

RESILIENT AND SUSTAINABLE: *HOW OIL- DEPENDENT ECONOMIES CAN BUILD FOR THE FUTURE*



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INTRODUCTION

Oil-dependent economies vary widely, from some of the world's most prosperous nations to some of its poorest. But from Qatar (with the highest GDP per capita in the world) to Equatorial Guinea (where over half of the population lives in poverty), they face common challenges in moving beyond a reliance on natural resources. This paper examines how these countries are addressing these challenges, looking at a group of countries including members of the GCC, other members of the Organization of Petroleum Exporting Countries (OPEC), and some additional energy-exporting nations.

The need to diversify and move “beyond oil” is not new – it has been core to the economic development policies of many oil-producing countries for decades. Despite this focus, few countries have made much progress. The pressure to change has mounted, however, driven by a combination of factors, including the persistence of relatively low prices, the need to manage economic volatility, and increasing pressure on existing economic and social models.

To address these challenges, policymakers are pursuing two related objectives:

- **Increasing resilience:** Handling price fluctuations, including managing oil-dependent industries over the course of the commodity price cycle
- **Increasing sustainability:** Diversifying for the long term, laying the foundations for prosperity after oil resources are depleted, or for the time when global demand shifts away from fossil fuels.

There is no simple answer or quick fix. To achieve these goals, countries will need to address weighty and closely related economic, fiscal and social challenges. In this report, we explain how one country has addressed comparable challenges, admittedly from a different starting point, lay out potential solutions for other oil-exporting countries, and discuss some of the reforms underway now.



WHY IS THIS AN ISSUE NOW?

The challenge of diversification is not new. As far back as the first two national development plans in the 1970s, Saudi Arabia's Ministry of Planning aimed to grow non-oil industries to diversify the economy. In 1999, Oman was the first country to adopt formal targets for the "Omanization" of its workforce as part of its Vision 2020.

The recent push for diversification is driven by three major trends :

- Long-term moderation in energy prices, and for some countries depletion of their resources, which undermine export revenues
- Volatility in economic growth over the past decade, through the global financial crisis and more recent commodity price fluctuations
- Challenges to the sustainability of existing economic models, given expanding populations and their rising expectations for government services.

LONG-TERM OUTLOOK FOR OIL DEMAND

While prices have recovered somewhat from recent lows, and the medium-term outlook suggests that the supply-demand balance will stabilize, demand is likely to face downward pressure over the long term. The IEA's scenarios suggest that overall demand for oil and coal as primary energy sources will remain more or less flat to 2040, with just 0.5% growth per year. They forecast the fastest growth, from a low base, in renewable options and other clean energy sources (Exhibit 1).

Several trends are at work. An increasing role for electricity in the energy mix will reduce the reliance on oil. Although oil is likely to remain the largest energy source overall, the share of electricity in final energy demand rose from 13% in 1990 to 18% in 2012. The IEA expect it to grow to 24% or even higher by 2040.¹ Also noteworthy are changes in personal transportation, with energy demand from light vehicles expected to peak in 2022 and then decline.

Although experts do not expect alternative sources to supplant oil and gas in the next 20 years, long-term trends suggest that demand will face downward pressure. This implies that oil-exporting countries cannot expect to address their economic challenges simply by waiting for prices to return to recent highs.

THE CHALLENGE OF ECONOMIC VOLATILITY

Economic volatility is another key challenge for oil-exporting nations. While most have enjoyed higher real GDP growth than other nations over the past decade, their economies have also been more volatile (in line with the EU), with substantially higher standard deviations than the US or other OECD countries (Exhibit 2).

Volatility matters. It poses challenges for sustained economic development.² Oil-exporting countries are particularly vulnerable: their ability to respond to downturns is limited by the nature of their fiscal systems, which often depend on "shallow" tax bases of export revenues. The large share of foreign workers in many oil-exporting countries can also exacerbate economic shocks. The residence status of foreign workers, and thus their contribution

¹ IEA

² "What makes growth sustained?" IMF, June 2010

Exhibit 1

OIL WILL CONTINUE TO ACCOUNT FOR THE LARGEST SHARE OF PRIMARY ENERGY PRODUCTION, BUT RENEWABLE ENERGY SOURCES WILL GROW FASTEST

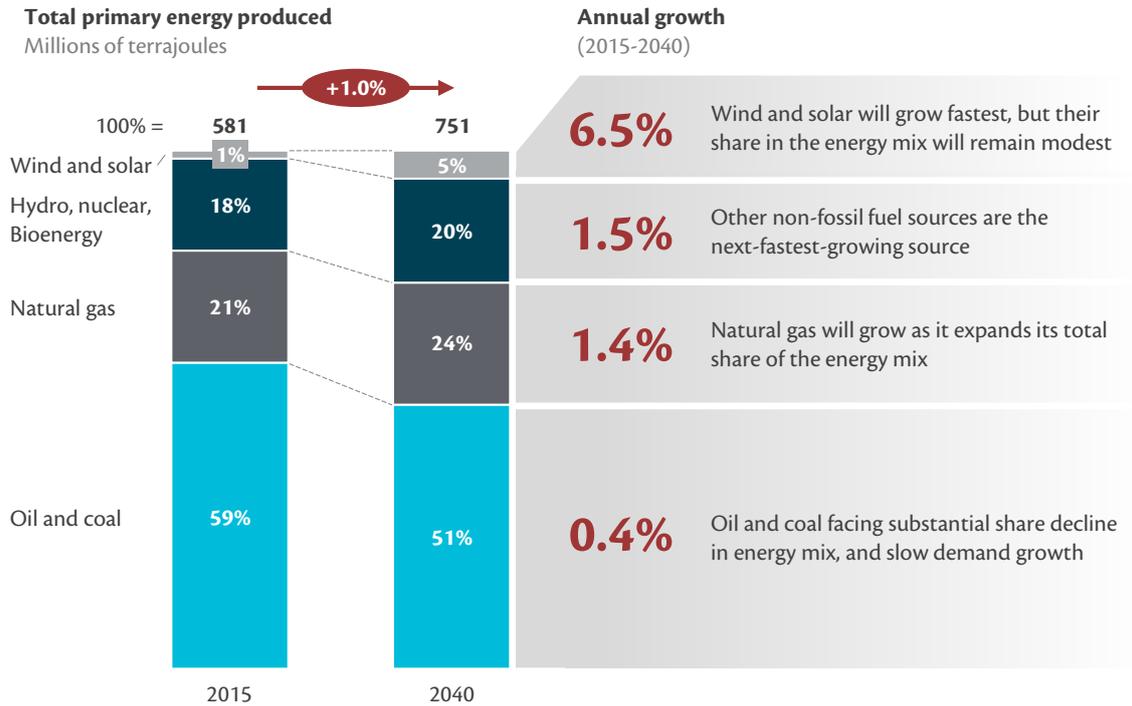
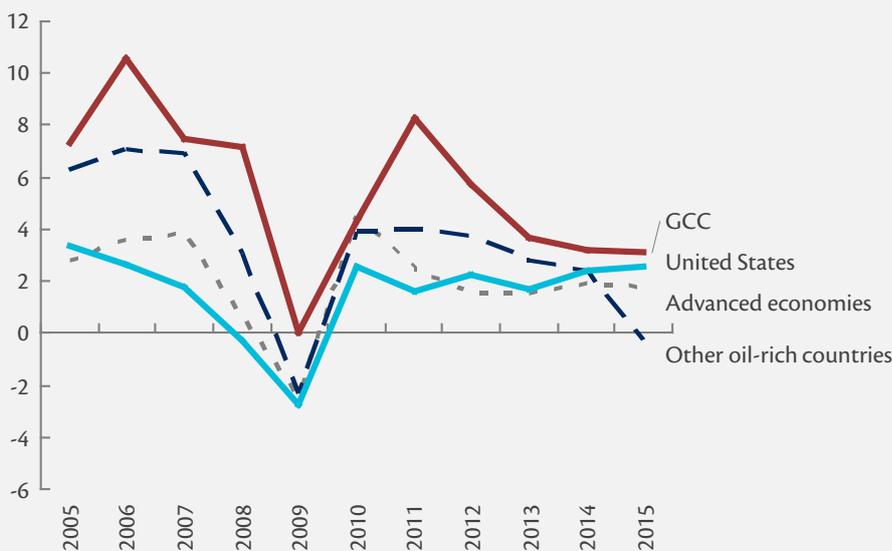


Exhibit 2

RESOURCE-RICH ECONOMIES CAN BE MORE VOLATILE THAN OTHER ADVANCED ECONOMIES, SLOWING LONG-TERM GROWTH

Real GDP growth in resource-rich countries has been higher than in non-resource rich advanced economies ...

Real GDP growth, LCU, % y-o-y



... but is also more volatile

Standard deviation, %

GCC	3.0
Other oil-rich nations	2.9
United States	2.3
Advanced economies	1.9

GCC excluding Oman. Other oil rich nations include Norway, Russia, Kazakhstan. Advanced economies include Italy, France, Germany, UK, New Zealand, Australia, South Korea, Singapore and Japan
SOURCE: IHS

to GDP through consumption, is linked to employment status. This means that shocks in sectors with high expat employment have pro-cyclical effects on economic growth. In other words, expats lose their jobs in downturns and leave the country, taking their spending power and skills with them. This pro-cyclical trend is also strengthened by patterns of government spending, which is often highly linked to resource revenues.

PRESSURE ON EXISTING MODELS

Oil-exporting countries also face significant pressures on their economic, fiscal, and social systems, which we address below. It is worth noting that they all face the challenge of expanding populations with relatively limited growth in revenues from natural resources. In particular, countries that have relied on public sector investment to drive development, and on public sector employment to absorb the young people entering the labor force, will need to rethink their systems.



UNDERSTANDING THE CHALLENGES

To build economic resilience and sustainability, oil-exporting countries will need to address core issues including closely related economic, fiscal and social factors.

ECONOMIC CHALLENGES

The economic development challenge for oil-exporting countries is usually framed as one of diversification, but it is also helpful to consider it from the perspective of productivity. Many oil-exporting countries share some core challenges.

Dependence on low-productivity employment

Outside of some of the more developed economies in OECD, economic transformation in oil-exporting countries has been relatively slow. The key drivers of growth have been capital, energy use and increases in the labor force – not the productivity increases that drive growth in many other economies.

In Exhibit 3, the larger number in bold shows the impact of each factor in terms of percent of average annual economic growth from 2004-2014, and the smaller number the percentage that this represents of overall annual growth. The key inputs to economic growth include investment, energy use, the number of workers, and two elements of productivity: human capital per worker (education and years of experience) and other factors comprising total factor productivity, including the mix of industries.

Exhibit 3

IN MANY OIL-EXPORTING COUNTRIES, ECONOMIC GROWTH IS DRIVEN MAINLY BY LOW PRODUCTIVE TALENT ACCUMULATION AND CAPITAL-INTENSIVE INDUSTRIES

GDP growth breakdown, % 2004,2014

XX Points of growth
YY% Percentage share

		Oil Exporters					Other benchmark economies			
		UAE	Kuwait	Qatar	Kazakh.	Nigeria	Singapore	USA	China	Korea
GDP growth 04-14 CAGR, %		3.8	3.1	12.5	6.4	6.0	6.3	1.7	10.2	3.7
Inputs	Investment	1.5 38%	1.4 46%	2.2 17%	0.6 9%	0.7 12%	1.4 23%	0.8 46%	3.5 34%	1.2 31.1%
	Energy	1.2 31%	0.5 17%	1.1 9%	1.1 17%	0.3 6%	0.0 0%	-0.1 -4%	1.7 17%	0.6 16.7%
	Employment	6.4 163%	4.1 133%	9.6 76%	1.4 23%	2.4 40%	2.1 34%	0.2 14%	0.4 4%	0.6 15.6%
Productivity	Human capital	1.2 31%	1.6 35%	0.6 5%	0.6 9%	-2.1 -34%	1.0 16%	0.5 31%	1.7 17%	1.7 44.8%
	Other factors	-6.4 -163%	-4.5 -46%	-0.9 -8%	2.6 42%	4.6 77%	1.7 27%	0.2 13%	3.0 29%	-0.3 -8%

SOURCE: MGI Global Growth Model, Team analysis

From the table, we can see that about 60% of growth in Qatar in the past decade was driven by increases in the size of the labor force, with similar patterns in Kuwait and the UAE. The pattern in other oil-exporting countries is different – looking at Nigeria and Kazakhstan shows a smaller role for employment growth, but with a relatively much smaller role for improvements in the level of education in the workforce. (In fact in Nigeria, the average level of education and experience in the workforce has declined).

Looking at other economies around the world, both large and small, highlights some key differences. Singapore and the USA, for example have achieved growth over the past decade without a major role for increase energy use. China's rapid growth has been significantly driven by investment and improvements in overall productivity.

Inefficient use of energy

From 1980 to 2010, global energy efficiency rose by 30%. Energy-exporting countries did not become more efficient at the same rate, and in fact in some countries this stagnated or even declined.

Limited export competitiveness

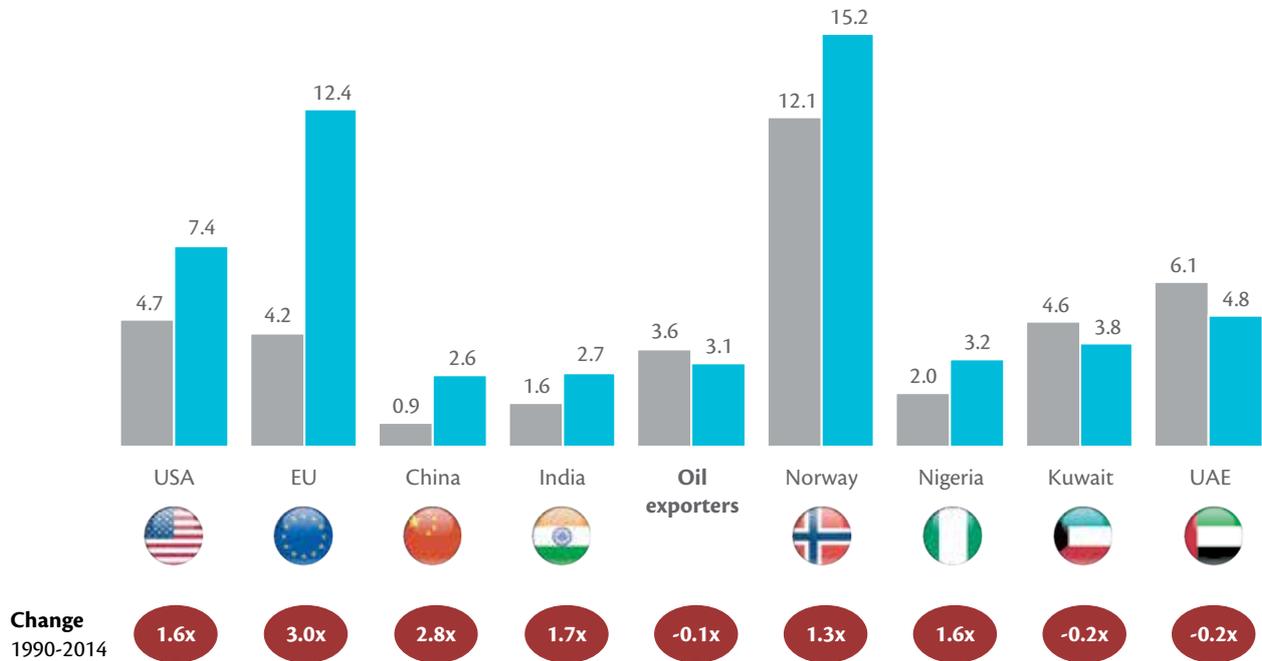
Many energy-exporting countries have struggled to develop non-energy exports – many of which remain broadly uncompetitive. The exports that are competitive, whether directly in petrochemicals or related industries, or in other sectors such as aluminum, are often highly energy-intensive and often with limited sophistication or value-added.

Exhibit 4

THE PAST THREE DECADES HAVE SEEN A TRANSFORMATION IN ENERGY EFFICIENCY, BUT IN SOME OIL-EXPORTING COUNTRIES THIS TRANSITION HAS BEEN SLOWER

\$ 2010 GDP per MTOE of energy final demand

■ 1990 ■ 2014



SOURCE: IEA, World Bank, McKinsey Global Growth Model

What competitive edge exists is driven by cheap energy inputs or by other resources linked to the energy industry. Saudi Arabia, for example, has been successful into becoming a global petchem player, but primarily in the lower value added product segments, and benefiting from low cost of energy inputs. Consequently, oil rich economies have not produced global players in non-oil sectors.

Another key reason these countries have a narrow export base is that they -unlike some of the key export-oriented economies- have not succeeded in attracting foreign investment in export-oriented manufacturing.

Low productivity

Outside of oil and gas, productivity in non-oil sectors is lower than in benchmark countries. For example, output per worker in manufacturing in the UAE is around 60% of Singapore's and 45% of Norway's.³ This situation is not improving; despite a global trend for countries to catch up in productivity, Saudi Arabia, for example, has fallen further behind the US over the past decade.

Combined with high reservation wages driven by high wages in the public sector, this drives significant barriers in the labor market and traps many countries in low productivity patterns in certain industries or the non-oil sector in general.

³ Singapore Statistics, UAE Federal Bureau of Statistics, Norway Statistics

FISCAL CHALLENGES

In many oil-exporting countries, the oil industry is only minimally connected to the rest of the domestic economy, with underdeveloped value chains and limited direct employment in the industry. In many countries, the fiscal regime – revenue from oil and gas financing government spending – forms the main link. Thus, optimizing the fiscal model is important not only for financial sustainability but also for economic resilience.

Unsustainable fiscal “balance sheet”

In almost all energy-exporting countries, government revenues are dominated by resource-related revenue sources, which play key roles as a source of salaries, investment and welfare spending. This leads to a situation where countries reduce the assets on their national “balance sheet” – depleting their assets to meet current spending needs – even if their fiscal “cash flow” is in balance.

Pro-cyclical spending

Public spending patterns are often pro-cyclical – higher when oil prices are high and much lower, especially in public sector investment, when prices are low. This worsens the economic shock of low prices and disrupts vital infrastructure development and other programs.

Meanwhile, many countries have limited linkages between the non-oil economy and state revenues. This means that even raising non-oil economic growth will not be enough to solve the fiscal challenge unless the fiscal system itself is also reformed.

Exhibit 5

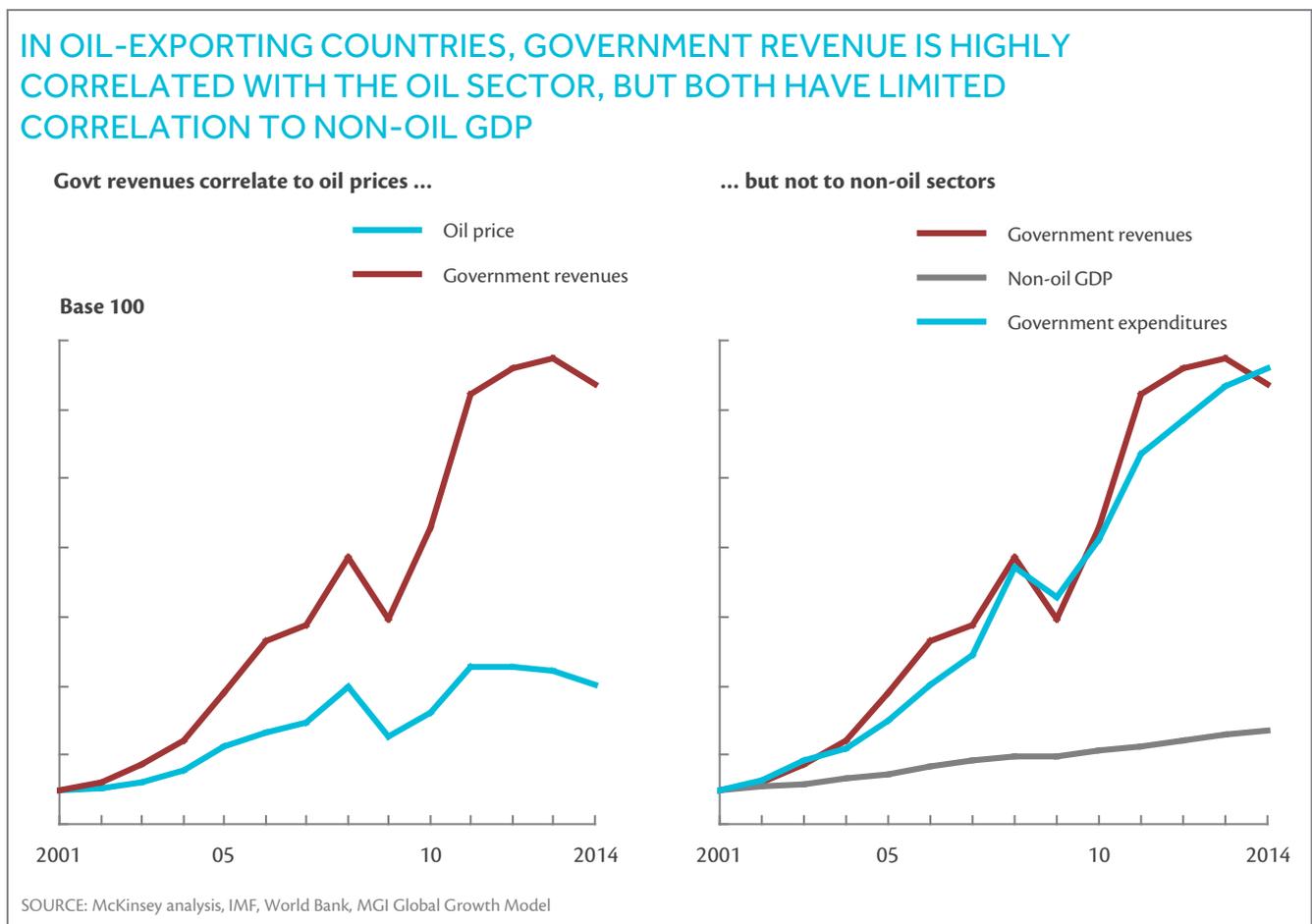


Exhibit 5 shows the impact: the chart on the left shows the close ties between government revenues and oil prices in oil-exporting countries. This is particularly pressing, as the chart on the right shows that spending increases have outstripped non-oil GDP growth.

Despite having significant fiscal reserves, many energy-exporting countries do not have the mechanisms in place to use their reserves for economic stabilization purposes. In more advanced countries, reserves managed by sovereign wealth funds are accumulated and used for three purposes: saving for future generations, economic stabilization, and short-term liquidity buffer. However, many energy-exporting countries do not have formal targets or policies that mandate their SWFs to perform each of these three roles. They are lacking strong fiscal rules that define how reserves could be used for counter-cyclical policies. In contrast, Norway has developed a strong system and culture of fiscal rules that aim to optimize the use of the largest SWF in the world in terms of achieving all the above three objectives (see the case study below for a more detailed discussion of the Norwegian model).

SOCIAL FACTORS

Government leaders need to consider economic and fiscal challenges along with the social impact of these challenges and of any reforms.

Dependence on government

In many oil-exporting countries, a large share of citizens depend on government and by extension on natural resources. The public sector employs many people, and natural resources fund generous welfare systems. In Saudi Arabia, household income increased by about 6% per year from 2003 to 2013, but over 90% of that growth was driven by public sector wages and social transfers.⁴

In addition to being a burden on the budget, such dependence on government creates additional negative externalities. First, generous welfare discourages people to work. Second, for those who are willing to work, high public sector wages and benefits disincentivize them to pursue higher productivity private sector jobs.

Low labor force participation

Many oil-exporting countries also have relatively low labor force participation, which exacerbates reliance on government. The challenge looks different in each country. In many Middle Eastern oil exporters, for example, women's participation is low, or women face higher levels of unemployment than men. In some Central Asian countries, despite high overall participation, the challenge is low participation in rural areas. In addition in some countries, a youth bulge is putting demographic pressure on both government employment and welfare. At the same time if today's young people are not encouraged to pursue private sector jobs, including through entrepreneurship, the negative effects will be felt for years to come.

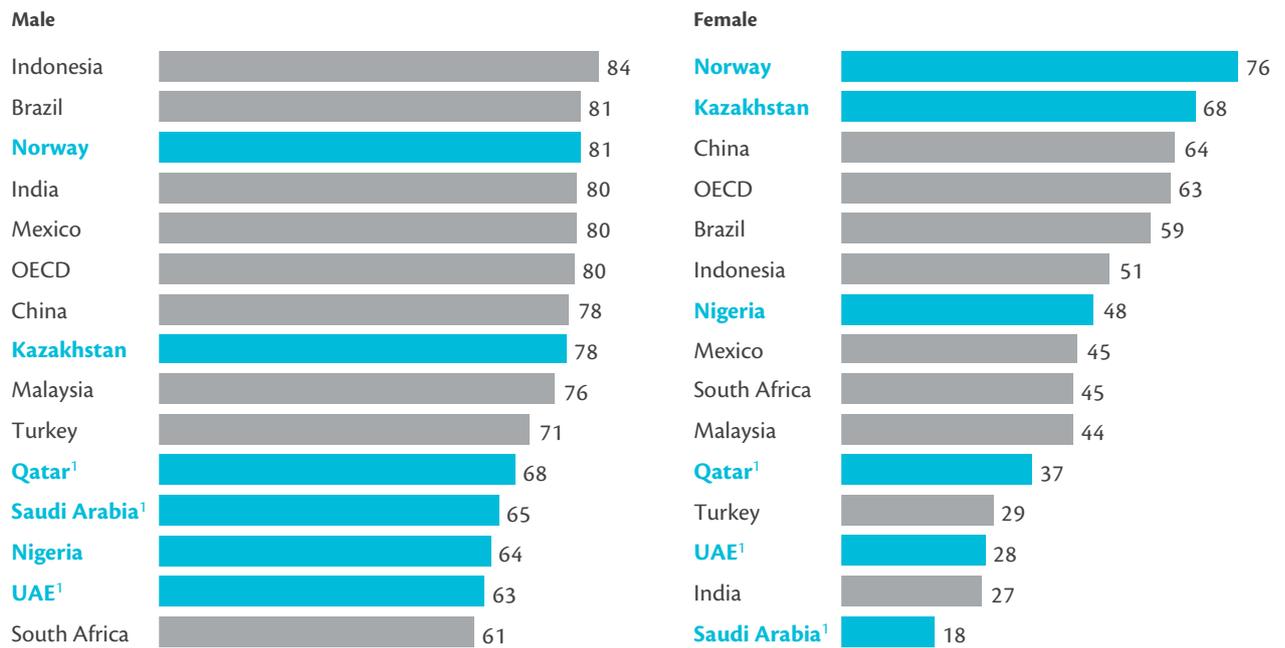
⁴ McKinsey Global Institute *Saudi Arabia Beyond Oil*, 2015

Exhibit 6

MALE AND FEMALE LABOR PARTICIPATION LAGS BENCHMARK COUNTRIES

Labor participation in oil exporters and benchmark nations, 2013

% of working-age population (15-64)



¹ Nationals only; excludes foreign workers

SOURCE: OECD, UAE Federal Statistics Authority (2009), Saudi Ministry of Economy and Planning; Qatar Ministry of Development Planning and Statistics, World Bank Indicators, World Bank; McKinsey Global Institute analysis



ONE EXAMPLE OF A SUCCESSFUL TRANSITION: NORWAY

Given the interrelated nature of many of these challenges, it is worth considering countries that have succeeded in shifting their economic and social models. One country that has reduced its dependence on oil and improved its resilience and sustainability is Norway. It has built a system that insulates the “onshore” economy and the country’s fiscal situation from the effects of oil prices, and built resources for the future. These advances rely on a combination of economic and fiscal policies and firm commitments from all stakeholders in the economy.

When it first discovered oil in the 1960s, Norway did not make the best use of its new-found wealth. The government overspent and endured economic and fiscal crises before making a commitment to transition to a new model based on a few “golden rules”:

- **Everyone works.** Norway’s greatest asset is human capital. One study suggested that human capital represented over 85% of the future wealth of the country, dwarfing the sovereign wealth fund and oil resources. The country relies on strong labor force participation and high-skilled workers
- **Non-oil sectors must remain competitive.** Wage policy, infrastructure investment and a floating currency help protect the competitiveness of non-oil sectors
- **Limit oil revenues used for state spending.** Only 4% of the fund’s current value (based on a conservative estimate of annual return) can be spent – other revenues are transferred to the sovereign wealth fund. This protects wealth for the future and limits inflation impact.

The key lessons for the other oil exporting countries are not necessarily Norway’s specific mechanisms or industries – most OPEC members will never export salmon or timber. But Norway’s success shows the importance of an integrated approach across economic, fiscal and social factors, and the need for commitment from all stakeholders across the economy.

FRAMING A SOLUTION

As Norway's example shows, the economic, fiscal and social elements of the challenge are closely linked.

Relatively low-productivity economic activity that depends on imported labor, and energy-intensive activity that depends on cheap or subsidized inputs, both challenge national budgets. These practices tend to keep private sector wages relatively low, so people's welfare depends heavily on the public sector and transfers, and thus on energy revenues. This encourages reactive behavior in response to price shocks, as the government tries to limit the impact on citizens by pulling back on investments and maintaining operational spending. The lack of non-energy sources of revenue makes this worse, because even if countries can foster stronger non-oil growth, the fiscal benefit will be limited, and the budget will remain dependent on energy revenues.

Therefore, while countries could consider a range of short-term solutions to address individual challenges, improving resilience and long-term requires an integrated approach.

In the next section, we discuss specific measures in each of the three areas, and conclude by addressing the prospects of integrated reform efforts.



ECONOMIC SOLUTIONS

Build productivity in existing sectors

Many oil-exporting countries are trying to grow new industry sectors. This is important, and the drive to build new knowledge-based industries can help increase overall long-term prosperity. Research shows, however, that most of the productivity differences between countries is driven by productivity within sectors rather than the different sectors which exist. This suggests that increasing productivity in existing sectors will be more effective than trying to create new ones. Productivity enhancements could range from infrastructure development to improvements to the regulatory environment. Some countries, such as Singapore, have even established national authorities with a mandate to increase productivity in the private sector. For countries currently dependent on expatriate workers, productivity increases can also help to alleviate some of the pressure on infrastructure and potentially make jobs in the private sector more attractive to nationals.

Improvements in the overall business environment

A core part of this agenda is developing attractive private sector jobs, which typically requires a range of reforms to the business and investment climate. Some of these elements are regulatory, which can be relatively straightforward. Others require improving the government's performance in serving businesses, and perhaps also reducing the government's direct role in non-core activities, that can crowd out other sectors.

Having an environment that is conducive to SME development and entrepreneurship is particularly important for energy-exporting economies with a narrow manufacturing base. In countries with high purchasing power and low level of domestic production, SMEs could flourish producing for the domestic market, and some of them may one day grow to become regional and global players.

Develop human capital

These reforms should help economies generate more productive and thus more attractive employment opportunities for citizens. Human capital is critical, as the Norwegian example shows. Norwegians support education and training across the full spectrum of employment opportunities – ranging from research universities to technical training and lifelong learning – to ensure that the whole population can fully contribute to the economic success of the nation.

FISCAL SOLUTIONS

Transition to a “balance sheet” approach

To manage their budgets better, resource-rich countries should shift from balancing their current accounts to using a balance-sheet approach. Where natural resources or financial reserves are used for public spending or as inputs at below-market prices, the nation should work to create assets that will underpin long-term productivity. For example, careful investments in infrastructure or in education and training can deliver long-term benefits, while providing households with electricity at below-market rates will not.

Adopt new fiscal rules

Fiscal rules can help governments adopt more sustainable policies, reducing the overall burden on resources. This will also make more room for countercyclical spending to help smooth out some of the effects of oil price fluctuations. Fiscal rules can take a variety of forms, with countries adopting a single rule (focused for example on the deficit as a share of GDP), or a set of rules which balance deficits, the role of public investment, or requirements for new revenue measures.

Explore new revenue sources

Reducing spending is only one side of the fiscal coin. It is vital that governments identify new sources of revenue to broaden and deepen the tax base. This can include introducing new taxes (for example, the introduction of a GCC-wide VAT) or expanding coverage of existing sources of revenue.

Make the best use of resources

Governments must also invest wisely and manage projects and programs effectively. A study by the IMF⁵ on public investment management showed that energy-exporting countries have weaknesses in their public investment management systems, which in turn lowers the efficiency and effectiveness of capital spending. Improving management will make the best use of scarce financial and human capital and improve the transition programs' chances of success. Bold visions and lofty goals are essential, but leaders must deliver results if their nations are to keep pace in an increasingly competitive world.

SOCIAL SOLUTIONS

Employment is the key

Many millions of citizens in oil-exporting states have come to depend on their governments to meet most of their financial needs, whether through subsidies or through public sector employment. Reforming this pattern of dependence will reduce the burdens on public resources and increase households' financial resilience in the face of shocks to energy revenues. The solution can be found in productive employment opportunities outside the government and energy sector. Governments can encourage more people to take advantage of these opportunities and help them gain the skills to do so.

Expanding employment opportunities for women will help in some countries, as will redesigning benefits programs to give people more incentives to enter the labor force.

Reform the social safety net

In welfare, housing and other areas, many oil-exporting countries need to reduce people's reliance on government and make existing support systems more targeted and efficient. Examples include unwinding subsidies to make them more targeted, reforming social security investment schemes to boost returns, and expanding and developing housing finance programs to encourage home ownership.

Social safety nets can also be designed to act as an automatic stabilizer to the economy, whereby social spending decreases during growth phases and rises to provide a consumption boost during economic downturns. One way to achieve this is by having unemployment insurance schemes with broad coverage that can help smoothen consumption for those losing their jobs during economic downturns. At the same time, the scheme would be withdrawing liquidity during times of high employment as employees pay contribution. Also, social assistance schemes can be designed in a way that they provide temporary benefits to vulnerable groups during downturns, but then incentivise those who are able to work to do so if jobs can be found.

⁵ <http://www.imf.org/external/np/fad/publicinvestment/>

CONCLUSION: HOW COUNTRIES CAN DRIVE SUCCESS

The past few years have seen some signs of reform in many countries that have a realistic understanding of the twin challenges of increasing resilience and sustainability.

The UAE's National Agenda, for example, presents an integrated agenda across the economic, social and government spheres. Equally ambitious are Saudi Arabia's Vision 2030 and the related National Transformation Plan, both of which will require major and sometimes difficult changes in the years ahead. These programs reflect the seriousness of national leaders and their recognition that half measures and temporary fixes will not be enough – that economic and fiscal reform must be linked with significant changes in the labor market and even in the way people think about work and government.

What will it take to make these transformations successful? Every country is different, but looking at national transformation efforts around the world, we find a few common keys to success.

First, **strong leadership with a clear rationale for change** that is broadly accepted across society. Given the fundamental nature of the change required, leaders and citizens must share a clear understanding of the challenges they face, their starting point and their goals.

Second, **keen insights based on data**. To design effective interventions and programs, make wise decisions and track their impact, governments must collect and harness timely, comprehensive data and understand its implications.

Third, a **careful sequence of reforms to protect the welfare of citizens** and keep them on board with the transformation. Some reforms will necessarily upend expectations that families have held for generations. The most successful transformations introduce each major change carefully to help people adjust and understand what it will mean. Subsidy reforms, for example, might be introduced hand-in-hand with new training opportunities or improvements in private sector benefits.

Finally, **policy stability and predictability** are essential to creating an environment for national development – including partnering with the private sector to deliver on the economic agenda. Greater stability fosters private sector and investor confidence in a way which encourages investment and job creation and thus supports the overall agenda. Governments can improve stability and predictability in many ways, such as by maintaining a stable investment environment, setting and abiding by fiscal rules, and clarifying expectations about the path to reform – and its benefits.

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