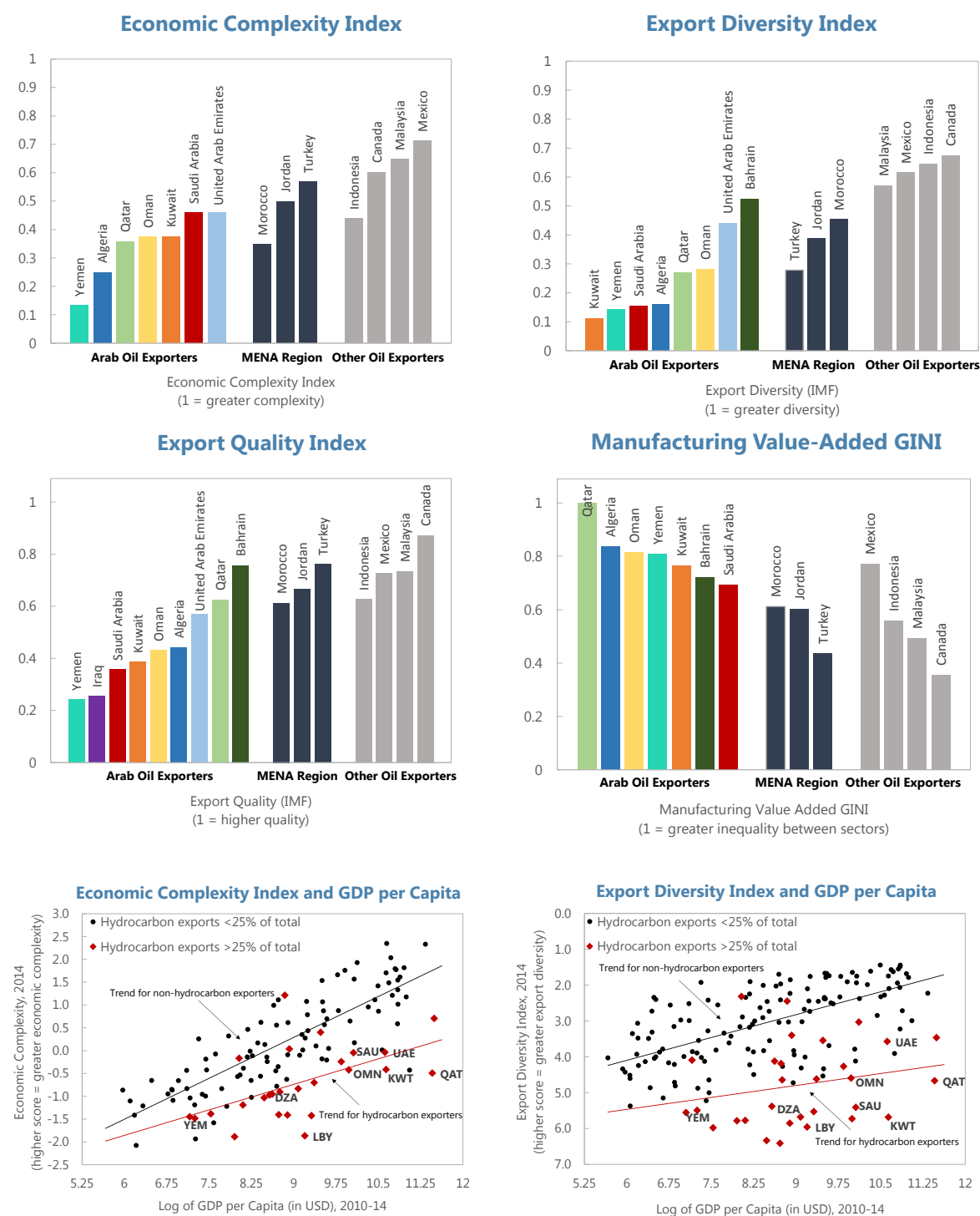
Table 1. Arab Oil Exporters: Key Sectoral Indicators

	Share of GDP (Percent)			Share of employment (Percent)				Main industries
	Agriculture	Industries	Services	Agriculture	Industries	Services		
						Total	Government	
Algeria	8.6	48.3	43.1	14.0	13.4	72.6	32.0	Petroleum, petrochemical, natural gas, light industries, mining, electrical, and food processing
Bahrain	0.3	47.1	52.2	1.0	32.0	67.0	11.6	Petroleum processing and refining, aluminum smelting, iron pelletization, fertilizers, Islamic and offshore banking, insurance, ship repairing, tourism
Iraq	3.3	64.5	32.2	21.6	18.7	59.7	40.0	Petroleum, chemicals, textiles, leather, construction materials, food processing, fertilizer, metal fabrication/processing
Kuwait	0.3	49.4	50.2	...	...	...	27.1	Petroleum, petrochemicals, construction materials and cement, shipbuilding and repair, water desalination, and food processing.
Libya	2.0	45.8	52.2	17.0	23.0	59.0	...	Petroleum, petrochemicals, aluminum, iron and steel, food processing, textiles, handicrafts, cement
Oman	1.3	55.2	43.5	...	...	...	11.0	Crude oil production and refining, natural and liquefied natural gas, construction, cement, copper, steel, chemicals, optic fiber
Qatar	0.1	68.0	31.9	1.3	54.9	43.8	12.1	Liquefied natural gas, crude oil production and refining, ammonia, fertilizers, petrochemicals, steel reinforcing bars, cement, commercial ship repair
Saudi Arabia	2.0	59.7	38.3	6.7	21.4	71.9	30.7	Crude oil production, petroleum refining, basic petrochemicals, ammonia, industrial gases, sodium hydroxide (caustic soda), cement, fertilizer, plastics, metals, commercial ship repair, commercial aircraft repair, construction
United Arab Emirates	0.6	58.9	40.5	7.0	15.0	78.0	28.4	Petroleum and petrochemicals; fishing, aluminum, cement, fertilizers, commercial ship repair, construction materials, handicrafts, textiles
Yemen	9.2	26.8	64.0	...	...	...	12.2	Crude oil production and petroleum refining; small-scale production of cotton textiles, leather goods; food processing; handicrafts; aluminum products; cement; commercial ship repair; natural gas production

Sources: Authorities' data and IMF staff estimates.

3. Reflecting the predominance of the oil sector, economic diversification is generally low in oil-exporting Arab countries (Figure 2, Box 1). Although some countries have made more headway than others in diversifying their economies, most indicators of economic complexity, diversity, and export quality are lower in oil-exporting Arab economies than in many emerging market economies, including other countries in the region and commodity exporters in other regions.⁷ Furthermore, as discussed below, the integration in global value chains remains low.

⁷ Many oil exporting Arab countries have launched over the years initiatives to support a more diversified economy. For example, the UAE has promoted the development of industrial zones and the restructuring of industrial sectors; Algeria implemented large infrastructure projects; in Kuwait, a new Development Plan focuses on large infrastructure projects and is largely financed through partnerships with the private sector.

Figure 2. Measures of Economic Diversity

Sources: The Observatory of Economic Complexity; The Diversification Toolkit (IMF); UNIDO INDSTAT4 Industrial Statistics Database; and IMF staff estimates.

Note: Scales for Economic Complexity, Export Diversity, and Export Quality indices are normalized between 0 (minimum observed value) and 1 (maximum observed value) to facilitate comparison.

Box 1. Measuring Economic Diversification: Concepts and Indicators

Economic diversification can be defined and measured in various ways. Beyond simpler measures of sectoral diversification, this paper measures diversification through four specific indicators from the literature:¹

Economic Complexity Index: This index measures the number of products made by an economy and controls for the likelihood that the same product is also made by others. Countries that produce goods or services that are not made elsewhere receive higher complexity scores than countries whose products are widely manufactured. For example, Germany and Japan have high scores, because they manufacture a wide array of products that very few countries can make. Like the IMF indices (described below), the Economic Complexity Index relies on international trade data. It is based on the assumption that countries will export most high-quality products, and thus, trade data will reflect overall production within the economy.

IMF Export Diversification Index: The IMF Export Diversification Index is calculated using trade data and is a combined measure of the ‘extensive’ and ‘intensive’ dimensions of diversification (also available as separate indices):

- Extensive export diversification reflects an increase in the number of export products or trading partners.
- Intensive export diversification considers the shares of export volumes across active products or trading partners.

A country is less diversified when export revenues are driven by only a few sectors, trading partners, and/or total market share is low. Countries with a large number of exports and trading partners improve their extensive diversification, which in turn provides resilience to market or trading-partner shocks. Claiming greater market share (by product or country) increases intensive diversification, which confers greater pricing power and integration into supply-chains. The Theil index, a measure of inequality, is calculated for the intensive and extensive components of each country/year pair and summed to create a synthetic indicator.

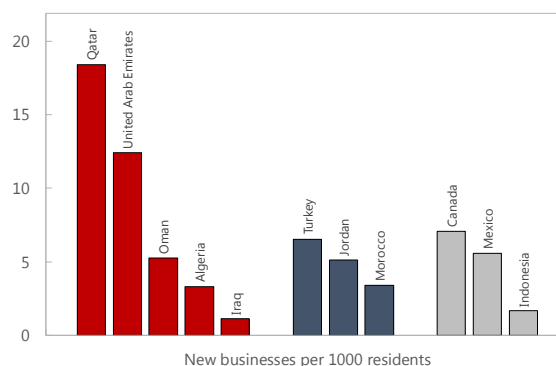
IMF Export Quality Index: This index describes the average quality within any product category. The baseline methodology (see Henn et al., (2013) for more details) estimates quality based on trade price, which is calculated in turn based on three factors: product unit value relative to market prices; exporter income per capita (as a proxy for differences in production technologies); and the distance between importer and exporter.

Manufacturing Value-Added Gini: This is a Gini index constructed on the relative value-added of different manufacturing industries within an economy. The data come from the 2015 UNIDO INDSTAT4 Industrial Statistics Database, which provides manufacturing data disaggregated at the ISIC 3-digit level, including the total value added of each industry classified. A score of 0 indicates complete equality between industries’ value-added within an economy, while a score of 1 indicates the complete dominance of only one industry.

^{1/}Henn, C., C. Papageorgiou, and N. Spatafora, 2013, “Export Quality in Developing Countries” IMF Working Paper 13/108.

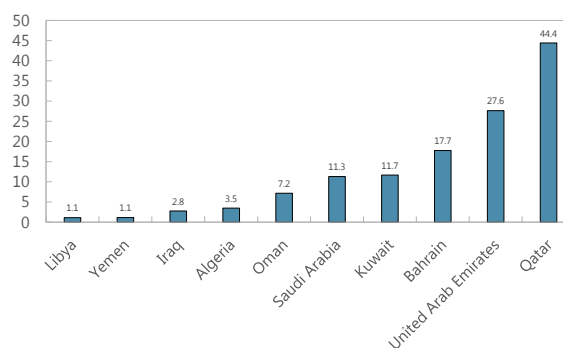
4. The private sector in most oil-exporting Arab countries also remains small in size. Many firms in oil-exporting Arab countries are state-owned and operate in public related services and the private sector remains small in many of these economies. By measures of average firm size and new firms per 1000 residents, the private sector of oil-exporting Arab economies tends to be largely informal or relatively underdeveloped in non-GCC countries.

New Businesses per 1000 Residents, 2008-12 (Average)



Sources: World Bank Enterprise Surveys; WEO; and IMF staff estimates.

5. The size of the economies and GDP per capita vary significantly across countries. Saudi Arabia has the largest economy, with a nominal GDP of US\$746 billion while Bahrain is the smallest of all, with a GDP of US\$34 billion. The disparity in 2014 per-capita-GDP is very large: Qatar had one of the highest per-capita-GDP in the world at close to US\$94,000 (and the highest in the world when measured in purchasing power parity terms). Conversely, Yemen had a GDP per capita of US\$1,574 in 2014. There were also significant variations in real GDP-per-capita growth across countries in the group, but in all countries except Iraq it was lower than the world average of 3.1 percent over 2010-14. Over that period, GDP per capita declined in Yemen and Oman in real terms. When oil and government sectors are excluded (as a measure of the wealth-generating value added produced outside the oil sector), the remaining GDP per capita is fairly low in most countries. Only a few Arab oil exporter economies would have per capita GDPs above the world average.⁸

Non-Government, Non-Oil GDP per Capita, 2014
(In thousands of USD)

Sources: WEO and IMF staff estimates.

6. Although their sizes vary considerably, populations in most oil-exporting Arab countries are young and fast growing. In 2014, national population sizes varied from 630,000 in Bahrain to nearly 40 million in Algeria. With the exception of war-torn Libya, overall populations tended to grow fast, with average annual growth rates over 2010-14 ranging from 1.5 percent in Bahrain to 6.6 percent in Qatar. While the source of population growth is domestic in some countries, like Algeria, a number of Gulf countries rely heavily on migration for labor. Around 10 million migrants are in Saudi Arabia, a third of the total population, while other GCC countries also host large expatriate populations, often more than half of total population. Overall, the share of children ages 15 and younger in the national population is high, although in GCC countries, the large expatriate presence skews the overall population more towards working ages. Populations are

⁸ The world average total GDP per capita was estimated at 10,848 nominal USD in 2014.

predominately urbanized, except in Yemen. The relatively high fertility rates in a number of Arab oil exporter countries indicate that their populations will continue to grow in the near future.

Table 2. Arab Oil Exporters: Selected Economic Indicators, 2014

	Algeria	Bahrain	Iraq	Kuwait	Libya	Oman	Qatar	Saudi Arabia	UAE	Yemen
(In percent, unless otherwise specified)										
Activity										
Nominal GDP (billions of US\$)	213.5	33.9	223.5	172.6	41.1	77.8	210.1	746.2	399.5	43.2
Nominal GDP per capita (US\$)	5,406	26,701	6,520	43,168	6,671	20,927	93,990	24,252	42,944	1,574
Nominal GDP (2010-14 average annual growth rate)	11.8	8.2	15.6	10.5	10.3	11.1	17.2	12.2	9.7	13.2
Oil GDP (share of total nominal GDP)	27.1	24.0	46.5	62.9	38.5	56.1	51.1	42.6	34.3	19.5
Non-oil GDP (share of total nominal GDP)	72.9	76.0	53.5	37.1	61.5	43.9	48.9	57.4	65.7	80.5
Real GDP (2010-14 average annual growth rate)	3.1	4.0	6.5	3.4	2.0	4.5	9.3	5.2	4.5	0.4
Real GDP per capita (2010-14 average annual growth rate)	0.8	2.5	3.8	0.6	0.9	-0.7	2.9	2.3	1.9	-2.5
Real oil GDP (2010-14 average annual growth rate)	-3.0	2.7	6.0	3.4	11.6	2.8	8.7	3.4	5.0	4.6
Real nonoil GDP (2010-14 average annual growth rate)	6.4	4.4	7.2	3.6	1.0	6.2	10.3	6.8	4.3	0.2
Fiscal revenue (2014)										
Oil revenue (share of total) ¹	59.2	86.2	94.4	79.8	93.4	87.9	80.3	76.8	63.5	47.3
Non-oil revenue (share of total) ¹	40.8	13.8	5.6	20.2	6.6	12.1	19.7	23.2	36.5	52.7
Export of goods and services (2014)										
Oil and gas exports (share of total)	91.8	60.9	95.1	87.8	97.2	60.5	85.7	80.2	28.5	72.9
Non-oil exports (share of total)	8.2	39.1	4.9	12.2	2.8	39.5	14.3	19.8	71.5	27.1
Demographics										
Population (millions)	39.5	1.3	34.3	4.0	6.2	3.7	2.2	30.8	9.3	27.5
of which: nationals (millions)	39.4	0.6	...	1.3	...	1.9	0.2	20.7	1.3	...
Population (2010-14 average annual growth rate)	2.3	1.5	2.6	2.8	0.7	5.3	6.6	2.9	2.6	3.0
Population share ages 15 and younger (2013)	27.8	21	40.1	24.8	29.4	23.5	13.6	29	15.3	40.2
Fertility rate (2012, births per woman)	2.8	2.1	4.1	2.6	2.4	2.9	2.0	2.7	1.8	4.2
Unemployment rate (2013)	9.8	3.8	16.0	3.1	19.6	7.9	0.5	5.7	3.8	17.4
Youth unemployment rate (2013, ages 15-24)	24.0	27.9	34.1	19.6	51.2	20.5	1.5	28.7	9.9	29.8

Sources: ILO; World Bank; WEO; and IMF staff estimates.

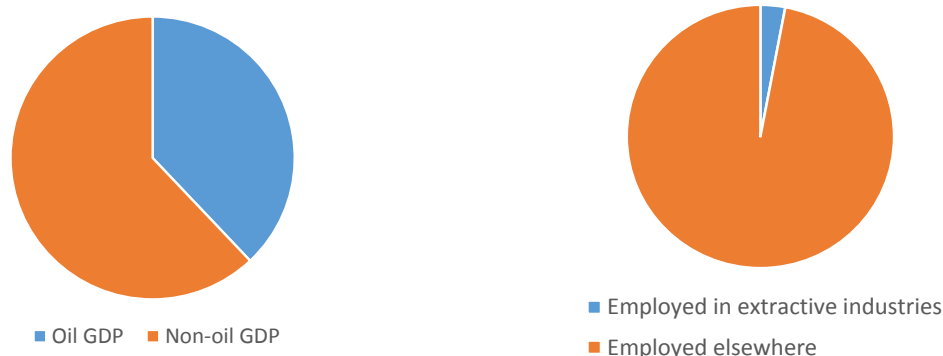
¹ Calculated from central government revenue for Algeria; otherwise general government is used. Oil GDP and revenue includes all hydrocarbons (oil and gas).

B. The Case and Context for Economic Diversification

7. The oil sector cannot be a sustainable source of jobs to absorb the growing workforce.

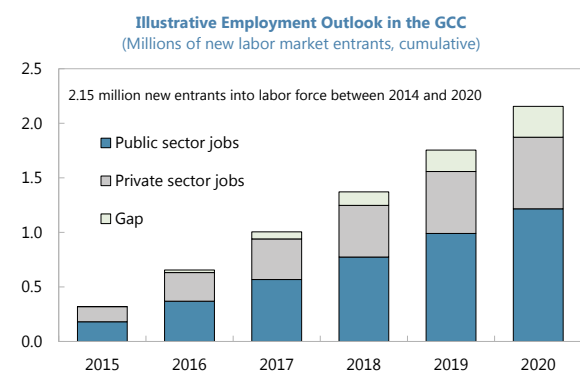
The dominance of oil in oil-exporting Arab economies contributes to shape the economic structure toward energy intensive activities and/or energy dependent services. However, the energy industry, is typically highly capital intensive and generates fewer jobs than other sectors.

Arab Oil Exporters: Oil GDP and Employment in Extractive Industries (Share of total GDP and employment, percent)



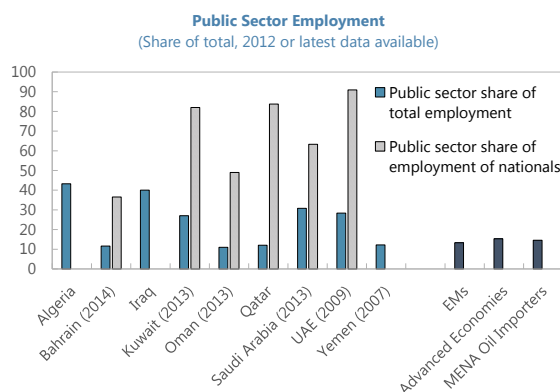
Sources: ILO; WEO; and IMF staff estimates.

8. Furthermore, a significant share of employment in many countries is provided by the government, financed through volatile and exhaustible oil revenue. In many oil-exporting Arab economies, the public sector is a major source of employment. In Algeria and Iraq for instance, the public sector absorbs more than 40 percent of total employment. On average elsewhere in the world, about 90 percent of the jobs are provided by the private sector.⁹ The fiscal cost of government employment is mostly financed by volatile oil revenue. Maintaining the level of public employment steady, as governments typically seek to do, transfers oil revenue volatility to the budget balance. At the same time, the exhaustibility of oil resource jeopardizes the sustainability of public employment in the long run while the domestic workforce in many oil-exporting Arab countries is typically young and set to continue growing rapidly.



Sources: National authorities; and IMF staff calculations.

⁹ Note: Data for U.A.E. not included. Public sector jobs are projected by using historical growth rate (4.6%), while private sector jobs are projected by using historical employment-non-oil growth elasticities and non-oil growth current WEO projections (as in Behar, 2015).



Sources: ILO; UNDP; authorities' data; and IMF staff estimates.

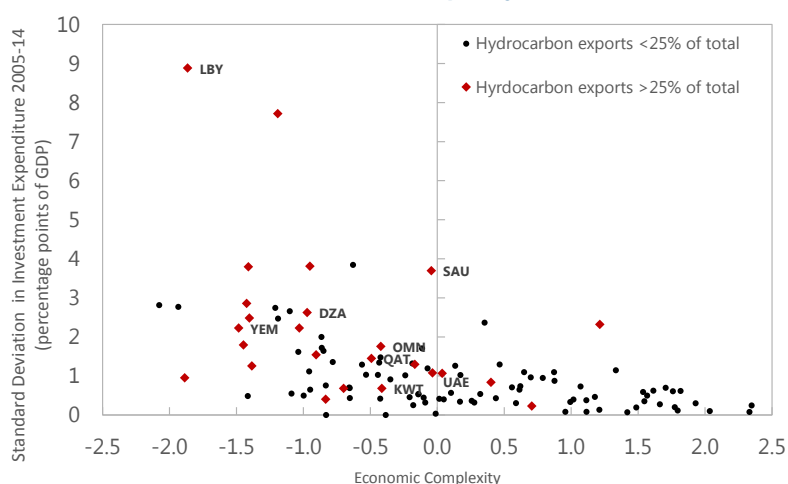
⁹ World Bank, 2012.

9. A competitive private sector would provide a more sustainable source of growth and employment. In most economies in the world, services in the private sector lead job creation, followed by manufacturing, with the share of the agriculture typically declining. Within the private sector, small and medium enterprises (SMEs) are the primary source of job creation.¹⁰ This suggests that greater economic diversification, reflected in a private-sector driven economy operating in a wide range of profitable sectors, would provide a more sustainable source of productive jobs, reducing total employment's exposure to volatile and exhaustible source of financing.

10. Greater economic diversification would shield the economy from the volatility of the global oil market. Wide fluctuations in hydrocarbon prices is a key source of macroeconomic volatility, notably in the fiscal and external sectors given the high dependence of fiscal and export

revenues on oil prices. When oil prices drop, as they did in 2014, oil-exporting countries experience significant decline in government revenue, public spending (consequently), current account balance and (potentially) international reserves. Shrinking oil revenues affect domestic consumption as many jobs in oil-exporting countries are directly or indirectly linked to the performance of the oil sector. In downturns, many job seekers may have fewer job opportunities, which means less income and little prospect for increasing households' wealth. For example, the GCC countries experienced a long decline in consumption per capita in the early 1980s and returned to the early 1980s level only in the late 2000s, well after the oil price boom began.¹¹ Furthermore, lower fiscal spending (e.g., cut in public investment programs) also weighs on economic activity in the short run and may reduce medium-term potential growth. Reducing the reliance on oil revenue through greater economic diversification is an important way of fostering a more stable economy.

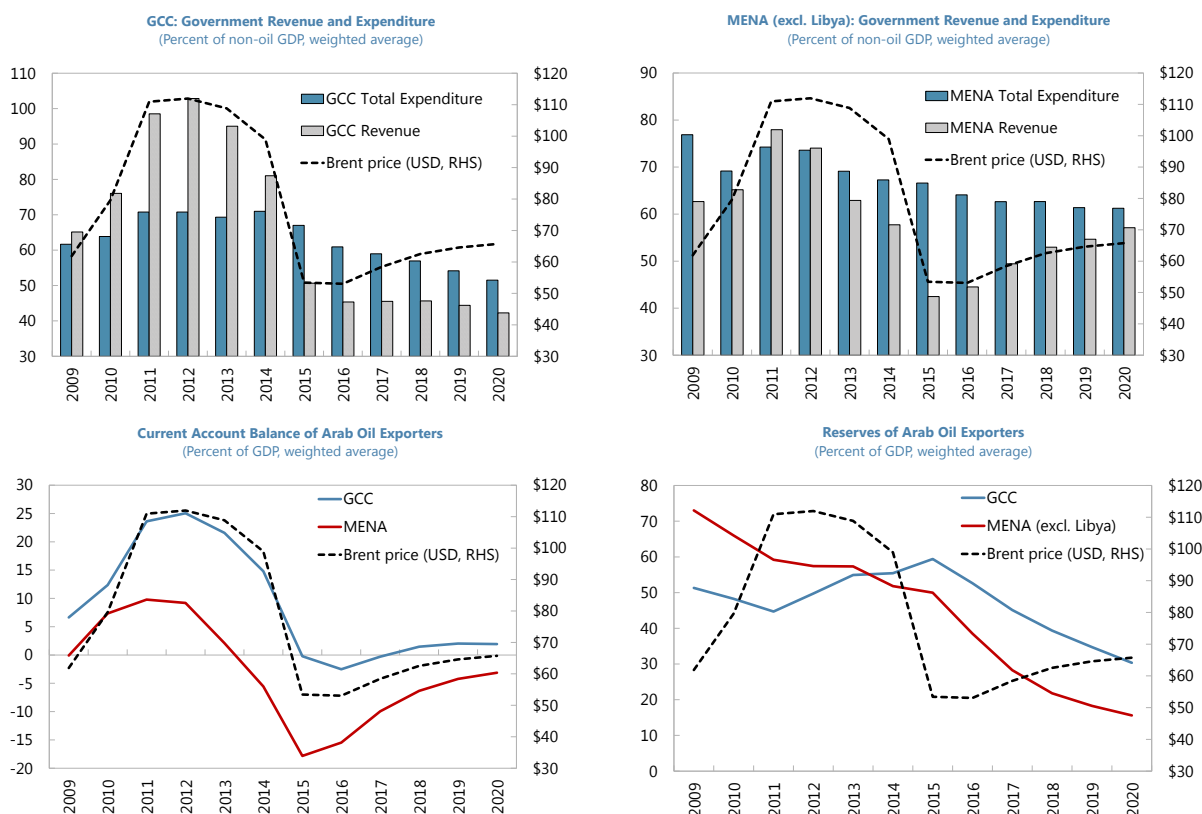
Volatility of Government Investment Expenditure and Economic Complexity, 2014



Sources: Observatory of Economic Complexity; WEO, and IMF staff estimates.

¹⁰ IFC 2013: Jobs study.

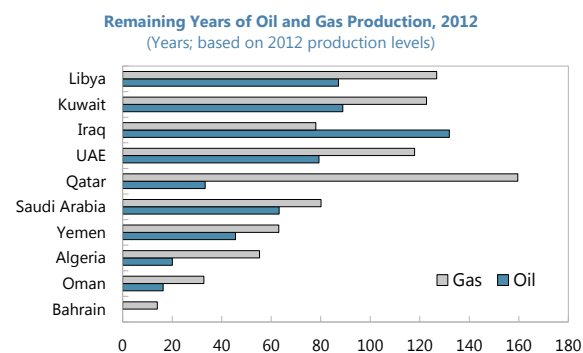
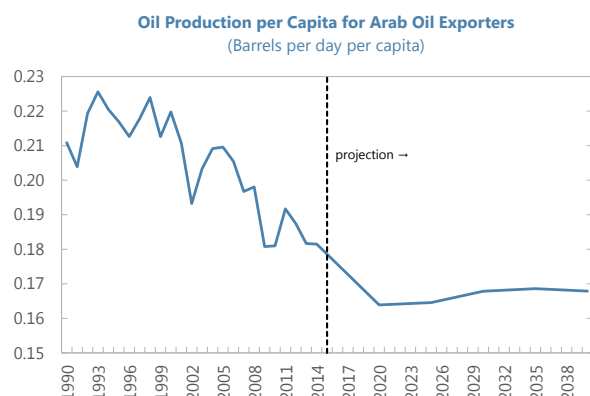
¹¹ IMF 2014: GCC diversification.

Figure 3. Projected Impact of the Recent Drop in Oil Prices

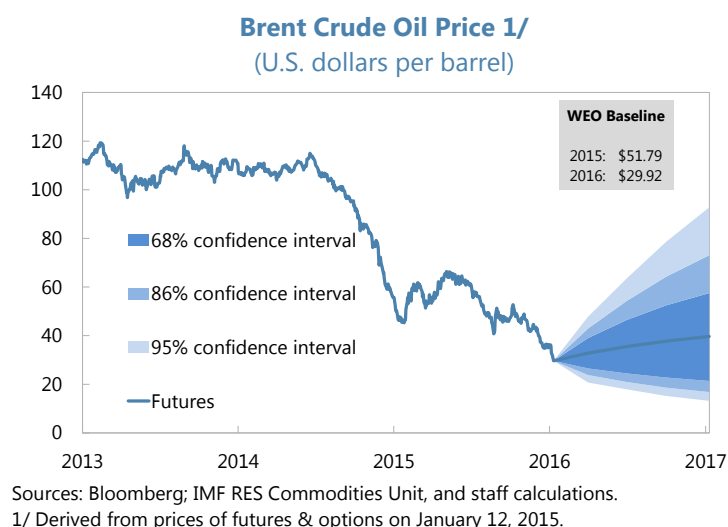
Sources: WEO; and IMF staff estimates.

11. Diversification would also sustain economic growth when oil resources are depleted.

As oil is an exhaustible resource, oil revenues will eventually dwindle. While some oil-exporting Arab countries have a long oil production horizon, hydrocarbon resources in a number of others (e.g. Bahrain, Oman) are expected to be depleted in the foreseeable future. Governments' resources will diminish and their capacity to support economic growth will be impaired. Sustaining growth requires developing new sectors to take over and provide alternative sources of revenues as the oil and gas industry dwindles. Strong private investment should become the impetus for growth when high public investment can no longer be maintained. Moreover, it would raise non-oil production and compensate the eventual loss of government revenue from the oil sector. A dynamic and diverse export sector would help preserve the sustainability of the current account and provide a more steady source of reserve accumulation. Moreover, even countries with large proven reserves need to nurture the development of a vibrant non-oil sector to provide suitable employment opportunities for their citizens.



12. The current environment of lower oil prices adds urgency to long-standing efforts to diversify oil-exporting Arab economies. Oil prices have dropped dramatically since mid-2014. Going forward, oil prices are expected to remain low, increasing only modestly over the medium term. Therefore, oil exporters need to adjust their policies to preserve macroeconomic stability. Absent adjustment, and with the exception of Kuwait, Qatar, and the UAE, oil-exporting Arab countries could substantially run down their fiscal buffers in the next five years or less. Thus, the need for significant fiscal consolidation and external sector adjustment implies a more constrained context for promoting economic diversification given the reduced fiscal space to support it. Fiscal consolidation will also weigh on growth, adding urgency to the implementation of structural reforms to boost potential growth and employment. Nonetheless, the current environment provides an opportunity to move ahead with some difficult but necessary reforms, notably that of energy subsidies.

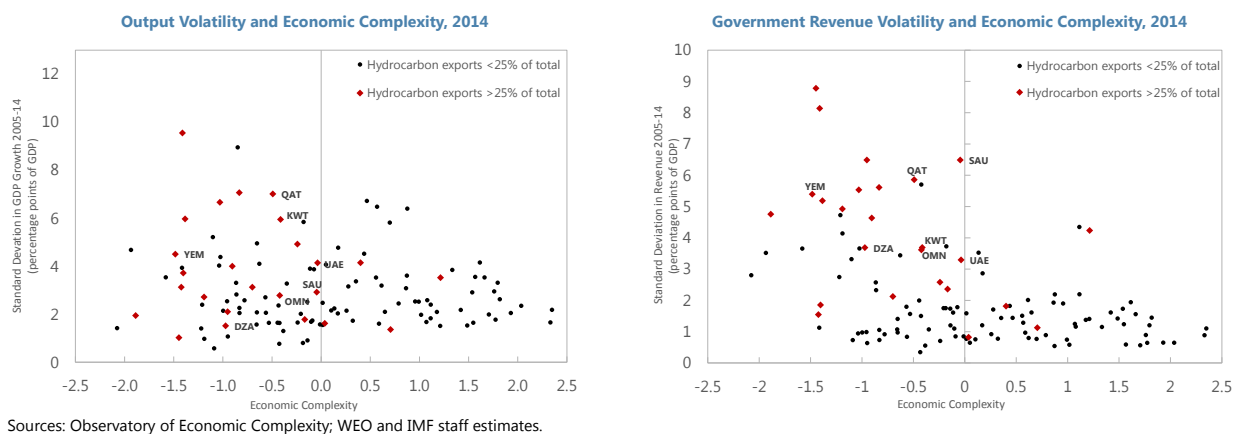


POLICY DISCUSSION

A. Macroeconomic Pre-Conditions to Economic Diversification

This section discusses the macroeconomic pre-conditions to economic diversification. Drawing from the existing literature, it argues that fostering macro-stability and insulating the economy from the impact of oil price volatility is necessary to lay a sound foundation for the diversification of oil-exporting Arab countries. It briefly discusses the policies needed to achieve such stability, including the appropriate fiscal policy and framework, effective liquidity management, supportive financial sector policies, including macro-prudential policies, and the need for a fairly valued exchange rate.

13. Macroeconomic stability and economic diversification reinforce each other. Empirical evidence shows that countries with a diversified economic structure are more resilient to exogenous shocks. Indeed during the great recession in 2008-09, economies with a more diversified export structure weathered better international trade shocks.¹² Moreover, output volatility tends to be lower in economies with a more complex structure. Likewise, volatility of government revenue diminishes as an economy becomes more complex and diversified. In this regard, the relatively high volatility in output and government revenue observed in oil-exporting Arab economies during 2005–14 could be partly explained by a lower degree of diversification, hence reliance on oil. In turn, fostering macroeconomic stability through appropriate economic and financial policies is a prerequisite to the development of a viable and diverse non-oil sector.

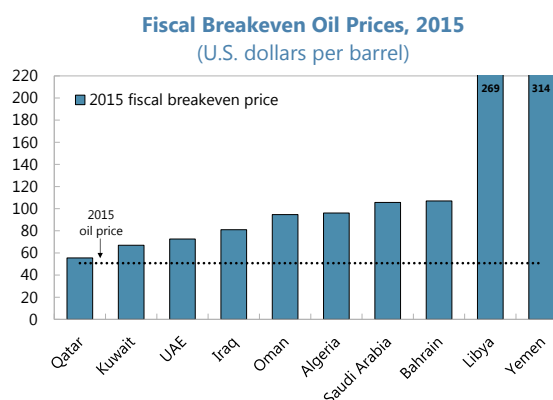


¹² See UNDP, 2011. The study shows that East Asian economies lost 18 percent of export revenue in 2009, while Middle East and African economies, which exhibit a higher export concentration ratio, lost about 30 percent of export revenue. This loss in export revenue also translated in growth performance with growth in South Asia declining by 1.4 percentage points while growth in Africa fell on average by 3.4 percentage points. Growth in Arab oil-exporting Arab countries fell by 5.7 percentage points during in 2009.

Sound fiscal policy and framework

14. Oil-exporting Arab economies face a number of competing fiscal objectives in both the short and long term.

- A challenge for fiscal policy stems from unpredictable oil prices fluctuations that can be very large and sometimes persistent.* As expenditure is normally stickier than revenue, most of the volatility in oil revenue tends to translate into the fiscal balance in the short term, complicating the conduct of fiscal policy. An illustrative indicator of this issue is the fiscal break-even price for oil-exporting countries, i.e., the level of oil prices below which budget deficits occur absent a reduction in expenditure.¹³ In 2015, none of the oil-exporting Arab countries is estimated to have had a fiscal break-even price below the actual oil price.



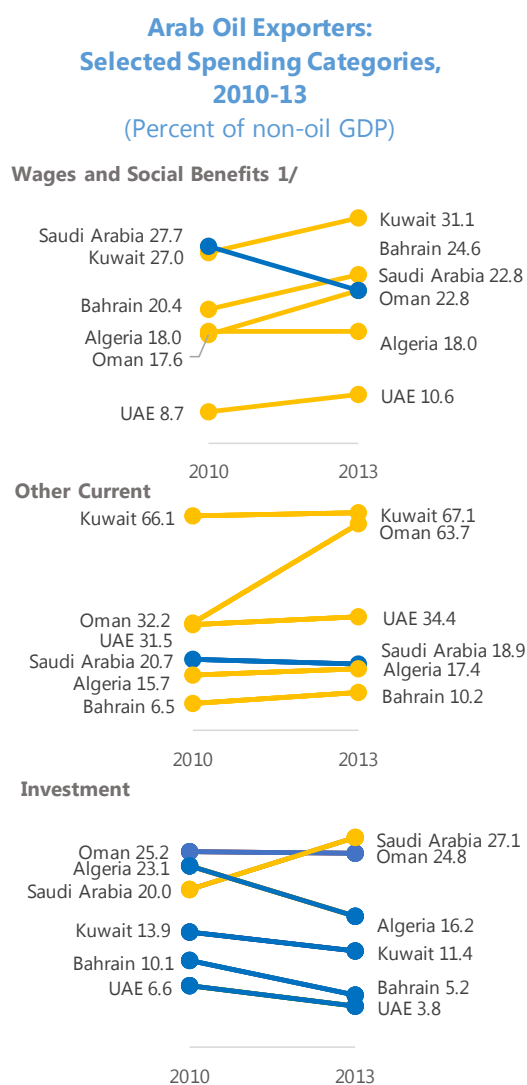
Sources: National authorities; and IMF staff calculations.

- Another challenge for policymakers stems from the exhaustibility of oil reserves and the necessity to meet the needs of current as well as future generations.* Governments typically face pressures to distribute a large share of oil revenues to the population in the form of current spending (wages, subsidies). However, balancing these short-term exigencies against factors supporting intergenerational equity—i.e. higher quality spending in health, education, and investment as well as sufficient accumulation of assets to permit sustaining per-capita spending levels even after oil reserves run out—is needed to lay a sound foundation for future growth. In this regard, fiscal decisions on oil revenues allocate wealth across generations.
- The decision on how much to save and how much to spend of current oil revenue is crucial in addressing these challenges.* The trade off is between spending oil revenues now to address the needs of the current generation and investing them to build the future of next generations, while safeguarding long-term fiscal sustainability. When appropriate, determining the amount of savings should go beyond intergenerational issues and consider the potential volatility of prices and the need to create buffers to guard against it. Indeed, countries that scaled up spending at a gradual pace, and those that have stabilization buffers are better prepared to manage sharp falls in prices.¹⁴

¹³ The fiscal break-even price is also sensitive to the level of production and to the level of exchange rate.

¹⁴ See IMF Fiscal Monitor, October 2015.

15. The current low oil prices exacerbate the challenges, calling for fiscal consolidation that should be as growth friendly as possible. The immediate concern of most oil-exporting Arab countries is the size of the fiscal deficits and their impact on debt sustainability. In this context, it is important to focus on preserving fiscal space for growth-enhancing spending while maintaining fiscal sustainability. Increasing non-oil revenue, notably through a broadening of the tax base should be an important part of the strategy.¹⁵ Expenditure restraint and the composition of spending are also important. High quality investment in infrastructure and human capital is essential to bolster the productive capacity of the economy and support economic diversification. However, oil-exporting Arab economies have often responded to distribution-related pressures by raising current spending while curtailing investment during downturns. Lower investment may translate into lower potential growth while the focus on current spending (e.g., wages and subsidies) to support consumption may contribute to reducing the competitiveness of the private non-oil sector, for example by raising reservation wages as further discussed below.¹⁶ As oil prices are expected to remain low for a relatively long period and some oil-exporting Arab economies still have significant deficiencies in areas such as infrastructure, education and health, fiscal consolidation needs to be implemented carefully to preserve investment in these areas.¹⁷ Raising the efficiency and the quality of spending, in particular investment, would help smooth the impact of fiscal adjustment.



Sources: WEO and IMF staff calculations.
1/ Kuwait excluding social benefits.

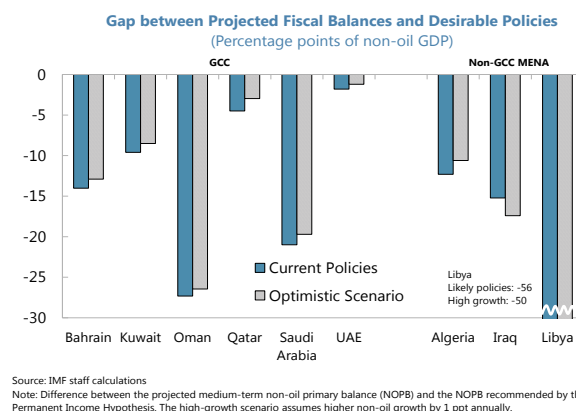
¹⁵ Initiatives in that direction are receiving increasing attention in some oil exporting Arab countries today. For example, GCC countries are considering adopting a VAT, Kuwait is considering the introduction of a profit tax; Saudi Arabia is considering increases in excises.

¹⁶ Many oil exporting Arab countries have already started to reform energy pricing. For example, UAE has implemented energy pricing reforms by adjusting fuel prices and increasing electricity tariffs; Algeria, Bahrain, Oman, Qatar, and Saudi Arabia have recently implemented substantial increases in energy prices; Kuwait has raised the prices for kerosene and diesel and further energy price reforms are under consideration.

¹⁷ Sturm et al, 2009.

16. A robust fiscal framework is needed to navigate short and long-term considerations.

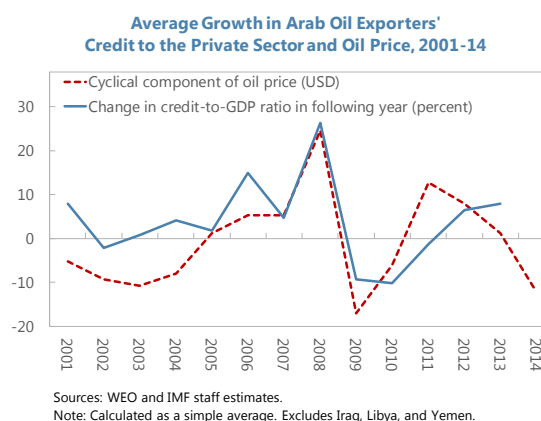
As fiscal authorities seek to allocate resources to maximize short- and long-term growth, a strong fiscal framework can help ensure that appropriate buffers are built to manage oil price shocks, mitigating the risk of overspending or lowering the quality of spending in good times and overconsolidating when oil prices fall (a real risk in the current situation). A strong fiscal framework would also support long-term sustainability and intergenerational equity goals. Such a framework needs to rely on long-term fiscal anchors and may include a fiscal rule, for instance based on non-oil deficit that is consistent with the permanent income hypothesis. In the current environment, a fiscal rule could help lock in the needed adjustment after it has been achieved. A stronger fiscal framework can be supported by dedicated oil funds, the use of which should be governed by clear and transparent rules and fully integrated with the budget. While the appropriate rule and the sequence of fiscal reforms will vary across countries, oil-exporting Arab economies should continue to strengthen their fiscal framework to help better align desirable and projected policies. Some countries have made headways in that direction. Qatar for instance established a 10-year cap on public investments and has prepared a draft medium-term fiscal framework and showed expenditure restraint even before oil prices fell. Even countries with large proven reserves and a budgetary surplus might need additional efforts in that direction to promote greater intergenerational equity.



Effective liquidity management

17. Domestic liquidity needs to be shielded from oil revenue fluctuations. Oil revenue volatility poses particular challenges for the implementation of monetary policy and to financial stability.

- Many oil-exporting Arab economies, until recently, faced excess liquidity. This weakened monetary policy transmission channels and increased risks of credit booms and inflation volatility.
- The recent decline in oil prices has contributed to a drying up of excess liquidity in many oil-exporting Arab economies (e.g., Algeria, the GCC) and a concern is whether liquidity might become too tight in some countries. Oil price downturns are typically associated with large drawdowns in government deposits in the banking system—as the government attempts to sustain spending levels—which in turn



contributes to a sharp decline in money supply (as both net foreign assets and net domestic claims decline). The commercial banking system could be exposed to a liquidity crunch as deposits dry up, which could lead to a sharp surge in interest rates. Moreover, tight liquidity conditions could also affect private sector credit growth further—particularly as government borrowing from banking system picks up—exposing the financial system to additional pressure.

18. Effective liquidity management involves better calibrating liquidity for banks, which can be supported by the use of a government savings vehicle that invests externally, such as a sovereign-wealth fund. Effective liquidity management would help improve the interest rate transmission channel of monetary policy. Enhancing liquidity forecasting and putting in place measures to appropriately calibrate liquidity in banks, including facilities to respond to bank liquidity needs and development of appropriate collateral, could help reactivate the interbank market where it has been dormant and facilitate the implementation of an interest-rate based monetary policy framework. Improving liquidity management and reducing interest rate distortions would also help deepen the financial sector, thus allowing financial markets to effectively perform the critical functions of price setting, asset valuation, arbitrage, capital raising, and risk management that are needed to support economic diversification. Sovereign-wealth funds invested abroad are also helpful tools to insulate domestic liquidity from large swings in oil revenue.¹⁸

Supporting financial policies

19. Oil price shocks could amplify the buildup of vulnerabilities in the financial system through macro-financial linkages. As noted, during oil price upturns deposits in the banking system tend to increase on the back of stronger fiscal position and surpluses in oil-corporate sector, which typically leads to excess liquidity. As liquidity becomes easy, households and corporates may be encouraged to excessive investment financed by borrowing—particularly in real estate, which could trigger rapid credit growth, balloon bank balance sheets, and create asset bubbles. In the event of an oil price downturn, these developments could reverse rapidly, further amplifying strains in the financial sector and the real economy.

20. Financial policies can help mitigate risks to the financial sector and support economic diversification. Strong regulatory and supervisory frameworks are necessary to stem risks to the financial sector. Moreover, macro-prudential measures could prove useful in shielding the economy from financial shocks resulting from the buildup of vulnerabilities in the financial system. Countercyclical macroprudential policies would help mitigate credit risk and liquidity risk to financial stability generated by the feedback loops between oil price movements, bank balance sheets, and asset prices. Specifically, policymakers could implement countercyclical capital and liquidity buffers and dynamic loans provision in good times to increase the resilience of the financial system, and

¹⁸ Among oil-exporting Arab countries, Bahrain, Kuwait, Libya, Qatar, and the UAE have such sovereign wealth funds.

reduce the procyclical feedback between asset prices and credit.¹⁹ Portfolio and/or financial diversification would help mitigate concentration risk, particularly in GCC.

A fairly valued real exchange rate

21. A fairly valued real effective exchange rate is essential to economic diversification.

Economies that are highly specialized in extractive industries could fail to develop thriving secondary or tertiary sectors because of rampant Dutch disease (i.e., situations where the dominant sector in the economy causes a currency real appreciation that reduces the incentive to invest in other export sectors). Such currency overvaluation would exacerbate the distortions in the relative price of tradable and non-tradable goods. This would amplify the inefficiency in the allocation of production factors across sectors and dampen prospects of new sources of growth. Conversely, an undervalued real effective exchange rate may lead to short-term gains, but such gains tend to be offset by long-term drawbacks stemming from an inefficient allocation of resources as most of the gains might lie in firms that are less competitive than foreign peers and only survive because they exploit distorted relative prices.²⁰

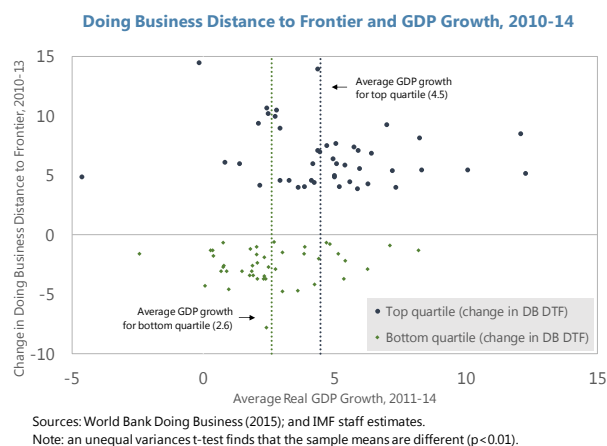
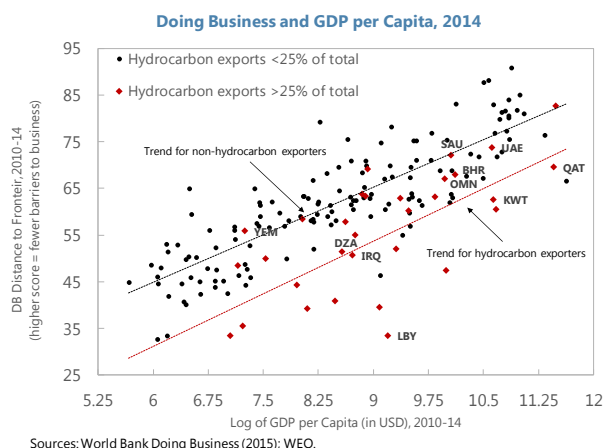
B. Regulatory and Institutional Frameworks Conducive to Private Sector Growth

This section discusses the regulatory and institutional preconditions for private sector growth, including improving the business environment, reducing regulatory barriers to competition, fostering greater trade integration, reforming labor markets and facilitating greater access to finance.

22. A business environment conducive to private sector growth is necessary for economic diversification. The business environment plays a key role in promoting private sector development and hence greater economic diversification. While the business climate in GCC countries remains relatively favorable, other oil-exporting Arab countries (Algeria, Iraq, Libya, and Yemen) rank low in the World Bank's doing business indicators. Beyond this disparity, the region faces common challenges to improve the business climate. These include increasing the efficiency of government administration (e.g., by streamlining procedures, establishing e-government), improving the legal framework for the conduct of business (e.g., to resolve insolvency, enforce contracts, protect minority investors) and fostering greater access to credit (Figure 4). Government efforts should address these issues to ensure that private enterprises operate in an efficient, transparent, and streamlined environment.

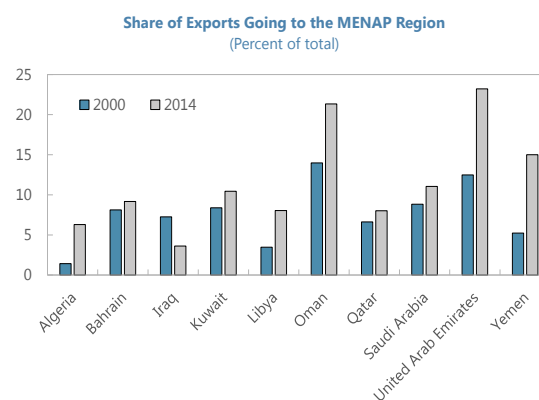
¹⁹ See also "Oil Prices, Financial Stability, and the Use of Countercyclical Macprudential Policies in GCC," IMF, 2015 forthcoming.

²⁰ Rodrick, 2008.



23. Reducing regulatory barriers to competition would also benefit economic diversification by raising productivity. Many sectors in oil-exporting Arab countries are dominated by state ownership. This high concentration level is a potential source of inefficiency in domestic markets and impedes the development of the private sector. Reviewing relevant regulations to increase competition would provide firms with incentives to reallocate resources to more productive industries and be better equipped to survive fierce market competition.²¹ In this regard, competition authorities and competition laws should be strengthened to open up markets to private enterprises. For instance, in Kuwait, a review of the competition policy law and its implementation and of policies related to barriers to entry could help increase competition.

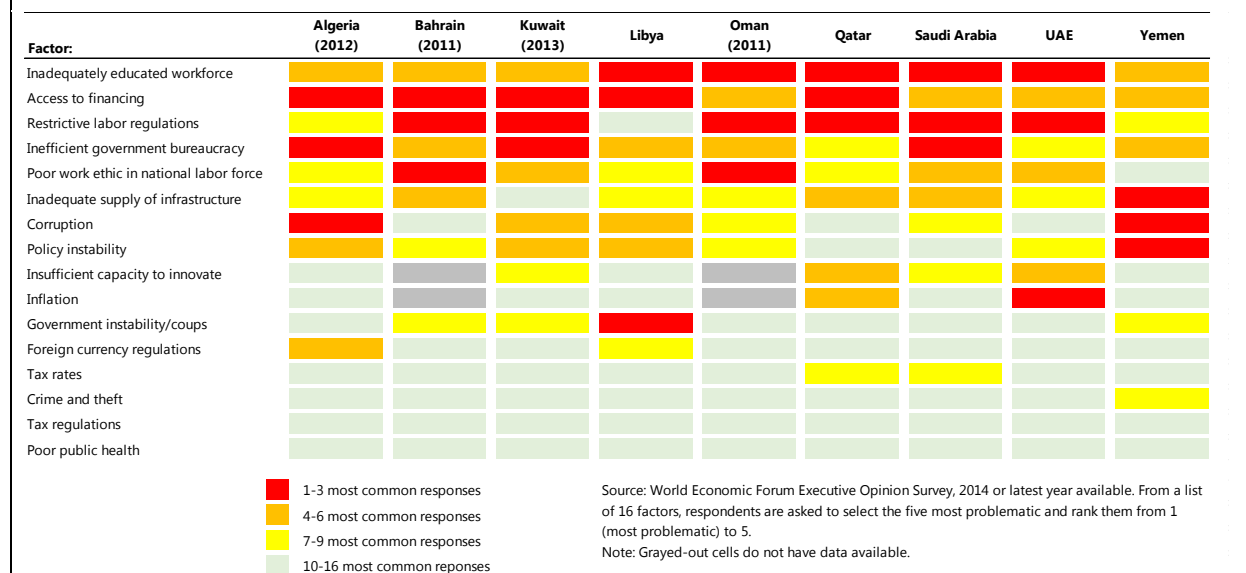
24. Greater trade integration could support export diversification. Arab countries are fairly integrated through labor mobility and infrastructure but, intra-regional trade flows remain low (about 12 percent on average) and largely consists in trade in oil. The Pan-Arab Free Trade Area (PAFTA, 1997) and the Unified Economic Agreement between members of the Gulf Cooperation Council (UEA-GCC, 1998) do not appear to have significantly boosted intra-regional trade. Non-tariff barriers, such as lengthy customs clearance procedures and high number of documents and signatures needed to process a trade transaction, remain important barriers to intra-Arab trade. Promoting deeper regional integration among Arab countries would require reducing these barriers, liberalizing trade services and strengthening rules applicable to regional



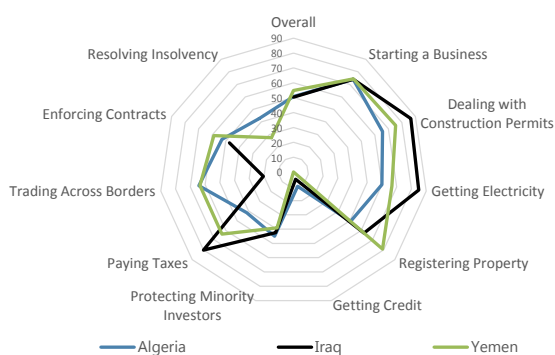
²¹ IFC 2013: Jobs study.

trade.²² Owing to a number of factors including geographical proximity and relative homogeneity in economic structures, GCC countries are more integrated than the rest of the region. Some countries, such as Bahrain, have seen opportunities arising from ongoing regional business integration, particularly with Saudi Arabia, Kuwait, and the UAE.

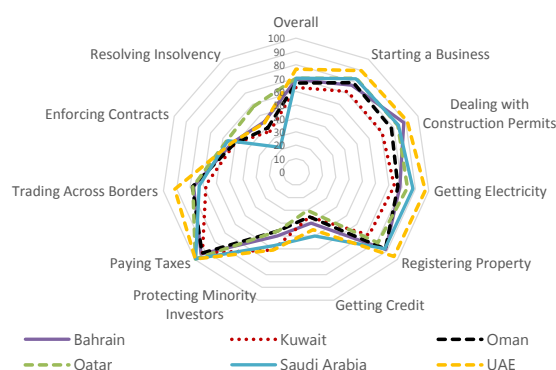
Figure 4. Most Problematic Factors for Doing Business in Arab Oil Exporters



**Doing Business Distance to Frontier
Non-GCC MENA**
(100 = no barriers to business)



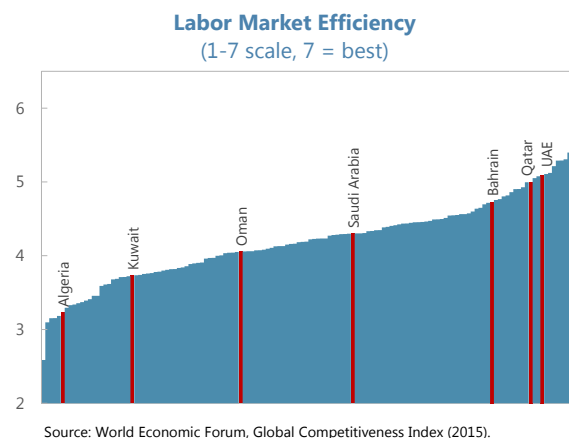
**Doing Business Distance to Frontier
GCC**
(100 = no barriers to business)



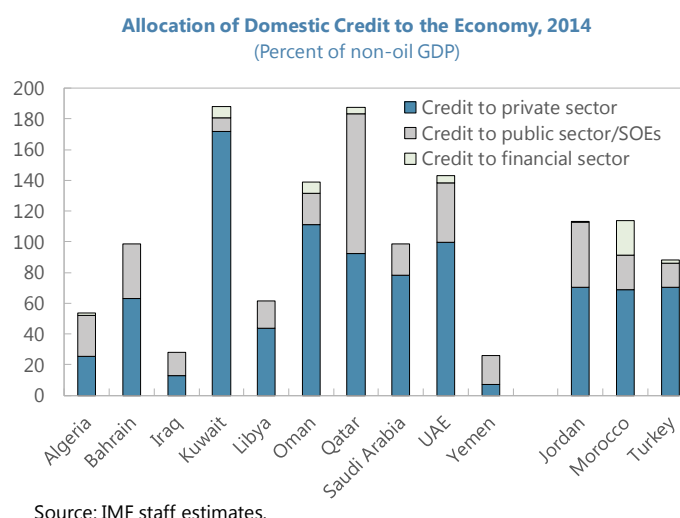
Source: World Bank Doing Business Indicators, 2015.

²² Chauffour, 2012.

25. Reviewing labor regulations can also help foster greater private-sector led job creation. Although labor markets are relatively flexible in most GCC countries, regulations are considered restrictive in some areas as evidenced by the Executive Opinion Survey undertaken by the World Economic Forum (Figure 4). In other countries (e.g., Algeria, Kuwait, Oman and, to a lesser extent, Saudi Arabia) insufficient labor market flexibility is seen as a hindrance.²³ Various degrees of labor market reforms are underway in a number of countries. For instance, Saudi Arabia has been implementing labor market reform to streamline regulations while seeking to improve work conditions. Regulations on female employment have been eased, with more sectors being opened for their employment. Oman is updating the labor law governing Omani and foreign workers, by amending issues related to labor dispute resolution, working conditions in the private sector, and working conditions for women. Other oil-exporting Arab economies would also benefit from reforms in labor regulations aiming to increase labor force flexibility while fostering better working conditions and introducing unemployment insurance schemes where they do not exist.



26. Inadequate access to finance is a key factor inhibiting private sector development. Access to finance is an important condition for private sector growth. The oil-exporting Arab countries have a relative low percentage of firms with credit lines or loans from financial institutions, and only a small portion of bank lending goes to SMEs. For instance, while credit growth is strong in these countries, bank lending to private sector only accounts for 10-30 percent of non-oil GDP in Algeria, Iraq, and Yemen. Further efforts to reform financial system, reduce directed lending, and develop domestic security markets will be important to support the financing of the private sector. Specific measures would vary across countries. Algeria, for instance, needs to foster the development of the local debt market to diversify financing options for the corporate sector. Iraq could continue to lift the restrictions placed on private banks in obtaining government business.



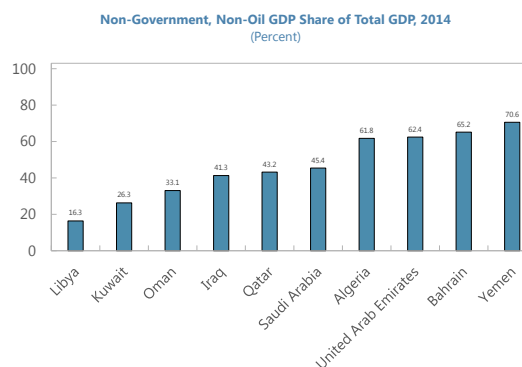
²³ Global Competitiveness Report, 2014-15.

27. Financial constraints tend to be more binding for SMEs. Insufficient financing is an important bottleneck hindering SMEs' ability to grow into larger firms. Weak credit information and creditor rights and an insufficient collateral infrastructure have been identified as the main reasons for banks' reluctance to lend to SMEs.²⁴ Progress has been achieved in some countries. For example, the UAE has reduced impediments for SME finance by issuing a new law on SMEs and establishing financial infrastructure such as a credit bureau and credit registry. In Saudi Arabia, the establishment of dedicated SME units in banks and of a national credit bureau aim to support increased SME access to finance. In Algeria, increasing the coverage of the existing credit registry would help foster greater access to finance for SMEs. However, further efforts to enhance SME access to credit are needed. Governments could strengthen the financial infrastructure such as credit assessment tools and creditors' rights, to ease SMEs' access to finance.

C. A Public Sector that Enables Private Sector Growth

*Drawing on previous work done at the Fund in the context of the GCC, this section analyzes the interplay between public and private sectors. It argues that the public sector should enable, and not compete with, the private sector, to support economic diversification. In particular, public employment and wage policies should not discourage private employment, while public spending should focus on investing in human capital, social safety nets and infrastructure.*²⁵

28. The public sector is a dominant player in oil-exporting Arab countries and a catalyst in the allocation of production factors. The combination of funding from oil revenue and (in some countries) a statist development strategy has resulted in a very large role of the state and/or public enterprises in the economy, including in areas where the private sector could easily provide the necessary goods and services. The presence of these public enterprises makes it all the more difficult to create a level playing field for the private sector. As noted, the share of the public sector in total GDP remains high in many oil-exporting Arab economies. The expansion of the public sector also involves large-size civil service with generous compensations. Rapid growth in government spending has contributed to the growth of low-value-added sectors such as construction, trade and retail, transport, and restaurants. Producing goods and services to meet domestic consumption and investment needs tends to be a reliable source of income, funded by the recycling of oil revenues.



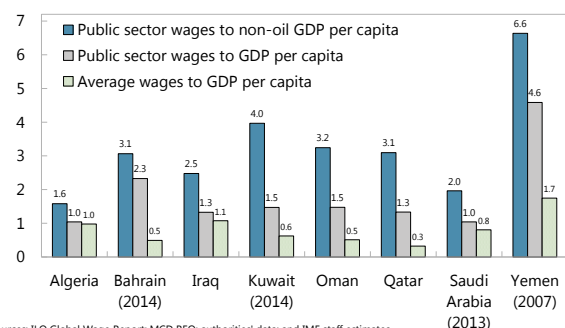
Sources: WEO and IMF staff estimates.

²⁴ Rocha 2011.

²⁵ This section draws extensively on "Economic diversification in the GCC, past, present and future" (Callen and al., SMD/14/12).

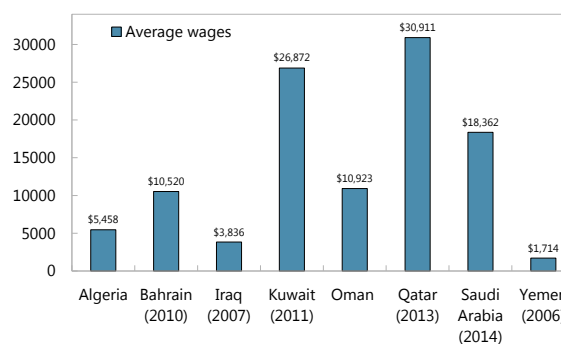
29. Public sector wage policies reduce the incentive for individuals to look for private sector jobs or launch their own businesses. As work conditions and compensation in the civil service are typically generous in oil-exporting Arab countries, workers see jobs in the public sector as the most promising path out of unemployment and an opportunity to earn a high salary and secure employment. Subsidies to households contribute to increasing the reservation wage for workers, thus reducing labor participation. In this context, only the most competitive, profitable and growing private firms, who can pay substantially better wages than the public sector, can attract skilled workers. As a result, where labor is scarcer, e.g., in GCC countries, the labor market is segmented, with public sector jobs attracting nationals through high wages, while the private sector relies more on an elastic supply of low-skilled foreign labor. Indeed, nationals in the GCC fill over 70 percent of public sector jobs, while, on aggregate, about 88 percent of 5.4 million private sector jobs created between 2000 and 2010 were filled by foreign workers (about 85 percent of them with low skills).

Public Sector and Aggregate Wages to GDP per Capita
(Ratio based on total public employment; 2012 or latest available data)



Sources: ILO Global Wage Report; MCD REO; authorities' data; and IMF staff estimates.
Note: Public wages were calculated by dividing general government wage expenditure by total public employees. Algeria and Saudi Arabia estimates use central government spending on wages. Average wages are from ILO data and were calculated using same year GDP per capita (see chart to right for the estimate year).

Average Annual Wages
(Inflation adjusted USD; 2012 or latest data)



Sources: ILO Global Wage Report; WEO; authorities' data; and IMF staff estimates.

30. Furthermore, the excessive attractiveness of public employment exacerbates the skills mismatches for the private sector. Better employment opportunities in public sector also increase incentives for future job seekers to invest in education and skills that are generally most demanded by public service, exacerbating the gap between the supply of skills and the need of the private sector. Moreover, the inadequacy of educated workforce is an important constraint for the development of firms in the private sector among oil-exporting Arab countries, as reflected in related surveys (Figure 4).

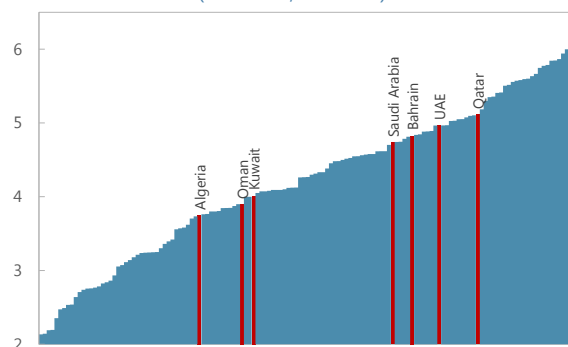
31. Therefore, instead of de facto competing with the private sector, the public sector should focus on enabling private-sector led employment growth. Actions need to be taken on several fronts:

- *Reducing the excesses of public employment.* Fostering private sector development should be supported by a progressive reduction in the size of the public workforce and public wage moderation. The latter would help gradually rebalance the relative prices of labor in the public and private sectors and ensure that public sector wages are better aligned to productivity. To

support a reduction in the size of public employment, a civil service review can help identify nonessential positions that should not be renewed when they become vacant.

- *Orienting education and vocational training toward the skills needed in the private sector.* First, public spending on education needs to be increased in some countries. Indicators of years of schooling and enrollment rates also reveal a comparatively low level of academic achievement. The quality of education also needs to be improved in most countries and better tailored to the need of the private sector. The approach requires coordinated efforts among relevant stakeholders such as the public sector, the private sector, and youth associations.²⁶ The private sector should engage in the design of curricula for vocational and tertiary education.

Quality of Higher Education and Training
(1-7 scale, 7 = best)



Source: World Economic Forum, Global Competitiveness Index (2015).

- *Providing unemployment insurance.* Rather than using the civil service as the employer of last resort, governments should put in place unemployment insurance schemes that ensure that the unemployed receive a minimum income while setting proper incentives to look for employment.

32. Moreover, the public sector can further deliver basic infrastructure while ensuring competitive public procurement policies. There is significant evidence that strong and efficient investment in infrastructure is important to economic growth and diversification.²⁷ In several oil-exporting Arab countries, infrastructure bottlenecks have been identified among the constraints holding back the private sector capital formation, along with insufficient access to credit. Furthermore, reducing excessive monopoly rents in the non-tradable sector by increasing competition and enhancing bidding procurement processes would also help boost the private sector.

D. The Road to a More Diverse Economy

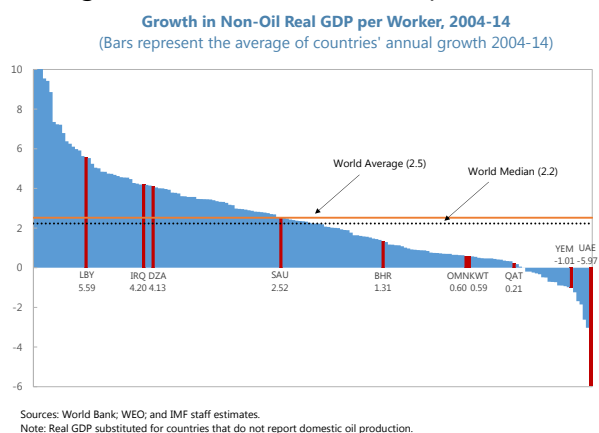
This section discusses specific strategies that policymakers could use to help grow new sectors in oil-exporting Arab countries. Drawing from examples in other countries, it discusses experience in advancing horizontal and vertical diversification. It also discusses the role foreign direct investment in the non-oil sector could play in fostering more broad-based economic growth.

²⁶ IFC 2013: Jobs study.

²⁷ See IMF, 2016, "Investment and Growth in the Arab World: A scoping Note"

33. Economic transformation in oil-exporting Arab economies will follow its own pattern. Economic diversification in today's advanced economies began by a sharp decline in the share of agriculture in total output and employment while the manufacturing and service sectors grew larger. In a later phase, deindustrialization occurred, during which labor moved from the manufacturing sector into services. However, the global environment is very different today than it was then, and the structure of oil-exporting Arab economies is significantly different to that of advanced economies at the early stage of their structural transformation. Agriculture has neither had the largest share of employment, nor the largest contribution to GDP. The services sectors tend to be already the largest source of employment (e.g., in Algeria, Bahrain, Iraq, Libya, and Saudi Arabia) and a substantial fraction of labor force in that sector is on government payroll. Large economies—in terms of the size of the population—tend to be industries dominant (i.e., industries have the largest share in GDP) while small economies are mixed. When the economy is industry dominant, industries concentrate on oil, reflecting its dominance in the economy.

34. Some oil-exporting Arab economies have experienced a certain degree of diversification in the last decades, but it has been uneven. Bahrain has diversified by developing banking and financial services—particularly Islamic banking—and increased non-oil exports and non-oil output. The UAE has built, for example, a commercial ship repair sector. In most cases, however, economic diversification has moved at a slow pace. Labor productivity growth due to reallocation of labor across sectors has been low and most of the aggregate productivity gains have come from within sector productivity growth (oil sector or private sector). Countries where the productivity gains were the lowest are, with the exception of Yemen, those with the largest share of foreign workers who on average tend to be low-paid but also low-skills and low-productivity workers.



35. Policies can be considered to support promising sectors, although caution is called for in light of the risks associated with “picking winners.”²⁸ There can be a case for some form of industrial policies when (i) dynamic economies of scale or knowledge spillovers affect a sector; (ii) coordination failures prevent a sector from developing; or (iii) informational externalities also prevent the development of a sector.²⁹ However, the international experience of the past 50 years suggests that “picking winners” and supporting infant industries can be tricky, because excessive government protection tends to lower incentives to seek productivity improvements and enhance

²⁸ This paragraph borrows from “Fostering Export Diversification in Algeria” (A. Lahreche, Selected Issues Paper for the 2014 Article IV Consultation).

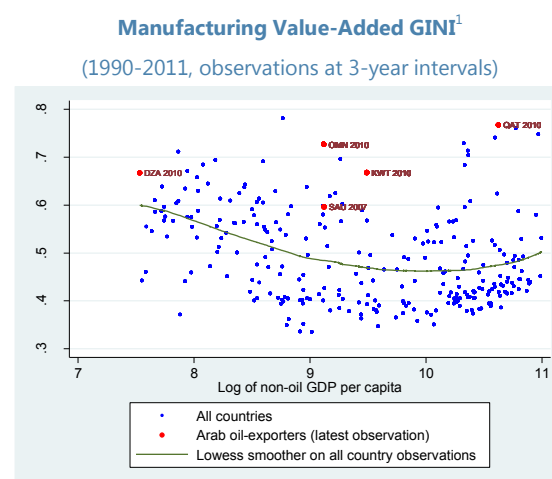
²⁹ Pack and Saggi, 2006.

international competitiveness. Industrial policies should, therefore, be carefully focused on sectors with clearly high export potential and strong integration into international value-added chains—although identifying such sectors is complex and risky. These sectors should be supported by policies that foster innovation and backward linkages;³⁰ technology spillovers can be useful in supporting industrial development and export diversification. Other “soft” industrial policies, consisting for instance, of increasing openness to FDI, or setting up industrial clusters and export processing zones, can also be instrumental, as shown in the case of the Indian software industry.

Developing horizontal and vertical diversification strategies

36. Oil-exporting Arab countries are at the early stage of their economic diversification.

As illustrated in Figure 2, the Gini coefficient for the distribution of their manufacturing sectors is high, which suggests a low degree of economic diversification. While empirical evidence³¹ suggests that manufacturing sector concentration and per-capita income tend to be correlated, with diversification rising steadily until a certain income threshold whereupon activity starts to concentrate again, oil-exporting Arab countries, though most already high income economies, lie outside the curve for other countries. This suggests that they are less manufacturing-diversified than the average country at the same per-capita income level. Their high income mostly represents resource endowments, not structural transformation that has shifted the economy to a higher level of per-capita income.



Sources: UNIDO INDSTAT4 database; and IMF staff estimates.

¹ See Appendix 2.

37. Vertical diversification would focus on sectors where the countries have an immediate comparative advantage. It might be very difficult to promote several sectors at the same time against the pull towards non-traded sectors that result from high domestic demand fueled by oil-revenue-funded public spending. Nevertheless the potential for vertical diversification is high in most oil-exporting Arab countries. In Algeria for instance, hydrocarbon exports are mostly made of crude oil and gas, with limited exports of refined products and hydrocarbon byproducts, suggesting that the potential for vertical integration into higher value-added products in the mineral and chemical industries is sizeable. However, while such strategy could succeed in generating new sources of growth and employment, it would not help significantly reduce the dependence on oil and therefore the vulnerability to a volatile and exhaustible source of revenue.

³⁰ Backward linkages exist when the growth of an industry leads to the growth of the industries that supply it.

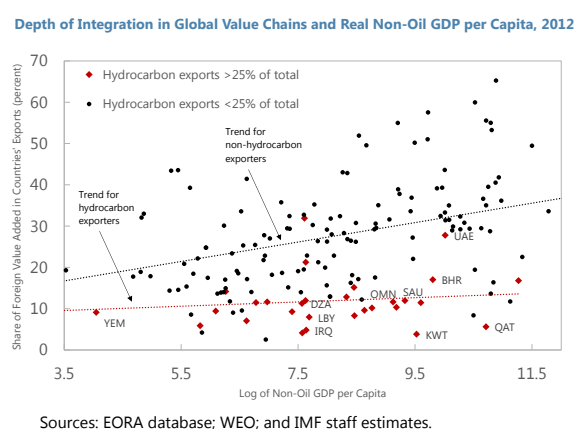
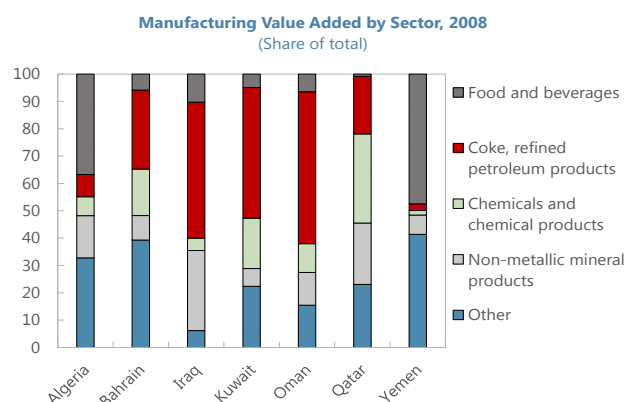
³¹ Imbs and Wacziarg, 2003.

38. Horizontal diversification strategies would consist of expanding activities beyond those sectors, across businesses not necessarily related to each other, and specifically to oil.

Because of new technologies or economies of scale, firms may profit from synergies and diversification. Horizontal diversification would also be affected by how governments choose to spend oil revenues as discussed above. Spending that reduces production costs in new sectors and raises their efficiency, would encourage the entry of investors with new capabilities and knowledge. The potential for horizontal diversification is also sizable in many oil-exporting Arab countries. In Algeria for instance, the agribusiness sector and tourism are two areas of likely large untapped potential, where receipts fall way below those in neighboring countries.

Further integration in the global value added chain

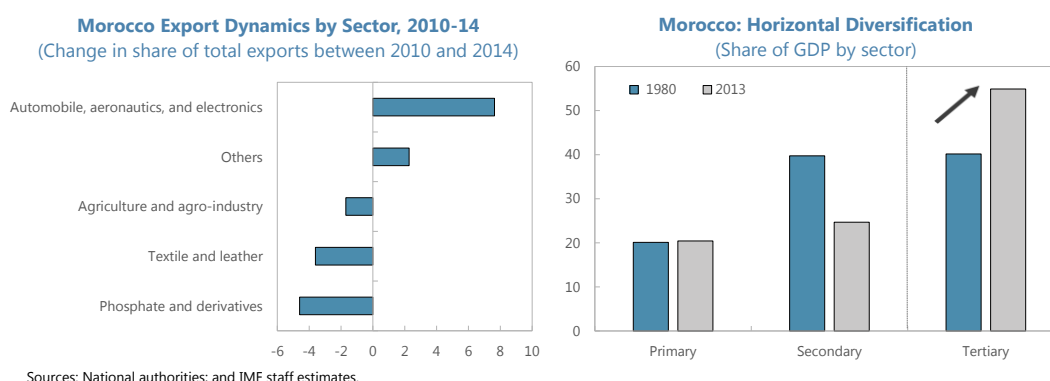
39. Global value chains are an additional mechanism through which firms in oil-exporting Arab countries could access the world market and technologies. There is scope to join networks of supply chains and specialize at certain stages of the production of complex economic goods. Many oil-exporting Arab economies still find themselves at the beginning of the process of integrating into global value chains. With exports dominated by oil, the share of foreign value added in exports remains significantly low. Moreover, the depth of integration in global value chains and/or the speed at which oil exporting countries (with hydrocarbon exports greater than 25 percent of total exports) join networks of supply chains is relatively lower. Further integrating global value-added chains would require deep exploitation of comparative advantage—including geographic position and labor intensity—improvement in technological capacity, greater efficiency in production, higher technical and managerial skills, and competitive wages.



Box 2. Morocco: Diversifying Away from Phosphate and Agriculture

For years, Morocco's economy was highly depended on agriculture, phosphate, tourism, fishing and seafood. The reliance on phosphate and derivatives exposed Morocco's economy to the fluctuations of international prices of phosphates, while rains determined agriculture output. Both factors greatly influenced the economy's business cycle.

In 2008, the government launched a Plan Emergence, a diversification strategy to widen the production base, increase export products, and improve the resilience of the economy to external shocks—including phosphate prices shocks. Despite adverse international conditions in recent years, the government has sustained its efforts to implement important reforms and safeguard macroeconomic stability. These efforts are now bearing fruit as testified by the emergence of newly developed industries (automobile, aeronautics, and electronics), which as of 2014 represented a greater part of Morocco's exports (28 percent) than traditional sectors including textiles (17 percent) and phosphate (19 percent).



The service sector also expanded and diversified rapidly in products and markets. Financial activities have grown and diversified abroad, specifically in sub-Saharan Africa. Morocco also developed further its tourist industry, leveraging on the country's geography, culture, and history. Approximately 10 million tourists visit the country per year, providing plenty of foreign exchange.

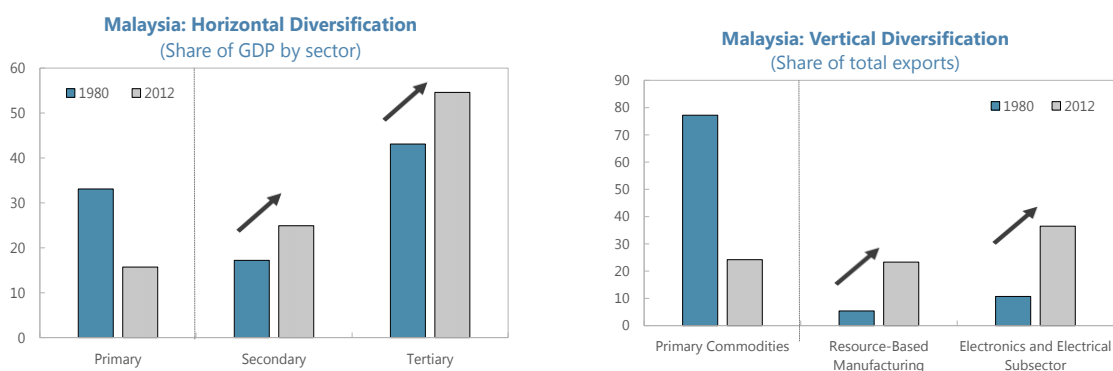
Industrial development strategies led to improvement in infrastructures and development of a new port and free trade zone. Morocco's integration in global trade is also deepening, allowing to diversify trading partners and to better position Morocco in global value chains. For example, the share of exports to the euro area in total exports declined from 69 percent to 56 percent between 2003 and 2013. Over the same period, exports to Latin America grew from 3 percent to 7 percent of total Moroccan exports, helping the improvement of the external position. The continued flow of FDI to new sectors is expected to support their expansion over the medium term.

However, agriculture, which accounts for only 14 percent of the GDP, continues to employ about 45 percent of the labor force. Moreover, unemployment remains relatively high, especially for the youth. Additional strategies are required to further diversify Morocco's economy and reallocate labor to high productive sectors. Improvement in agricultural techniques and irrigation systems are being sought, while further reforms in business climate, education and judiciary systems, would increase the competitiveness of the private sector.

Box 3. Pattern of Diversification of a Resources-Based Economy: Malaysia

Malaysia relied heavily on primary commodities at the early 1980s. Primary commodities accounted for 33 percent of GDP and 77 percent of exports in 1980, which posed considerable challenges to the economy, specifically in terms of managing the volatility from commodity prices. Malaysia launched an economic diversification strategy in the early 1980s aiming to increase higher value-added activities and reduce the over-concentration in upstream commodities (tin ore and rubber).

The National Industrial Policy and the Industrial Master Plans were particularly instrumental and included a series of policy measures that aggressively promoted the manufacturing sector. The Industrial Master Plan 1 (1986-95) laid the foundation of manufacturing industries and promoted the processing of natural resources and the development of local technological capability. The Industrial Master Plan 2 (1996-2005) improved the competitiveness of manufacturing, broadened its base through the strategies of cluster-based industrial development, while expanding along the value chain to encompass higher value-added activities. The Industrial Master Plan 3 (2006-20) aims at further broadening the scope of economic activity by including services and featuring functional targets such as SMEs, research and development, technology, logistics, marketing.. The success triggered by the Master Plans resulted in a rapid space of horizontal diversification of the economy, with increasing share of the manufacturing and services sectors, and less reliance on commodity. Malaysian economy also diversified vertically by moving into high technological activities, which reduced the share of commodities in exports.



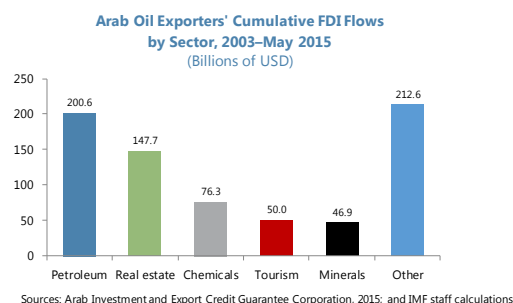
Sources: Authorities' data; and IMF staff estimates.

Manufacturing developed through resource-based industries, including petrochemicals, refined petroleum, palm oil, rubber gloves, tires and prophylactics products. Value-added of resource-based industries increased significantly, as well as their contribution to exports. The diversification into resource-based industries also ensures a high share of manufactured exports to total exports.

Well-designed industrial policies and a careful focus on sectors with high export potential and increasingly integration into international value-added chains reduced the over-concentration on primary commodities and increased the degree of intensity of economic activity across various interconnected industries. The vertical diversification in the resource-based (i) deepened structural linkages of the economy and improved the production function; (ii) increased profitability of firms while ensuring higher wages (for private workers) and higher tax revenue for the Government; (iii) raised productivity across the board including in agriculture; and (iv) continues to preserve macro stability.

Attracting FDI in non-oil sector

40. Attracting foreign direct investment (FDI) in non-oil sector would support a broad-based economic growth. The oil and gas sector has been the largest beneficiary of FDI in most oil-exporting Arab countries. In Oman for instance, around 50 percent of FDI is invested in the oil sector. As manufacturing and service export bases remain limited in many of these countries, specialization and entrances in a specific segment of global production chain could also benefit from FDI while improving export quality and sophistication, and accelerating technology and knowledge transfers, specifically in the form of FDI.³² Improving the climate for foreign investment in non-oil industry may involve lowering entry requirements, creating investment promotion intermediaries, and streamlining tax structures. For instance, some countries impose a requirement of a majority domestic ownership that is a significant deterrent to FDI and should be eliminated or at least limited to strategic sectors.



CONCLUSION

41. Oil-exporting Arab countries face three-pronged challenges: job-creation, macroeconomic volatility from oil prices and the depletion of oil resources. The oil sector generates few jobs directly and the government sector tends to be the largest employer and offers better compensation than the private sector. Over-reliance on oil exposes revenue and output to fluctuations in oil prices, exacerbating macroeconomic volatility. Oil is also an exhaustible resource and countries need to develop adequate non-oil sectors before their oil reserves are depleted.

42. To achieve economic diversification, oil-exporting Arab countries should continue to strengthen macro-economic stability and improve regulatory and institutional frameworks. These preconditions to economic diversification will make markets more flexible and competitive to spur the innovation for goods, services, and job creation.

43. Policies and strategies to create dynamic new tradable sectors are needed to accelerate economic diversification. Transitioning to a diversified economy with robust and nimble tradable sectors requires additional policies and strategies to develop local technological capability, promote the processing of natural resources, improve the competitiveness of non-oil exports and broaden the export base through integration into global value chains to encompass higher value-added activities.

³² IMF 2015: African Department Regional Economic Outlook.

44. Notwithstanding these key elements, economic diversification will not be successful without security. Some countries (e.g., Iraq, Libya, and Yemen) are affected by wars that severely disrupt economic activity and weaken investor confidence. Restoring stability and security should be a first order priority to economic diversification.

45. Policies to support economic diversification should be tailored to country specific circumstances. Oil-exporting Arab countries are different in many dimensions, and the choice of policies to further advance economic diversification in these countries should take into account country heterogeneity as well as capacity. The recent decline in oil prices has put strains on governments' resources thereby making the context of economic diversification in oil-exporting Arab countries difficult but also more urgent. The labor force is young and growing and unemployment, specifically for the youth and women, remains high in many countries. Policymakers will need to move simultaneously to safeguard fiscal sustainability while pressing forward to facilitate economic diversification.

Appendix. Technical Notes

Estimate of government GDP (Figure 1)

The gross value-added (GVA) of an industry is measured as its total sales minus the cost of its intermediate inputs, while the GDP of an industry equals its GVA plus taxes on products minus subsidies on products.

Schematically, GVA is also equivalent to the sum of expenses (wages & salaries, dividends, and depreciation), profits, and (indirect) taxes—minus net subsidies.

As public administration services are not marketed, the government sector does not generate measurable sales. Consequently, the value added of public goods cannot be accurately determined. Since governments do not pay taxes or dividends, generate profits or receive subsidies, only wages and depreciation determine the gross value-added government services. For Arab oil-exporters, data on the depreciation of government assets are not available; thus this paper uses government wages as the best available proxy for determining government value-added.

Arab oil exporters manufacturing value-added GINI (Figure 2)

The chart on “Arab Oil Exporters Manufacturing Value-Added GINI” (page 32) reproduces the analysis in Imbs and Wacziarg (2003) using more recent data from the United Nations Industrial Development Organization Industry (UNIDO) Statistics database. The data cover the period 1990–2011 and include 137 economies. Manufacturing is broken down into 23 subsectors in the ISIC-3 classification; the size of each sub-sectors being measured by its value-added. The Gini coefficient is computed to assess the inequality of sectoral shares; the more equal the distribution of sector shares, the lower the gini and the more diversified the economy. Specifically, the Gini coefficient is calculated for each country and every year with exception of cases where a third of the sectoral data are missing.

The analysis by Imbs and Wacziarg (2003) is based on the proposition that countries initially diversify, on the back of dynamic evolution of relative productivity and declining transportation costs, until they reach a point when the forces of concentration dominate—arising for example from the pace of decline in transportation costs exceeding that for technological gap improvement.

Their hypothesis is generally supported by observed trends in industry data. Their result provides a “U-shaped pattern” for the Gini coefficient over the income scale, indicating that countries tend to diversify their industrial base as they move up the income scale, but at a certain point, this trend starts to reverse—as income increases and inequality between industrial sectors increases. They obtain this finding using Gini coefficient computed for value-added and also employment of the subsectors in the ISIC-3 classification.

Staff’s analysis, using recent data, suggests increasing diversification for the average country as it moves up the income scale and points to some reversal but not a very strong “U-shaped pattern”. However, oil-exporting Arab economies tend to lie outside the curve (by more than two standard

deviation) as their income per capita is relatively high but their degree of economic diversification, as indicated by the Gini coefficient, is low. In addition, while the Imbs and Wacziarg (2003) hypothesis would assume that this reflects reversal, this is not the case for oil-exporting Arab economies. One reason could be that the Imbs and Wacziarg (2003) hypothesis assumes a traditional pattern of development, in which countries typically moved from agriculture to manufacturing and then services. However, for resource-rich economies (e.g., oil-exporting Arab countries) the high income levels may reflect natural endowments not necessarily structural transformation that has shifted their economy to high level of income.

References

- Asian Development Bank (ADB), 2010, "The Rise of the Middle Class. Key Indicators for Asia and the Pacific 2010" (Mandaluyong City: ADB).
- Asian Development Bank (ADB), 2013, "Beyond Factory Asia Fueling Growth in a Changing World" (Mandaluyong City: ADB).
- Asian Development Bank (ADB), 2013, "Asia's Economic Transformation: Where to, How, and How Fast" (Mandaluyong City: ADB).
- Chauffour, J. P., 2012, "Trade Integration as A Way Forward for the Arab World: A Regional Agenda. World Bank Policy Research, Working Paper 5581 (Washington: World Bank).
- Chenery, H., S. Robinson, and M. Syrquin, 1986, "Industrialization and Economic Growth" (New York: Oxford University Press).
- Dasgupta, S., and A. Singh, 2006, "Manufacturing, Services, and Premature De-industrialization in Developing Countries: A Kaldorian Empirical Analysis" Center for Business Research, University of Cambridge.
- Eichengreen, B., and P. Gupta, 2013, "The Two Waves of Service Sector Growth" *Oxford Economic Papers*, 65(1): 96–123.
- Groningen Growth and Development Centre (GGDC). 10-Sector Database. www.ggdc.net
- Hakura, D. and A. Billmeier, 2008, "Trade Elasticities in the Middle East and Central Asia: What is the Role of Oil?" IMF Working Paper 08/216 (Washington: International Monetary Fund).
- Haraguchi, N., and G. Rezonja, 2010, "In Search of General Patterns of Manufacturing Development," Development Policy and Strategic Research Branch, Working Paper 2010/02 UNIDO.
- Hausmann R., and others, 2011, "The Atlas of Economic Complexity: Mapping Paths to Prosperity" (New Hampshire: Puritan Press).
- Imbs, J., and R. Wacziarg, 2003, "Stages of Diversification," *American Economic Review* Vol. 93, pp. 63–86.
- International Finance Corporation, 2013, "IFC Jobs Study—Assessing Private Sector Contributions to Job Creation and Poverty Reduction" (Washington).
- International Labor Organization (ILO). LABORSTA Internet. <http://laborsta.ilo.org/>
- International Monetary Fund, 2006, *Exchange Rates and Trade Balance Adjustment in Emerging Market Economies*, prepared by Policy Development and Review Department (Washington)
- International Monetary Fund, 2011, *Regional Economic Outlook: Sub-Saharan Africa, "The East African Community: Taking Off?"* April (Washington).
- International Monetary Fund, 2012, *Regional Economic Outlook: Sub-Saharan Africa —Structural Transformation in Sub-Saharan Africa*, October (Washington).

- International Monetary Fund, 2013, "Economic Prospects and Policy Challenges for the GCC Countries," paper prepared for the Annual Meeting of Ministers of Finance and Central Bank Governors.
- International Monetary Fund Background Note, 2014, Thematic Session 4: Improving the Business Climate. This note was written as a background note for the "Jobs, Growth, and Fairness" conference, which took place in Amman on May 11-12, 2014.
- International Monetary Fund, 2014, "Economic Diversification in the GCC: Past, Present, and Future," IMF Staff Discussion Note.
- International Monetary Fund, 2015, "Global Value Chains: Where Are You? The Missing Link in Sub-Saharan Africa's Trade Integration" African Department Regional Economic Outlook (Washington)
- International Monetary Fund, 2016, "Investment and Growth in the Arab World: A scoping Note" IMF Staff discussion Note.
- Isard, P, and H Faruquee, 1998, *Exchange Rate Assessment: Extensions of the Macroeconomic Balance Approach*, IMF Occasional Paper No. 167 (Washington).
- Rocha, R., and others, 2011, "The Status of Bank Lending to SMEs in the Middle East and North Africa Region: Results of a Joint Survey of the Union of Arab Bank and the World Bank," World Bank Policy Research Working Paper 5607 (Washington: World Bank).
- United Nations Industrial Development Organization, 2012, *Industrial Statistics Database 2-Digit Level, ISIC Revision 3* (INDSTAT2) (Vienna).
- World Bank, 2012, *World Development Report 2013: Jobs* (Washington).
- World Economic Forum, *Global Competitiveness Report*, 2014-15