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**Insight Report** 

# The Arab World Competitiveness Report 2013

May 2013



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independent basis.

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## **Preface**

Erik Berglöf, European Bank for Reconstruction and Development

Børge Brende, World Economic Forum This fifth edition of *The Arab World Competitiveness Report* appears at a critical time for the Arab world. After decades of uneven efforts to reform their economies, many countries in the region over the last few years have embarked to varying degrees on political transitions, sparked by the dramatic events of the Arab uprisings. Faced with the aspirations of their populations, political leaders will have to decide on the economic direction of their countries. The uprisings and ensuing transitions have brought to light a number of socio-economic challenges – including youth unemployment, regional inequalities, weak institutions and lethargic private sectors – that must be addressed to fulfil the hopes that have been seeded. Strong leadership based on a shared vision of the future political and economic system will be necessary to navigate the countries of the region through these turbulent times.

The European Bank for Reconstruction and Development (EBRD) and the World Economic Forum aim to facilitate these transitions and to support the region's efforts to boost competitiveness and growth. The EBRD has recently extended its activities to four Arab countries in transition: Egypt, Jordan, Morocco and Tunisia. In preparation for its engagement in the new region, the Bank has evaluated transition progress and challenges in the four countries based on 20 plus years of experience helping Eastern and Central Europe develop market-oriented economies. The Forum has been providing detailed assessments of Arab nations' productive potential through *The Arab World Competitiveness Report* series since 2002 and continues to actively stimulate dialogue on competitiveness between the public and private sectors in the region.

This joint *Report* attempts to contribute to understanding the key factors determining future prosperity and economic growth in the Arab world. It offers policy-makers and business leaders an important tool in improving economic policies and implementing institutional reforms. The findings of this *Report* will provide a key basis for discussions at the World Economic Forum on the Middle East and North Africa to be held in Jordan on 24-26 May 2013.

With the aim of facilitating transitions and generating future employment – undoubtedly the region's most pressing priority – the *Report* investigates the Arab world's current competitiveness with a focus on North Africa and the Levant. The sector and country-level methodology employed in this *Report* serves to guide EBRD's engagement in the new region by empowering the private sector through projects and policy advice. The focus is on developing sustainable market structures and institutions, which can enhance the regulatory and business environment and ultimately attract more capital into the region.

The Arab World Competitiveness Report 2013 could not have been put together without the commitment of the teams within our two organizations, under the leadership of Hanan Morsy at the EBRD and Margareta Drzeniek Hanouz and Miroslav Dusek at the World Economic Forum. At the EBRD, we would like to thank Nafez Zouk for research support. At the World Economic Forum, appreciation goes to Jennifer Blanke, Chief Economist, and the members of the competitiveness team Ciara Browne, Gemma Corrigan and Tania Gutknecht, as well as Hala Hanna and Sofiane Khatib from the Middle East team for their continued support.

This *Report* also would not have been possible without the collaboration of the World Economic Forum's network of Partner Institutes in the region. They carry out the Executive Opinion Survey, thus providing much of the underlying information used in this *Report*. Finally, we would also like to convey our sincere gratitude to all the business executives in the Arab world who took the time to participate in the Executive Opinion Survey.

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# The Employment-Competitiveness Nexus in the Arab World: Findings from the Global Competitiveness Index 2012-2013

By Margareta Drzeniek Hanouz and Miroslav Dusek, World Economic Forum

The Arab world has witnessed many changes over the past few years. Since the onset of the Arab Spring, many countries have embarked on a political and economic transition process, which brought to light the daunting social and economic challenges many countries in the region face. High unemployment, particularly among the young, female and the educated parts of the population, is considered by many to be the most important socioeconomic challenge currently facing the region. The problem is not new. The subsequent editions of *The Arab World Competitiveness Report* have highlighted since 2002 the need to strengthen competitiveness in order to create jobs and to absorb the large numbers of young people coming into the workforce.

The causes of unemployment in the Arab world are numerous and complex, yet two aspects play an important role. One is the demographic evolution in the region. High population growth ensures that large numbers of young people enter the workforce every year, and growth in the region has not been sufficient to create an appropriate number of jobs, thus leading to high levels of youth unemployment despite efforts to enhance education. Another important aspect is that the private sector, the most important engine of job creation, cannot thrive in a context of the low national competiveness encountered in the region. The stalemate is further aggravated by the consequences of political turbulence, which impact investment in the region and key sectors such as tourism.

In the longer term, the unemployment challenge in the Arab world cannot be resolved without major strides in countries' national competitiveness, as only a strong and dynamic private sector can create a sufficient number of jobs to absorb the countries' growing young workforce. Against this background, this *Report* will analyse the region's competitiveness and identity ways to strengthen economic performance in the region with the ultimate aim of contributing to job creation for the growing populations. The analysis is based on the results of the Global Competitiveness Index 2012-2013. It features additional contributions from the World Economic Partner Institutes in the region, as well as from Global Shapers from the region. The Global Shapers Community is a network of hubs developed and led by young people who have exceptional potential.

## Methodology

The World Economic Forum defines competitiveness as the set of institutions, policies and factors that determine a country's level of productivity. The level of productivity, in turn, determines the rates of return obtained by investments in an economy. Because the rates of return are also drivers of growth rates, a more competitive economy is likely to grow more and become more prosperous in the medium to long term.

Since its introduction in 2005, the Global Competitiveness Index (GCI) has been the key methodology used by the World Economic Forum in its assessments of competitiveness. The model, which was developed by Xavier Sala-i-Martin and the World Economic Forum, rests on the belief that the determinants of competitiveness are numerous and interact with each other in a complex manner. The GCI captures these interactions through a weighted average of many different components, each of which reflects a particular aspect of competitiveness. These components are grouped into 12 categories, 1 as follows:

Institutions are crucial for competitiveness as they determine
the legal and administrative framework within which individuals,
firms and the government interact. Examples of well-functioning
institutions include clearly defined and enforced property rights,
an efficient and transparent public administration, a fair and
independent judiciary, provision of physical security, and high
corporate governance standards.

- Infrastructure is key for economic activity for a number of reasons. Transport infrastructure is crucial for getting goods to markets rapidly and at low cost, electricity for smooth and interruption-free production, and telecommunications for efficient communication.
- 3. Stability in the Macroeconomic environment is important, as its absence makes it difficult for businesses to operate. Inflation limits companies' ability to plan and invest, and continued fiscal lassitude, high government debt or inefficiencies in the financial system can result in high interest rates, restraining both public and private investment.
- 4. **Health and primary education** are crucial as a healthy workforce that has received at least a basic education is much better positioned to perform to its full potential.
- Countries cannot move up the development ladder without investing in Higher education and training, as more complex products and production processes require a skilled workforce.
- Healthy competition is an important driver of efficiency and innovation, as it forces inefficient businesses out of the market and enables new ventures to enter the market. This concept is represented under the goods markets efficiency pillar.
- 7. Labour market efficiency is important to ensure that talent is put to its best use in an economy. A flexible labour market, accompanied by meritocratic incentive structures, free of discrimination against societal groups, is best placed to contribute to competitiveness.
- 8. Much attention has recently been paid to the functioning of financial markets. The **financial market development** pillar encapsulates two major factors that contribute to competitiveness: the efficiency of the financial system as a source of finance for businesses and the stability and trustworthiness of the financial system.
- 9. Technological readiness reflects a country's ability to adopt the latest technologies and use them to increase domestic productivity. We distinguish between adoption of technology and technological innovation (the 12th pillar), as these two factors affect competitiveness in different ways. Technological adoption raises the productivity of existing processes, whereas innovation expands the technology frontier. Much of the productivity-enhancing effect, in particular in emerging markets that do not operate at the technology frontier, can therefore be harnessed through the adoption of foreign technologies.
- 10. Market size is taken into account because large markets, which are viewed as domestic markets, expanded by international markets, enable companies to realize economies of scale.
- 11. Business sophistication plays an important role for productivity. The presence of clusters of economic activity raises the efficiency of many processes within businesses, while activities such as marketing and distribution raise productivity by increasing the value of products and services.
- 12. As noted above, **Innovation** is crucial, as it can expand the technology frontier. Businesses in advanced economies can only sustain high wage levels through moving the technology frontier outwards; they must therefore develop cutting-edge products or services and/or develop unique processes.

<sup>&</sup>lt;sup>1</sup> The appendix to this chapter shows the detailed structure of the GCI. For a more detailed discussion of the 12 pillars and their contributions to competitiveness, see Sala-i-Martin et al. 2012

Although taken into account separately in the GCI, the categories are highly interrelated. In fact, they tend to reinforce each other. For example, innovation (pillar 12) is not possible in a country where weak competition among companies (pillar 6) or poor protection of intellectual property (pillar 1) reduces incentives to innovate. A well-educated population (pillar 5) best contributes to raising productivity when the labour market is flexible and meritocratic incentives are common in the workplace (pillar 7).

The GCI also takes into account the fact that the different dimensions of competitiveness are not of equal importance to all countries. As a country becomes increasingly advanced in economic terms, its products and services must become increasingly sophisticated to sustain the rising productivity levels necessary to maintain an increasing wage level. The GCI therefore attributes different weighting schemes depending on the level of development of a country. Economies are grouped in three stages of development: the factor-driven stage, the efficiency-driven stage and the innovation-driven stage, based on GDP per capita and the importance of natural resources in their economy.<sup>2</sup>

The pillars are grouped into subindexes as shown in Figure 1 and different weights are applied on the subindexes, depending on the stage of development. Basic requirements are relatively more important for factor-driven economies, efficiency enhancers matter relatively more for efficiency-driven economies, and innovation and sophistication factors also take on increasing importance for innovation-driven economies.

It is important to note that the GCI is calculated using two distinct types of data. Approximately one third of the indicators are data obtained mainly from major international organizations, such as the World Bank, International Monetary Fund, UNESCO and so on. The remaining indicators are derived from the World Economic Forum's annual Executive Opinion Survey (Survey). By surveying business executives, it provides an assessment of the more qualitative aspects of competitiveness, as well as on dimensions for which statistical sources are not available for all countries covered by the GCI. The Survey is conducted in collaboration with partner institutions in each country, which administer the Survey process. In 2012, over 15,000 business executives were surveyed in 144 countries between January and May.3,4

A total of 13 Arab countries are part of the sample of 144 economies covered by the GCI 2012-2013. Currently, the GCI covers Algeria, Bahrain, Egypt, Jordan, Lebanon, Morocco, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates and Yemen. Tunisia and Syria, which have been included in past editions of the GCI, were excluded. In Syria, it was not possible to carry out the Survey during the civil unrest in the country. In Tunisia, the data presented a structural break that made an informed interpretation of the GCI results impossible. Table 1 shows how countries in the Arab world are allocated into the three stages and provides details about the weighting scheme applied.

Figure 1: The 12 pillars of competitiveness

## **Basic requirements**

- Institutions
- Infrastructure
- Macroeconomic environment
- Health and primary education

## Efficiency enhancers

- Higher education and training
- Goods market efficiency
- Labour market efficiency
- Financial market development
- Technological readiness
- Market size

Key for

factor-driven



## Innovation and sophistication factors

- Business sophistication
- Innovation



Key for innovation-driven economies

<sup>&</sup>lt;sup>2</sup> This is proxied by the share of exports of mineral products as a share of total exports.

<sup>&</sup>lt;sup>3</sup> For the detailed breakdown of Survey respondents and more details about the Executive Opinion Survey and the processing of the data, see Browne and Geiger 2012.

<sup>&</sup>lt;sup>4</sup> Since 2007, the Survey data has been calculated as a moving average of the present and the previous year, in line with a Bayesian updating approach. There are several reasons for doing so. First, it renders the results less sensitive to the specific point in time when the Survey is administered. Second, it increases the amount of available information by providing a larger sample size, and by retaining some previous information, which continues to be deemed valuable. Additionally, because the Survey is carried out during the first quarter of the year, the average of the responses in the first quarter of 2010 and first quarter of 2011 better aligns the Survey data with many of the data indicators from sources other than the Forum, which are often year-average data.

Table 1: Allocation of Arab countries to stages of development

Stage	Arab World	Examples of countries in this stage	Important areas for competitiveness
Stage 1 (factor-driven) GDP per capita (US\$) < 2,000;	Yemen	Bangladesh, Kenya, Pakistan, Vietnam	Basic requirements (60%) and efficiency enhancers (35%)
Transition from 1 to 2 2,000< GDP per capita (US\$) < 3,000;	Algeria, Egypt, Kuwait, Libya, Qatar, Saudi Arabia	Brunei Darussalam, Iran, Islamic Rep., Venezuela	Basic requirements (between 40% and 60%) and efficiency enhancers (between 35% and 50%)*
Stage 2 (efficiency-driven) 3,000 < GDP per capita (US\$) < 9,000;	Jordan, Morocco	China, South Africa, Ukraine	Basic requirements (40%) and efficiency enhancers (50%)
Transition from 2 to 3 9,000< GDP per capita (US\$) < 17,000;	Bahrain, Oman, Lebanon	Chile, Croatia, Poland, Trinidad and Tobago	Basic requirements (between 20% and 40%) and efficiency enhancers (50%) Innovation factors (10% to 30%)*
Stage 3 (innovation-driven) GDP per capita (US\$) > 17,000;	United Arab Emirates	Germany, Korea, Rep, Norway, Spain, United Kingdom, United States	Basic requirements (20%) and efficiency enhancers (50%) Innovation factors (30%)*

Source: The Global Competitiveness Report 2012-2013

## Where does the Arab world stand in terms of competitiveness?

Table 2 presents the positioning of the Arab countries within the global ranking. Among the Arab countries assessed, Qatar stands out as the most competitive economy, followed by Saudi Arabia and the United Arab Emirates. Oman, Bahrain and Kuwait occupy positions lower in the ranking. North African and Levantine economies lag behind Gulf countries.

Figure 2 shows how the different subregions perform in terms of the 12 pillars of competitiveness in comparison to EU27 countries. It underscores the persistent and significant competitiveness divide between North African and Levantine economies, on the one hand, and Gulf countries, on the other. Not surprisingly, this gap is most remarkable when it comes to infrastructure and macroeconomic development, where the oil-exporting economies of the Gulf enjoy a particular advantage. The figure also underscores the significant differences present in the region, which span across almost all dimensions assessed by the GCI. While on most categories, some countries have reached the level of EU27, other economies lag behind by a significant margin. Interestingly, the only area where no country has reached EU27 levels is higher education and training.

Figure 2: 12 pillars of competitiveness - Subregion performance

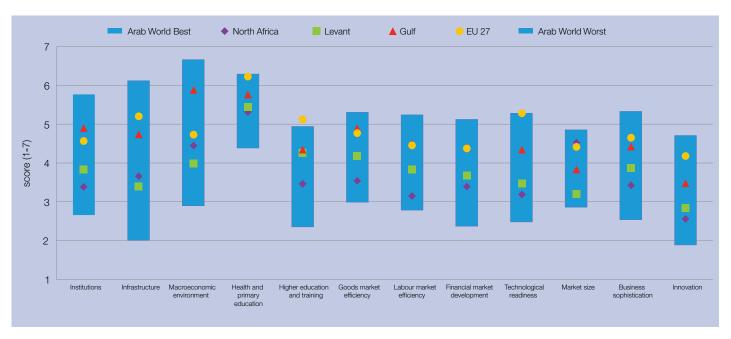


Table 2: Global Competitiveness Index 2012-2013 rankings

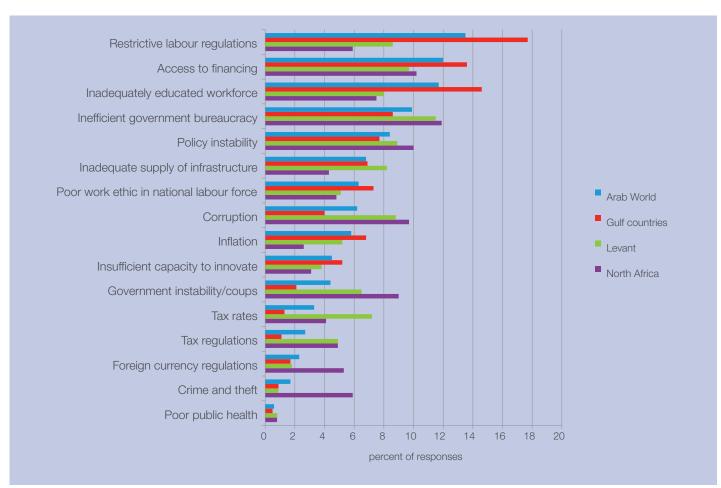
Rank / 144	Country/Economy	Score	Rank / 144	Country/Economy	Score	Rank / 144	Country/Economy	Score
1	Switzerland	5.72	49	Portugal	4.40	97	Jamaica	3.84
2	Singapore	5.67	50	Indonesia	4.40	98	Gambia, The	3.83
3	Finland	5.55	51	Kazakhstan	4.38	99	Gabon	3.82
4	Sweden	5.53	52	South Africa	4.37	100	Tajikistan	3.80
5	Netherlands	5.50	53	Mexico	4.36	101	El Salvador	3.80
6	Germany	5.48	54	Mauritius	4.35	102	Zambia	3.80
7	United States	5.47	55	Latvia	4.35	103	Ghana	3.79
8	United Kingdom	5.45	56	Slovenia	4.34	104	Bolivia	3.78
9	Hong Kong SAR	5.41	57	Costa Rica	4.34	105	Dominican Republic	3.77
10	Japan	5.40	58	Cyprus	4.32	106	Kenya	3.75
11	Qatar	5.38	59	India	4.32	107	Egypt	3.73
12	Denmark	5.29	60	Hungary	4.30	108	Nicaragua	3.73
13	Taiwan, China	5.28	61	Peru	4.28	109	Guyana	3.73
14	Canada	5.27	62	Bulgaria	4.27	110	Algeria	3.72
15	Norway	5.27	63	Rwanda	4.24	111	Liberia	3.71
16	Austria	5.22	64	Jordan	4.23	112	Cameroon	3.69
17	Belgium	5.21	65	Philippines	4.23	113	Libya	3.68
18	Saudi Arabia	5.19	66	Iran, Islamic Rep.	4.22	114	Suriname	3.68
19	Korea, Rep.	5.12	67	Russian Federation	4.20	115	Nigeria	3.67
20	Australia	5.12	68	Sri Lanka	4.19	116	Paraguay	3.67
21	France	5.11	69	Colombia	4.18	117	Senegal	3.66
22	Luxembourg	5.09	70	Morocco	4.15	118	Bangladesh	3.65
23	New Zealand	5.09	71	Slovak Republic	4.14	119	Benin	3.61
24	United Arab Emirates	5.07	72	Montenegro	4.14	120	Tanzania	3.60
25	Malaysia	5.06	73	Ukraine	4.14	121	Ethiopia	3.56
26	Israel	5.02	74	Uruguay	4.13	122	Cape Verde	3.55
27	Ireland	4.91	75	Vietnam	4.11	123	Uganda	3.53
28	Brunei Darussalam	4.87	76	Seychelles	4.10	124	Pakistan	3.52
29	China	4.83	77	Georgia	4.07	125	Nepal	3.49
30	Iceland	4.74	78	Romania	4.07	126	Venezuela	3.46
31	Puerto Rico	4.67	79	Botswana	4.06	127	Kyrgyz Republic	3.44
32	Oman	4.65	80	Macedonia, FYR	4.04	128	Mali	3.43
33	Chile	4.65	81	Croatia	4.04	129	Malawi	3.38
34	Estonia	4.64	82	Armenia	4.02	130	Madagascar	3.38
35	Bahrain	4.63	83	Guatemala	4.01	131	Côte d'Ivoire	3.36
36	Spain	4.60	84	Trinidad and Tobago	4.01	132	Zimbabwe	3.34
37	Kuwait	4.56	85	Cambodia	4.01	133	Burkina Faso	3.34
38	Thailand	4.52	86	Ecuador	3.94	134	Mauritania	3.32
39	Czech Republic	4.51	87	Moldova	3.94	135	Swaziland	3.28
40	Panama	4.49	88	Bosnia and Herzegovina	3.93	136	Timor-Leste	3.27
41	Poland	4.46	89	Albania	3.91	137	Lesotho	3.19
42	Italy	4.46	90	Honduras	3.88	138	Mozambique	3.17
43	Turkey	4.45	91	Lebanon	3.88	139	Chad	3.05
44	Barbados	4.42	92	Namibia	3.88	140	Yemen	2.97
45	Lithuania	4.41	93	Mongolia	3.87	141	Guinea	2.90
46	Azerbaijan	4.41	94	Argentina	3.87	142	Haiti	2.90
47	Malta	4.41	95	Serbia	3.87	143	Sierra Leone	2.82
48	Brazil	4.40	96	Greece	3.86	144	Burundi	2.78

The heterogeneity of the region is reflected in the different strengths and weaknesses the three subregions under discussion display. North Africa (Libya, Morocco, Egypt and Algeria), for example, shows relative strengths in health and basic education, market size and the macroeconomic environment. The latter of which is influenced by the favourable situation in oil-exporting economies in this subregion. At the same time, North African economies face significant challenges related to labour-market efficiency and institutions. More labour-market flexibility and more efficient allocation of talent, as well as a fundamental overhaul of the institutional framework, will be crucial for creating growth and employment in these countries.

Countries in the Levant (Lebanon and Jordan) benefit from relatively strong educational outcomes but are challenged by infrastructure shortages and their small market size. For the Gulf region (Bahrain, Qatar, Saudi Arabia, Kuwait, Oman, UAE and Yemen), the stable macroeconomic environment is a major advantage, while low levels of innovation are a challenge for the economies, particularly as they diversify and move into more advanced stages of development.

Figure 3 sheds additional light on the factors that hamper business development in the region. It is based on a question in the Survey asking the executives to identify and prioritize the most problematic factors for those doing business in their countries. The results corroborate some of the findings of the GCI by suggesting that labour-market-related measures are crucial for private sector growth, which in turn is a major engine of job creation going forward. For the Arab world region as a whole, restrictive labour regulations emerge as the most important factor, ahead of access to finance and the inadequately educated workforce. While labour-related factors are the most important impediments to business activity in the Gulf region, business development in North Africa and the Levant would benefit from a stronger institutional framework, in particular from less bureaucracy and corruption, and more political and policy stability. In both subregions, however, labour-market-related issues (regulations and skills) are also frequently mentioned. The following section analyses the country performance in detail.

Figure 3: Most problematic factors for doing business



Source: Executive Opinion Survey 2012, World Economic Forum

Qatar reaffirms once again its position as the most competitive economy in the region by occupying the 11th position. The country has followed an upward trend in recent years, which was sustained by improvements in its macroeconomic environment, the efficiency of its markets for goods and services, and its institutional framework. The country's strong performance in terms of competitiveness rests on solid foundations made up of a high-quality institutional framework, a stable macroeconomic environment (2nd), and an efficient goods market (10th). Low levels of corruption and of undue influence on government decisions, high efficiency of government institutions and high levels of security are the cornerstones of the country's very solid institutional framework, which provides a good foundation for heightening efficiency. Going forward, reducing the country's vulnerability

to commodity price fluctuations will require diversification into other sectors of the economy and reinforcing some areas of competitiveness. Qatar's efforts to strengthen its financial sector appear to be paying off, as the trustworthiness and confidence in the country's financial markets improved from 80th to 44th this year. However, the legal rights of borrowers and lenders remain under-protected (99th). Given its high wage level, diversification into other sectors will require the country to raise productivity by continuing to promote a greater use of the latest technologies (27th) and by fostering more openness to foreign competition – currently ranked at 42nd, reflecting barriers to international trade and investment. Box 1 sheds further light on the competitiveness-enhancing measures recently implemented in Qatar.

## Box 1: The Vision for Improving Competitiveness in Qatar and Key Achievements By the Qatari Businessmen Association and Gemma Corrigan, World Economic Forum

The Qatar National Vision 2030, based on four pillars, aims to harmonize economic growth with social and human development, while ensuring environmental protection and a sustainable use of resources. The government aims to improve standards of living through sound macroeconomic management and diversification, with a particular emphasis on education, science and technology, to strike a balance between an oil- and knowledge-based economy.

Qatar has made great strides in education reform over the last decade especially in the K-12 system of basic education (in collaboration with the RAND-Qatar Policy Institute). Public expenditure on education will increase by 15% in 2013-14 compared with the previous fiscal year's budget. The Education and Training Sector Strategy 2011-2016 emphasizes the importance of higher education in developing a knowledge-based economy, as well as the importance of technical and vocational training to build a more qualified workforce to meet growing labour market demands. Science and technology reflects a longstanding focus of educational reforms as evident in the opening of numerous independent schools and private foreign university satellites specializing in medicine and engineering in Education City over the past few years.

In line with its prioritization of post-secondary education, Qatar is striving towards becoming a regional hub for applied research and technological innovation particularly in the health care and biomedical fields. This ongoing effort is visible in the development of the US\$ 7.8 billion state-of-the art Sidra Medical and Research Centre, scheduled to open in 2013 and employ a staff of more than 2,000. Large investments have also been made to develop green construction and the renewable energy sector as evident in the numerous solar power R&D projects underway in Qatar's Science & Technology Park (QSTP). These initiatives aim to address the country's growing energy needs in an environmentally sustainable and innovative manner.

Many recent initiatives have sought to improve the country's infrastructure to support the development of the tourism sector. Growth in the construction and transport sectors is expected to reach between 10% and 15% respectively in 2013 and continue to grow rapidly in the future. For example, the amount of US\$ 200 billion will be invested in construction and energy projects over the next 10 years spurred by 2022 FIFA World Cup. This trend also extends to the transport sector; in addition to improving roads, the country plans to build a 300 km railway system to enhance connectivity with the recently constructed Doha international airport.

With respect to goods market efficiency, the country has improved recently in terms of the ease of doing business, with a new Commercial Companies Law aimed at simplifying the procedures required for the establishment of commercial enterprises. Access to credit has improved over the past few years and trading across borders improved notably in 2013. Qatar also reduced the time for exporting and importing by introducing a new website allowing electronic data interchange for customs clearance at the Doha seaport.

In terms of financial market development, recent reforms by the Qatar Credit Bureau will grant banks access to borrowers' credit details to rank their creditworthiness. This initiative seeks to reduce the number of write-offs and defaults, and further bolster the country's macroeconomic stability. Financial reforms have also granted the Central Bank regulatory authority over the country's stock market, thereby lengthening the settlement time for institutions' stock trades and expediting the creation of banks' brokerage arms. This aims to increase liquidity in the market and make payments easier.

In conclusion, extensive investments and reforms across several areas relevant to competitiveness, including higher education and training, innovation, infrastructure, goods market efficiency and financial market development, have been undertaken in Qatar, aiming to improve the country's overall productivity and further drive growth.

Saudi Arabia occupies the second-best place in the region at 19th. The country has seen a number of improvements to its competitiveness in recent years that have resulted in a solid institutional framework, efficient markets and sophisticated businesses. Higher macroeconomic stability (6th) and more prevalent use of ICT for productivity improvements contribute to maintaining Saudi Arabia's strong competitiveness position. Box 2 discusses the most recent initiatives in more detail. Its macroeconomic environment benefits from rising energy prices, which buoyed the budget balance into an even higher surplus in 2011. As much as the recent developments are commendable, the country faces important challenges going forward. Health and education do not reach the standards of other countries at similar income levels. Although some progress is visible in health outcomes, improvements are being made from a low level. As a

result, the country continues to occupy low ranks in the health and primary education pillar (58th), and room for improvement remains on the higher education and training pillar (40th) as well. Boosting these areas, in addition to fostering a more efficient labour market (59th), will be of great significance to Saudi Arabia given its growing number of young people who will enter the labour market over the next few years. More efficient use of talent will increase in importance as global talent shortages loom on the horizon and the country attempts to diversify its economy, which will require a more skilled and educated workforce. Last but not least, although some progress has been recorded over the past years, the use of the latest technologies can be enhanced further (35th), especially as this is an area where Saudi Arabia continues to lag behind other Gulf economies.

## Box 2: Enhancing Competitiveness in Saudi Arabia By Mohammed Kafaji, Alfaisal University, and Khaldon Mahasen, Saudi Arabian General Investment Authority (SAGIA)

The Kingdom of Saudi Arabia continues to enjoy its standing as the largest economy in the Middle East through its leadership's conservative economic policies and continued political stability. Throughout the past few years, the government has supported various initiatives boosting spending across the board, including infrastructure projects, social programmes, healthcare and education, thereby increasing investment opportunities and creating a more business-friendly investment climate. Despite the global slowdown of economic growth, Saudi Arabia enjoyed a large budget surplus that set it far ahead of many in the region and boosted perceptions of its economic performance.

The Saudi Government's investment in the domestic economy includes US\$ 450 billion to upgrade the infrastructure of the Kingdom; launching new initiatives to boost infrastructure on a regional level, including the planned development of a US\$ 128 billion world-class integrated passenger and freight rail network, as well as a GCC-wide power grid; and an investment of US\$ 510 million in the Red Sea Gateway Terminal (RSGT) at Saudi Arabia's Jeddah Islamic Port (JIP) which will increase the annual capacity of JIP by 45%.

The Saudi Government also launched a generous direct consumption stimulus and invested 250 billion Saudi Riyals (US\$ 67 billion) in an affordable housing programme.

In addition, unemployed Saudis were offered support through various programmes including the "Hafiz" programme, offering unemployment benefits and technical guidance to unemployed citizens searching for jobs.

A key priority for the Kingdom is improving the quality of its educational institutions. This priority has been spearheaded by US\$ 5 billion investment in basic education (grades 1-12). King Abdullah University of Science and Technology was also established, which is an international graduate-level research university and holds the second-biggest university endowment globally (second only to Harvard). The Saudi Government has also encouraged Saudi graduates to pursue studies abroad through the King Abdullah Foreign Scholarship Programme which is now in its second phase. The aim of this programme, from which 170,000 students have benefited, is to actively develop and qualify Saudi students from the most distinguished foreign universities for the Saudi workplace.

In addition, the Saudi Government has implemented many reforms to enhance the competitiveness of the business environment. The most notable impact can be observed in the scores of the following four pillars: institutions, higher education and training, financial market development, and innovation. These four pillars dealt with business issues that were directly or indirectly impacted by the more than 40 competitiveness reforms of the past five years. Saudi Arabia's ambitious 10x10 Programme concentrated on the institutions pillar, focusing on improving the business environment as measured by the World Bank's annual Ease of Doing Business Index. In the last five years Saudi Arabia has climbed from 67th to 22nd on the back of reforms and regulatory improvements that have eased the "doing business" climate for investors.

## Box 3: Growth and Diversification: Competitiveness-enhancing Reforms in the UAE

By Alya Al Mulla, and Shaheena Mohamed, Emirates Competitiveness Council (ECC)

The United Arab Emirates (UAE) economy exhibits good macroeconomic strength, with expected overall GDP growth of 3.14% in 2013.5 The country's plans for diversification are on track as the non-hydrocarbon economy looks set to continue growing this year, backed by strong trade, tourism, logistics and manufacturing figures. The UAE is also investing in the development of sectors spanning healthcare, financial services, renewable energy, aerospace, nanotechnology, biotechnology, materials science and information technology.

The UAE's economic strength is buttressed by its world-class road, sea and airport infrastructure, with significant expansion planned for growth in airports and airline routes, enhancing connectivity and boosting the country's tourism industry. The country is now home to the world's first A380 terminal, cementing its place as a global hub for business, international trade and travel. The UAE is a contender for the upcoming 2020 Expo – a testament to its ability to host major international events that are well aligned with growth plans.

The UAE has articulated a national strategy, the UAE Vision 2021, which seeks to make the UAE a leading economy based on knowledge and innovation by the year 2021. Policy-makers are therefore focused on meeting the objective to strengthen the nation's position as a knowledge-based economy – driven by innovation and talented human capital.

There tends to be a preference for education in the humanities and commercial studies among students. Therefore emphasis in the education sector is now focused on ensuring students are adequately prepared for working in innovative fields. To meet the rising demand for technology-intensive sectors, the UAE is taking steps to increase engineering and science and

technology graduates. The quality of the educational system is also being upgraded through increased teacher development, curriculum enrichment, scholarship programmes and enhanced investment in educational infrastructure. In the tertiary sector, the UAE is home to over 70 accredited institutions of higher learning. These range from public research universities to campuses of renowned international universities, teaching colleges and vocational schools. Several universities perform R&D, including Masdar Institute, Higher Colleges of Technology and UAE University. In the R&D-intensive universities, professors typically spend between 40-50% of their time on R&D.7 Campuses of international institutions include New York University, Sorbonne and INSEAD, with a range of partner institutions such as Massachusetts Institute of Technology (MIT).

Furthermore, there are initiatives to facilitate closer cooperation between academia and industry – both leading local and international private sector firms. Initiatives include the development of clusters which provide an enabling environment for innovation and cross-fertilization of ideas, products and services, as well as the commercialization of innovative products and services. Dedicated clusters include Dubai Media City, Internet City, twofour54 and Masdar City, the world's first clean energy cluster.

Top quality talent is recognized through innovation awards including the University-Industry Research Collaboration, the Patent Filing Award, the Manchester Innovation Award and the Zayed Future Energy US\$ 4 million prize fund – the world's biggest award for innovation of clean energy solutions. The UAE is pursuing a solid path to enhance its competitive position as a leading, innovation-driven economy.

The United Arab Emirates takes the 24th position in the GCI. Overall, the country's competitiveness reflects the high quality of its infrastructure, where it ranks a very good 8th, as well as its highly efficient goods markets (5th). Strong macroeconomic stability (7th) and some positive aspects of the country's institutions – such as an improving public trust in politicians (3rd) and high government efficiency (7th) - round up the list of competitive advantages. Higher oil prices buoyed the budget surplus and allowed the country to reduce public debt and raise the savings rate. Going forward, putting the country on a more stable development path will require further investment to boost health and educational outcomes. Raising the bar with respect to education will require not only measures to improve the quality of teaching and the relevance of curricula, but also incentivizing the population to attend schools at the primary and secondary levels. Box 3 highlights some of the recent initiatives.

Ranked 32nd, **Oman** continues to reap the benefits of its economic development strategy of past years, as discussed in Box 4. A stable macroeconomic environment, with healthy budgetary surpluses (8th), low government debt (4th) and high savings rates (11th) bodes well for the future. Moreover, the county benefits from highly competitive markets for goods and services (25th). Complemented by an institutional set-up that ensures low levels of corruption (13th), high efficiency of the government (12th) and a secure environment (8th), these factors are the cornerstones of the country's competitiveness.

Despite these clear strengths, Oman will need to address a number of challenges that are longer term in nature. Education levels are below those in countries at similar levels of development, e.g. ranked 81st on the higher education and training pillar and, despite efforts to reform the education system, enrolment rates remain very low. The quality of education, in particular in the areas of math and science (86th) and management (107th), needs to be upgraded. Related to education are weaknesses in the area of labour-market efficiency. Although markets are flexible on average (8th), human capital, in particular female talent, is not used efficiently for raising productivity in the economy (94th in terms of efficiency of using talent). Fostering technological change and more intense adaptation and use of technologies by the business sector, as well as the public, would allow the country to reach higher productivity levels fairly quickly. ICT usage is presently constrained by low Internet bandwidth (79th) and the few broadband Internet subscriptions (92nd).

**Kuwait** occupies the 37th place in the GCI. This good assessment rests primarily on the country's strong macroeconomic environment (4th), which compensates for a number of weaknesses in other areas. The country's energy resources contribute to a healthy fiscal situation, with the third-highest budgetary surpluses in the sample and low government debt (7.35% of GDP). These factors, combined with good levels of physical security in the country (35th) and good protection of property rights (40th), contribute to a stable and predictable business environment. Box 4 sheds light on some of the recent measures.

<sup>&</sup>lt;sup>5</sup> IMF 2013.

<sup>&</sup>lt;sup>6</sup> Emirates Competitiveness Council 2013.

<sup>&</sup>lt;sup>7</sup> Ibid.

Despite these advantages, a number of challenges remain to be tackled for Kuwait to become more competitive. Most importantly, the education system needs upgrading. Enrolment rates, in particular for primary and tertiary institutions, are low, and the quality of education is assessed as poor and not attuned to the needs of the business sector (104th), when it comes to primary (89th), math and science (104th) and management education (102nd). Other important challenges are related to the efficiency of goods (90th), labour (98th) and financial markets (76th), which has deteriorated significantly since the last edition of The Arab World Competitiveness Report. Intensifying foreign competition to raise efficiency of domestic producers would be a step in the right

direction. Although tariff rates are rather low, domestic rules on FDI (141st) keep foreign investment from coming into the country (137th), thereby depriving the economy of beneficial spillover effects in management practice, technology or innovation. Labour markets would benefit from making the use of talent more efficient (110th) and in particular relying more on professional management skills as opposed to hiring relatives and friends (100th). Last but not least, financial markets need stabilization to raise confidence in the system (104th).

## Box 4: Competitive Oman: The Road Ahead

By the International Research Foundation and Gemma Corrigan, World Economic Forum

In an effort to move towards a knowledge- and service-based economy, Oman has focused its attention on building sustainable and high-quality infrastructure and transport services, a skilled and flexible labour force, and a more advanced education system to develop, attract and retain the world's most talented people and in turn support the growth of the country's business community.

To build and retain talent, Oman has made extensive educational (and labour market) reforms in recent years, an important part of Oman's "Vision 2020". Emphasis has been placed on improving standards and the quality of basic education, with a greater focus on the sciences and on increasing female participation among students and staff. Over the last decade, the higher education council has also encouraged the private sector to enter the education field, especially at the post-secondary level. The long-term vision seeks to build human capital to further develop the labour market and facilitate the "Omanization" of the private sector.

The country has also undertaken several important infrastructure projects, including the port in Duqm. A US\$ 1.5 billion dock, the second biggest in the Middle East, has been constructed as part of a special economic zone and is expected to generate substantial employment, facilitate exports and help to diversify the economy. The project has encouraged further investments and economic linkages, including a petrochemical factory, a refinery, an airport, hotels, housing, roads and railways to link the country with its neighbours (Saudi Arabia and the United Arab Emirates).

Oman has also placed more emphasis on developing the tourism sector to achieve its strategic vision. This initiative to make tourism an important and sustainable socio-economic sector (critical to economic diversification, the preservation of cultural integrity and environmental protection) began with the creation of the Ministry of Tourism in 2004.

Furthermore, Oman has made several reforms related to the business environment over the last few years which have improved the country's goods and financial market efficiency. Procedures to access credit (through an improved credit information system), to start a business and to pay taxes have been simplified and streamlined. For example, starting a business takes fewer procedures and is less time-consuming (dropping from seven to three days in 2012), and registration can now be done online.

Oman's Public Authority for Investment Promotion & Export Development (PAIPED) recognizes the need for countries like Oman to become increasingly competitive, given the current global economic context. As a result, PAIPED will host an international competitiveness forum in December 2013 to discuss the critical importance that identity and vision, good governance, enterprise, education, sustainability and technology play in creating a stronger, more robust and competitive Oman.

## Box 5: Developments in 2012 that Affected Kuwait's Competitiveness

By Reyadh Faras, University of Kuwait

Progress in improving Kuwait's competiveness has slowed down over the past few years due to political tensions between the Government and the Parliament (dominated by the opposition). This situation has made it very difficult for the two sides to reach agreement to issue and amend a number of important economic laws and regulations. Even for laws previously passed, the issuing of the appropriate bylaws and the establishment of the necessary government bodies was slowed down.

In 2012, Kuwait succeeded in passing a law and establishing two entities necessary to enhance the business environment and improve competitiveness. The first was the new company law, which replaced the law of 1960. A number of improvements were added to the new law to make it compatible with best practices and in line with international standards. The second was the establishment of the Competition Protection Authority in compliance with the Competition Protection Law of 2007. The third was the creation of the Higher Council for Privatization in compliance with the Privatization Law of 2010.

In addition, the Parliament discussed drafts of three laws in 2012; one for the Public Tender Law of 1964 that has not yet been passed and another to create a public fund to finance Small Enterprises, which was passed in 2013. The most important one was the anti-corruption law that was passed in 2013 and covers four key issues: fighting corruption, asset disclosure, conflict of interest and whistle-blower protection.

Moreover, the Parliament has discussed proposals to establish three public institutions that are expected to greatly improve the operations and management of key economic sectors, namely, Transportation Authority, Telecommunications Authority and Labour Authority.

A look at *The Global Competitiveness Report 2012-2013* shows that Kuwait's main weaknesses are in three pillars: innovation, labour market and goods market. More collaboration is required from the Government and the Parliament to issue the necessary regulations to overcome these weaknesses to improve Kuwait's competitiveness.

## Box 6: Bahrain's Achievements in the Area of Competitiveness By Nada Azmi, Bahrain Economic Development Board

Over the last decade, the Kingdom of Bahrain has put in place far-reaching economic and social reforms. These reforms have, in many cases, built on earlier initiatives, and included the corporatization and privatization of numerous state-owned businesses; efforts to boost transparency in the civil service through the establishment of the Tender Board and the National Audit Court; the removal of impediments to foreign investment in Bahrain; accession to a GCC customs union based on low tariffs; a free trade agreement with the United States; reforms in the labour market; liberalization of the telecommunications sector, the establishment of a telecommunications market regulator; and improvements to public education. Other key initiatives have included the establishment of the Bahrain International Circuit, and the inauguration of Bahrain Mumtalakat Holding Company, which manages state non-oil assets and investments. These policies have led to the launch of an ambitious programme of economic and institutional development, as part of the Economic Vision 2030 that was launched by King Hamad bin Isa Al Khalifa in 2008. The overriding aim of the Vision is to improve living standards for all Bahrainis. It aims to develop opportunities for the private sector, which has a pivotal role to play as the engine of growth and productivity in Bahrain. Meanwhile, the Government of Bahrain is focusing its efforts on infrastructure investments and human capital development.

The above reforms, among others, have significantly enhanced the Kingdom's economic performance. Indeed, the opening decade of the 21st century proved a period of rapid economic development for Bahrain. Real output growth between 2000 and 2012 averaged 5.0% annually, export volumes more than doubled, Bahraini national employment increased by 44%, while the real wages of Bahrainis rose by 34% between 2002 and 2011. The industrial structure has become more diverse, with both manufacturing and services expanding more rapidly than GDP as a whole. Despite an unusually uncertain global economic situation, 2012 proved a year of steady consolidation for the Bahraini economy. Economic growth was

led by a strong rebound in the non-oil sector of the economy and all main sectors of the non-oil economy recorded positive growth. Bahrain stands out as a regional pioneer of economic diversification as the oil-dominated mining and quarrying sector accounted for 19% of real GDP as of 2012.

The following sections will highlight some of the key programmes related to education and training, labour market and infrastructure development and their positive impact on economy, citizens and business.

The objective of recurrent waves of education reform in Bahrain has been to boost the contribution of human capital to economic growth. Ninety years ago, Bahrain was the first regional economy to introduce formal education. The number of students at the eight universities and higher education institutions in Bahrain has increased threefold in the last decade. The Kingdom has launched an extensive programme of education and training reforms that led to the creation of the Bahrain Teachers College as part of the University of Bahrain, a technical training college – Bahrain Polytechnic – and an independent body to monitor the quality of education in the Kingdom – Quality Assurance Authority for Education and Training.

In addition, Bahrain has completed a number of significant reforms related to the labour market. Apart from better regulation (in line with International Labour Organization standards), these steps have sought to improve the performance of enterprises by better matching the available skills with their current and future labour-market needs. The reforms aimed to create a balanced workplace and establish fair competition for Bahrainis and foreigners, on the basis of productivity. They promoted creativity and innovation and helped generate jobs and products with high added value.

## Box 6: Bahrain's Achievements in the Area of Competitiveness

By Nada Azmi, Bahrain Economic Development Board

The establishment of the Labour Market Regulatory Authority (LMRA) is aimed at regulating and managing the registration of the workforce in Bahrain and the licensing of workers, with supervision of the application of all laws and legislation. The establishment of Tamkeen is aimed at improving and enhancing the efficiency and reliability of Bahraini workers by providing a range of training programmes designed to hone their talents and capabilities. In addition, it established programmes to support the private sector, as well as to raise the productivity of the SME sector. Tamkeen, tasked with supporting Bahrain's private sector, has made a \$100 million investment to provide more than 18,000 Bahraini nationals with sector-specific skills training to match acquired skills to market requirements. These initiatives, among other factors, have resulted in an increase of 35% in the total labour force from 380,000 in 2007 to 514,600 in 2011. It also helped slash the unemployment rate from 16% in 2006 to 3.8% in 2012.

The Kingdom continues to invest heavily in its logistics infrastructure and the sector possesses considerable growth potential in the coming years, especially as cargo volumes in the Gulf increase. Bahrain has the shortest travel time between its seaport, airport and the logistics processing zones of anywhere in the Gulf, which makes possible more efficient and faster processing of trade goods. Bahrain International Airport (BIA) is home to Bahrain's national carrier, Gulf Air, and hosts

more than 37 other airlines. It has links to principal global financial and business centres and is the regional hub for Lufthansa, Cathay Pacific and Air India. The BIA is close to two other key new developments, the Bahrain Logistics Zone (BLZ) and the Khalifa Bin Salman Port (KBSP). The KBSP is linked to Saudi Arabia via the King Fahd Causeway and provides high-quality sea freight, shipping and logistic services. The BLZ is a customs-free logistics park focusing on re-export and value-adding logistics activities.

The Kingdom aims to strengthen its market competition through continuing and expanding its efforts to create an attractive environment for setting up and doing business. The Government has made it a priority to attract entrepreneurs and investors to do business in the Kingdom. Many of the Kingdom's past efforts in this area have been fruitful, such as reducing foreign investment restrictions, which includes allowing complete foreign ownership, and setting up the Bahrain Investors Centre as a one-stop-shop. These have contributed to a growth in foreign direct investment of around 114% between 2000 and 2011. The strong economic outcomes have been supported by a stable macroeconomic framework. The Kingdom realizes that ongoing structural reform is crucial to ensure continual improvements in living standards. Consequently, it has put it at the forefront of the Kingdom's policy today.

Bahrain ranks 35th in the GCI, and has remained relatively stable over past years. One of the two economies from the region that has reached the innovation-driven stage of development, the country's competitiveness is characterized by a solid institutional framework with well defined property rights (20th), fairly little corruption (20th) and a relatively efficient government (14th). The country benefits from efficient goods markets, ranked 16th. Domestic competition appears fairly intense (33rd), in particular when considering the small size of the country, and anti-monopoly measures are effective in preventing abuse of market power (13th). Nevertheless, it remains difficult to enter markets due to administrative barriers (i.e. it takes nine days and seven procedures to start a business) and tariffs are still above levels found in other countries of similar size (56th). In particular, in light of its small market size (103rd), Bahrain could benefit from more openness to trade, as this would even further increase efficiency of the domestic business sector. Other notable competitive advantages include a solid performance in terms of education and training (34th) and a highly developed financial market (18th). The high level of efficiency of financial services (4th), which is reflected in easy access to different types of finance for business, and the stability of the banking sector (28th) result from the government's targeted efforts to develop the country into a regional financial centre. The country has achieved improvements in its macroeconomic environment by considerably reducing the budget deficit to 2.29% of GDP (in 2011). Box 6 discusses other key achievements in detail.

Four areas merit additional attention to increase competitiveness: the macroeconomic environment, technological readiness, business sophistication and innovation. Upgrading technological readiness, currently ranked 39th, by fostering the use of latest technologies by business and the population, would allow the country to reap rapid productivity gains resulting from the adoption of cutting-edge technologies available abroad. Given the country's innovation-driven stage of development, particular focus should be placed on fostering domestic innovation (72nd) and sophistication of domestic business operations (39th), in particular given the country's high wage level, the fairly diversified structure of the economy and the limited availably of energy resources.

## Box 7: Encouraging Private-led Growth in Jordanian Infrastructure

By Nafez Al Dakkak, Global Shaper, Amman Hub

As one of the least resource-rich countries in the Arab world, the Hashemite Kingdom of Jordan has relied on tourism for its economic development over the past years, making the country one of the tourism hubs in the larger Middle East.

On one hand, Jordan's strategic location at the core of the MENA region allows access to key economies in the region, such as the Iraqi and Saudi markets, and has gained increased importance with the recent turmoil in Syria.<sup>8</sup> On the other hand, Jordan offers tourists world-class historical and cultural sites, such as the ancient city of Petra and great recreational and natural sites, such as the port city of Aqaba, and the Dana Nature Reserve. Additionally, religious tourists can visit the famous Baptist Site and Mt Nebo and have easy access from Jordan to the "Holy Land". Finally, and perhaps most importantly, Jordan has been a destination for medical tourism since the 1970s, becoming the top destination regionally, and the 5th globally as ranked by the World Bank in 2010.<sup>9</sup>

Recognizing the importance of transport infrastructure for supporting the economy and acknowledging the importance of private-sector led growth, the Jordanian Government awarded the development and management of the Queen Alia International Airport (QAIA) to Airport International Group (AIG), an international consortium, through an international

bid in 2007, under a 25-year Build-Operate-Transfer (BOT) concession. Considered Jordan's most important Pubic Private Partnership (PPP), the agreement has seen the expansion of QAIA's capacity from 3.5 million passengers in 2007 to over 6 million in 2013, in addition to the opening of a new terminal in March this year. According to the IFC, the new airport is expected to create 23,000 jobs and will enable Jordan to "strengthen its position as a tourist and economic centre by offering an exceptional travel experience to business and leisure travellers, setting QAIA as a convenient transfer hub". 10

International recognition of Jordan's efforts has already commenced. AIG has been selected from among 120 international eligible submissions, as one of the world's top 40 PPP projects, and QAIA has received "Gold recognition as Best Emerging Market Infrastructure Project for Europe, Central Asia, the Middle East and North Africa in Emerging Partnerships".<sup>11</sup>

It cannot be denied that the recent turmoil in the region has had a negative impact on tourism in the Middle East. <sup>12</sup> However, the award-winning PPP model behind QAIA, combined with its energy-efficient and expansion-centric design (which allows for 6% expansion per annum for 25 years), <sup>13</sup> position Jordan quite well to take advantage of new regional dynamics and growth, once the dust settles.

## Box 8: Promoting Equitable Distribution of Economic Development in Jordan – Baladiyati Programme By Ahmad Elzubi, Global Shaper, Amman Hub

A major problem facing developing nations is the concentration of growth in certain areas of the country – usually the capital – promoting inequality. While Jordan has maintained a solid record of real GDP growth over the past decade (around 6% annually), very little of this development is visible outside the capital city of Amman or the port city of Aqaba. Inequitable distribution of development is compounded by the lack of drivers for growth at the governorate level, chronically high unemployment rates (particularly among youth), the government's inability to absorb more labour due to budgetary constraints, and the lack of a systematic micro-level development planning.

The EU and the Ministry of Municipal affairs joined forces to create a new capacity-building programme, Baladiyati (which translates to "My Municipality"). The purpose of this programme is simple: building public-sector capacity at the most basic local level: the municipality. The programme is currently executed at the municipalities of Karak, Zarqa and Mafraq.

Municipalities are public-sector entities most concerned with the day-to-day operations within cities, acting as an interface between the public sector and citizens. The premise of the programme is that building the capacity of local-development units at the municipality level will result in increased private-sector activity within the jurisdictions, which will result in increased economic activity.

What sets this programme apart is the emphasis placed on utilizing local resources to build capacity in a sustainable manner. Typical programmes focus on knowledge transfer from experts (usually foreign consultants) to public-sector entities (mid-level civil servants), usually through strategies, policy papers and workshops. The impact of such programmes is usually limited. Instead, Baladiyati took a more innovative approach. The programme identified public-sector organizations with relevant expertise to join as long-term partners in implementing the programme. To extend a popular parable, Baladiyati not only teaches people how to fish, it teaches the right people in society how to teach others how to fish. This approach allows for the added benefit of creating connections between institutions that will outlast the programme itself.

There are multiple components to this programme, but of direct relevance to competitiveness is the work being done by the Jordan Investment Board (JIB). Experts from JIB have dedicated two days a week travelling to the three municipalities to transfer their experience in two particular aspects: mapping the local economic landscape to identify areas of high investment potential, and investment promotion. This particular portion of the programme has moved beyond sharing strategies and direct training; local development units have reached a stage where they have identified high-value-added projects, and are now in the process of performing feasibility studies jointly with the experts.

Baladiyati is a genuine example of a competitiveness initiative that adopts a grassroots stakeholder approach building upon the individual strengths of each partner to promote sustainable collaboration.

<sup>&</sup>lt;sup>8</sup> Periodical Islamic Chamber of Commerce & Industry Magazine 2013.

<sup>&</sup>lt;sup>9</sup> Medicaltourismco.com. 2010.

<sup>&</sup>lt;sup>10</sup> AMEinfo.com. 2013

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> ArabianBusiness.com. 2013

<sup>&</sup>lt;sup>13</sup> Foster + Partners 2013

Jordan occupies the 64th rank. The country has been considerably affected by the global financial and economic crisis in recent years. GDP growth slowed down to 2.3% annually in 2010 and has not returned to pre-crisis levels since (GDP growth was 8.2% in 2007). These growth rates are not sufficient to create the employment necessary to absorb the country's approximately 60,000 new entrants into the labour market every year. Boosting growth over the longer term to levels that would result in sustainable job creation will require Jordan's policymakers to address a number of challenges. Stabilizing the macroeconomic environment should remain on the agenda and should be accompanied by growth-enhancing structural reforms.

According to the GCI, there is significant room for improvements in terms of labour-market efficiency, and the full potential of ICT for productivity improvements has not yet been exploited, as reflected in the 90th rank on ICT use. Jordan could also benefit from more openness to international trade and investment, which would trigger efficiency gains in the domestic economy, as well as the transfer of knowledge and technology. Tariff barriers remain high in international comparison (104th) and regulatory barriers to FDI remain in place (70th). Although financing appears to be more easily available than in many other countries (i.e. 45th on ease of access to loans), efforts to further stabilize the banking sector should be continued (90th).

## Box 9: Actions to Increase Jordan's Innovation Potential By Akhtam Alzubi, Ministry of Planning and International Cooperation

Jordan experienced a period of steady and sustained growth up until 2009, when the economy was hit by the global financial crisis. From 2000-2009, the country's GDP growth averaged 6% and its export growth averaged 15%. Close ties to other countries in the region and dependency on energy imports and large inflows of remittances leave the country vulnerable to external shocks and a large and growing deficit. Jordan has made notable progress on the innovation front. However, the country recognizes that innovation must play a much bigger role if the economy is to sustain its past growth performance and provide jobs to the growing number of young people entering the labour market.

In the *Doing Business 2011* report, issued by the IFC and *The Global Competitiveness Report 2011-2012*, Jordan's ranking dropped sharply. In response to these developments, the Ministry of Planning and International Cooperation started a public-private dialogue on 6 November 2011 to identify and prioritize reform issues and challenges in order to set and implement a comprehensive reform plan that will increase Jordan's competitiveness.

Indeed, there is a shared sense in Jordan that even though the country has overcome the effects of the crisis, the economy has now reached a kind of plateau in terms of economic growth. Therefore, innovation must come to play a more prominent role. Moreover, the country's considerable energy, water, food and other social and environmental challenges will more than ever call for innovative solutions. While these challenges are substantial, a whole-of-nation push for a Jordanian innovation effort will constitute a strong and fruitful response to these challenges by focusing the country's strategy on the issue of "can Jordan join the ranks of innovative nations?" Against this background, the Jordan National Innovation Strategy will present and discuss the progress on Jordan's competitiveness innovation effort, and explore the challenges and the promises on the road ahead.<sup>14</sup>

Despite progress achieved, when it comes to innovation there is much room for improvement in Jordan. At the same time, there are good reasons why the country could be a strong innovation economy by regional standards:15

- Strong education scores by regional standards resulting from a large and diverse higher education system, with quite a few pockets of excellence
- A large pool of engineers (more than 80,000 registered), as well as a substantial and highly-skilled diaspora (500,000 educated Jordanians abroad)
- IT-savvy young generations more attuned to innovation than their elders
- The region's largest proportion of bilingual Arabic-English speakers

- A large pool of lively, albeit small, entrepreneurs with a keen sense for business
- Diversified, albeit mostly non hi-tech, exports both by sector and by destination
- Many under-exploited tourism assets and natural resources (e.g. the world's purest silica)
- A politically moderate country with a tolerant, open-minded society
- An island of stability, with access to large markets next door (including Iraq)
- An attractive capital city with good living conditions and drawing power
- A keen, visionary interest in innovation on the part of the country's leadership

For Jordan's future, the re-launch of the National Competitiveness Council as the National Innovation and Competitiveness Council (NICC), and the expansion of its membership to eight Ministers and Secretary Generals and 27 non-ministerial members under the chairmanship of the Prime Minister in person, represents a major step forward. This re-launch signifies the current government's endorsement of the pursuit of innovation and advanced competitiveness as a central theme of government and opens the way towards a sustained reform effort along these lines over the next 2-3 years.

The basic idea behind the Innovation and Competitiveness Council is to launch a vigorous multi-year government initiative with the goal of making Jordan within 3-5 years the region's most innovative economy, so as to dramatically lift the country's growth and jobs-creation potential and offer a clearly visible and forceful response to the aspirations of the country's youth.

To shape this initiative appropriately, this process should not be a one-off innovation strategy exercise squeezed through during one short-lived government tenure, but a process with the capacity to span successive government tenures and enlist many stakeholders and partners in a continuous flow of reforms leading towards the goal. The initiative should be placed under the banner of innovation, because even though the IJI would clearly be about both innovation and advanced competitiveness, innovation is more readily associated with leaping forward and creating a distinctive future, whereas it is harder to mobilize and motivate the nation through a pure "competitiveness" label, which many people tend to associate with negative experiences (e.g. wage restraint, devaluation).

<sup>&</sup>lt;sup>14</sup> Rischard et al 2010

<sup>&</sup>lt;sup>15</sup> World Bank 2010

## Box 10: Major Reforms Undertaken by Morocco in 2012

## By Seloua Benmbarek, National Committee for Business Climate Evaluation

The current situation of Morocco stands out with respect to the rest of the region. Less affected by the Arab Spring, the country has undergone fundamental changes, including a new Constitution, which came into force on 1 July 2011 and represents a new stage in Morocco's democratic transition. In addition, the country's economic position strengthened in regional as well as in international comparison. The country's solid economic situation, with healthy GDP growth rates close to 5% on average, a controlled inflation rate and falling unemployment, is buoyed by political stability. Taken together, these characteristics provide unique investment opportunities.

Within North Africa, Morocco emerges as an attractive and politically stable market for investors due to the following reasons:

- Its location at the confluence of Europe, the Arab world and Africa establishes the country as a genuine regional and international economic platform with competitive labour costs.
- The reforms undertaken by Morocco have consolidated the business climate with the rise of a competitive, knowledge-based economy able to innovate, develop and enhance Moroccan industrial know-how.
- The continuation of various major structural projects in selected industrial sectors (i.e. the "Emergence Plan", development of industrial zones in strategic areas, for example two areas dedicated to Bombardier and Renault), infrastructure (Tanger Med port, TGV, Tramways, etc.), renewable energy (solar plan), agriculture (Green Morocco plan), logistics (logistics plan) tourism, accompanied by appropriate vocational training (Renault Institute, Aeronautical Trades Institute, Training for offshoring careers, etc.).
- A new generation of investment projects in high technology areas such as R&D, ICT (Morocco Numeric) allow an increase in the Kingdom's competitiveness, by repositioning the structural sectors with high potential, based on private-public partnerships.

- In 2012, Morocco made great strides in the industrial sector, particularly in the highly performing aerospace and automotive industries. The rising production of phosphates and derivatives should also stimulate economic growth in 2013.
- The World Investment Report 2012, published by UNCTAD, acknowledged the Kingdom for its attractive model. Despite a difficult international situation, Morocco, due to its political stability and its aggressive policy to attract investments, recorded the biggest increase in countries in the region. The country looks back at an excellent performance since 2011, as the net inflow of FDI reached US\$ 2.52 million, up by 60% compared to 2010, at a time when FDI to North Africa recorded a decline of 50% severely affected by the impact of the Arab Spring.
- Moroccan FDI performance exceeds by far the global average (16%) and the average from developing economies (11%). Morocco has attracted 33% (10% in 2010) of FDI that are directed to North Africa (Egypt and Sudan included, as classified by UNCTAD).

From the point of view of social indicators, access to primary education (enrolment rates) increased from 91.4% to 97.9% over the past few years. Moreover, the government has undertaken a strategy for the development of a school proposal promoting fairness and equal opportunities, better educational governance, good management of human resources and capacity-building and skills.

Regarding the health sector, the rates of maternal and infant mortality have declined. A programme to identify the needs and expectations of citizens was announced. A reform of the pension system was also launched.

In a continuing effort to strengthen its competitiveness, Morocco continues its momentum in implementing policy reforms in the area of economic and social development for sustained growth and job creation.

At 70th in the GCI, **Morocco** is consolidating its position. Some aspects of the institutional framework are assessed rather positively, such as the public trust in politicians (52nd) or the degree of government favouritism (42nd). As outlined in Boxes 10 and 11, Morocco has made important progress in terms of making rules and regulations pertaining to FDI less restrictive (33rd) and reducing the burden of customs procedures (42nd). These improvements complement reforms implemented in 2010 and 2011 that have already facilitated administrative procedures relating to the functioning of enterprises. Box 11 sheds light on the current situation in the country.

Challenges persist in two areas that are important not only for competitiveness, but also for social cohesion in the country – education (101st) and the efficiency of labour markets (122nd). The education systems across all levels need improvement. Access to education is less prevalent than in other countries from the region, with enrolment rates for secondary and tertiary education remaining low (113th and 102nd, respectively). At the same time, curricula and teaching methods are not aligned sufficiently with

the needs of business, as reflected in the low 105th place on the related indicator. A more positive aspect is the prevalence of on-the-job training (61st), which certainly has the potential to compensate for some shortcomings in the educational system. Yet, for education to translate into higher productivity, the labour market structure needs to allow for an efficient use of talent and sufficient flexibility. This is not currently the case in Morocco, where labour-market efficiency is assessed at 122nd overall. Labour-market regulations are rigid with respect to the hiring process (74th) and wage-setting (64th), and meritocracy is not prevalent among management (98th). Last but not least, the potential of the female labour force as a source of productivity improvement is underused (137th).

## Box 11: Morocco: Business Climate Reforms

By Younes Slaoui, Global Shaper, Casablanca Hub

Morocco has chosen to speed up liberalization in order to accelerate its economic growth. During the 2000s, the country entered various free trade agreements with its major trading partners such as the European Union, the United States and several MENA countries. Remaining stable despite the international economic crisis and the Arab Spring, Morocco has shown solid economic performance, with an average growth of 4% and good macroeconomic fundamentals in recent years. Since 2010 the country has also been the second destination for foreign investments in Africa (after South Africa). However, the trade deficit continues to widen, while the trade balance coverage rate fell to 48.2% at the end of 2012 against 62% in 2003.

To address this issue and to increase investment and exports, improving competitiveness has become a strategic priority for the Government since the last decade and especially since 2008.

With this end goal in mind, in 2002 the Government established 16 "Regional Investment Centres", destined to serve as one-stop shops for foreign investors and to provide incentives. The country has also launched numerous sectoral strategic plans, including industry ("Emergence Plan"), agriculture ("Green Morocco Plan"), fishing ("Halieutis Plan"), tourism ("Vision 2020") and new technologies ("Numeric Plan"). For example, the National Pact for Industrial Emergence called "Emergence Plan" (2009-2015) aims to develop seven potent sectors and increase their competitiveness: offshoring, electronics, automobile, aeronautics, textiles, agribusiness and processing of seafood products. The targets by 2015 are ambitious: 220,000 direct jobs, 2,200 integrated industrial platforms and free-trade areas, an additional volume of exports by US\$ 11 billion, US\$ 1.5 billion of public budget mobilized, several specialized training institutes, etc.

To improve the business climate, the legal framework and attractiveness, Morocco created the National Committee of Business Environment in December 2009, chaired by the Prime Minister and composed of representatives of public and private sectors.

Among the main measures implemented to enhance Morocco's competitiveness in recent years are:

- Reducing the corporate income tax rate from 35% to 30% in 2008 and, under the Finance Act 2013, from 30% to 10% for companies with a maximum of 200,000 dirhams of net profit (~US\$ 24,000)
- Eliminating the minimum capital requirement for limited liability companies and cancelling formalities relating to blocking the amount of the released capital to make starting a business easier
- Opening of a one-stop shop to simplify the constructionpermission process
- Reducing the time to import and export by simplifying the documentary requirements
- Strengthening investor protection by requiring greater disclosure in annual company reports
- Enhancing electronic filing and payment of corporate income tax and value-added tax to ensure an easier administrative process for paying taxes
- Publishing a Code of Good Corporate Governance
   Practices and of a specific Code of Governance for Public companies
- Establishing the Central Authority for the Prevention of Corruption and a website to stop corruption dedicated to corruption incidents related to public tenders and investment operations pertinent to small and medium-sized enterprises

These measures have enabled significant progress. But many challenges remain, particularly in three areas: education, labour-market efficiency and perception of corruption.

## Box 12: SME Access to Finance in Lebanon

By Baria Daye, Global Shaper, Beirut Hub

As unemployment rates remain high, stimulating entrepreneurship in Lebanon is more critical than ever for the country's growth and sustainable development. Throughout history, Lebanese people have been known for their ability to find opportunities in the face of problems and their resilience in times of adversity. This innate entrepreneurial nature has indeed served the Lebanese diaspora quite well; but what about the dynamics of the entrepreneurship ecosystem within the borders of homeland?

According to the World Bank Doing Business 2013 report, starting a business in Lebanon is completed in five procedures within nine working days, for a total cost of approximately US\$ 6,344 and a paid-in minimum capital deposit of US\$ 3,333. The relatively high cost associated with establishing a limited liability enterprise in Lebanon – even when compared to regional MENA economies – constitutes an entry barrier to the formal economy, thereby necessitating the availability of adequate financial support services. In fact, the World Bank Enterprise Surveys conducted in 2009 revealed that the Lebanese private sector rated access to finance as the third main obstacle confronting businesses in Lebanon, after political instability and electricity. Apart from Lebanon's volatile security situation and its poor infrastructure, the capital accessibility challenge has been tackled by various institutions addressing specific target segments of the population.

Pi Slice, a recently launched web-based platform promoting a culture of lending in the region, supports its Lebanese partner – Al Majmouaa – by directing crowd-funded microcredits lent (or donated) through its online channel to the MFI's micro-entrepreneurs in remote rural areas of Lebanon, thereby offering financial inclusion to the poor and those without bank support.

Kafalat, on the other hand, serves as a channel for SMEs to access commercial banking services by providing loan guarantees that bolster the viability of business plans. As a result, it acts as a safety net in the lender-borrower relationship: mitigating the investment risk to be incurred by the financing institution, while offering the borrower salient subsidized interest rates. Kafalat will manage the recently announced US\$ 30 million loan offered by the World Bank to the Ministry of Finance in support of Lebanese SMEs through public-private equity financing schemes.

Private-sector businessmen and women have also contributed, both individually and collectively, to the proliferation of start-up capital. Similarly, there has been a growing sense of anticipation for an increased flow of angel investments by the Lebanese diaspora. Bader Lebanon, in this regard, is stimulating youth entrepreneurship by offering seed funding to aspiring entrepreneurs from its network of Lebanese Business Angels, among other forms of support. Bader Lebanon had also pioneered the launch of The Building Block Equity Fund, specifically geared towards financially empowering Lebanese SMEs.

Venture capital firms – namely Middle East Venture Partners, Cedrus Ventures, Wamda Capital Fund – are also playing a significant role in industry, hunting for the "few" winning start-ups in their early stages of growth. As venture capital firms often strategize their own scope of operation within certain sectors of the economy, the Berytech Fund, notably, specializes in ICT investments, serving innovative Lebanese information, communication and technology enterprises. Consequently, access to capital within the realm of equity-financing is not merely subject to the availability of funds, but also to the eligibility – or "maturity" – of start-ups for equity investment deals.

To date, Lebanese start-ups have been largely financed through debt as opposed to equity. Fortunately, conscious of the growing entrepreneurial momentum in Lebanon, traditional banking institutions have finally abandoned their conservative observant approach and joined the vibrant entrepreneurial wave. Bank Audi was recently granted a US\$ 20 million loan by the SANAD Fund for MSME (micro, small and mediumsized enterprises) – an initiative of the German Development Bank that supports financial institutions in MENA. Part of the loan is expected to be reflected on the Lebanese scene. Admirably, BLC Bank drew attention to a niche market by successfully launching the WE (Women Empowerment) initiative, and increasing its loans to women-owned SMEs by 55%. The initiative was born out of a key finding that only 3% of loans are granted to female entrepreneurs in the Levant. According to the World Bank 2011 Women, Business and the Law publication, only 25% of Lebanese women are active in the workforce. This segment of the population thus represents an untapped potential, and could constitute a major competitive advantage for Lebanon, provided that sufficient resources – including such targeted initiatives – are adequately allocated to promote female entrepreneurship in the country.

Lebanon occupies the 91st position in the GCI ranking, and displays a number of competitive strengths and weaknesses. The country has one of the better educational systems in the region, with both the quality of teaching, as well as enrolment rates, are assessed as good. While the overall quality of education is ranked 24th, math and science teaching is considered by the business community as excellent, ranked 4th, and Lebanon is also home to high-quality management schools, assessed at 13th. To improve educational outcomes even further, Lebanese businesses should provide more opportunities for on-the-job training to ensure continuous learning and upgrading of skills (the country ranks 56th for availability of research and training services). Another important competitive advantage is the presence of intense domestic competition on local markets (35th), which is one of the factors ensuring high efficiency of the goods market (36th). Low administrative barriers to entering markets and a taxation system that limits distortions also contribute to a healthy, competitive business environment. Box 12 highlights some of the initiatives related to access to finance for SMEs in Lebanon.

Going forward, the key challenges for Lebanon remain the weak institutional set-up, underdeveloped infrastructure and the country's difficult macroeconomic environment. Institutions suffer from corruption (135th), inefficient government agencies (129th) and a judiciary that does not meet the needs of business (114th) and is subject to influence by others (131st). At the same time, the security situation imposes important costs on the business community (103rd), mainly due to the prevalence of terrorism (135th). Upgrading infrastructure in the country will necessitate stabilizing electricity supply (144th) and investing in roads and railroads (115th and 124th, respectively). Such investment may necessitate private-sector participation, in view of the need for fiscal consolidation resulting from repeatedly high fiscal deficits (5.57% of GDP in 2011) and the unsustainable level of government debt (136.2% of GDP in 2011). However, given its solid base in terms of education and its entrepreneurial and dynamic environment, the country is well positioned to become more competitive and reap the benefits in terms of higher growth, provided these key challenges are addressed. Box 13 discusses the situation in Lebanon in more detail.

## Box 13: Lebanon's Competitiveness: Recent Developments

## By the Bader Young Entrepreneurs Programme

The year 2012 was challenging for the Lebanese Economy. In addition to constant political unrest, sporadic incidences of violence, a deadlock at the governmental level and the lack of new policies to promote an environment more conducive to foreign investments and overall economic activity, deteriorating conditions in Syria made matters worse through their significant spillover effect on the Lebanese economy.

With Syria being the only land route for the export of goods and products to the Levant and the GCC, and overland trade accounting for a third of Lebanon's trade volume, Syria's woes further amplified Lebanon's economic difficulties.

Lebanese banks, which had long been the bulwark of the country's economy and the largest creditors to the State, were shaken after having invested considerably in Syria.

Tourism and investments quickly followed suit in taking a hit, with tourism revenues declining by as much as 15% in 2012 compared to a prior projection of +10% (i.e. a net opportunity cost of around US\$ 4.3 billion, according to the World Travel and Tourism Council). To put matters into perspective, the ripple effect on the national economy of travel and tourism activity in Lebanon amounts to US\$ 15 billion annually, representing 35.5% of the GDP.

These seemingly contextual predicaments are compounded by the same structural problems that have historically plagued the country's economy, namely:

- An infrastructure on life support, whether in terms of the provision of electricity (which costs the treasury around US\$ 2 billion a year), transportation, water or waste management
- A telecom sector still lagging behind, despite government efforts to boost broadband capacity, reduce prices and increase speed
- Mushrooming public debt that stands at US\$ 56 billion, constituting a constant drain on the resources of the State and limiting its ability to invest in infrastructure-related projects (public debt service constitutes the second biggest burden on the general budget)
- Deeply-engrained corruption and antiquated laws

To tackle these issues, the Government made public in September 2012 a plan that outlines seven areas of reform to achieve sustainable development:

- 1. Public debt management
- 2. Public finance management
- 3. Private sector development

- 4. Infrastructure rehabilitation
- 5. Human development
- 6. Regional and municipal development
- 7. Institutional and administrative reform

Through several debt management and fiscal reform initiatives, including the elaboration of a fiscal reform plan, the establishment of a debt-management office, the setting up of a framework for public budgeting, and the creation of a public asset management agency, the Government is trying to gradually reduce public debt over the next seven years.

According to the plan, the Government is also trying to regulate and modernize areas capable of attracting private capital, including the electricity, oil and gas, and telecommunications sectors, where value can be created by offering end consumers a better quality of service at a lower cost.

The plan also comprises infrastructure rehabilitation initiatives related to energy, including green energy, oil and gas, transportation, water and sanitation, and telecom.

Meeting these challenges requires a clear vision that defines the nation's objectives, as well as a commitment by all stakeholders, be they from the public or the private sector, to see this vision through. The Government should play the role of facilitator of national development, but, to do so, it must perform at the highest level of efficiency and effectiveness, necessitating the implementation of a public-sector reform programme as a priority.

Although 2013 is set to be a difficult year due to regional conditions, which are often beyond the control of Lebanese, both the State, by playing its part in easing the situation and initiating reforms, and the private sector, through several initiatives to encourage competitiveness and innovation, can mitigate most of the risks and difficulties, and move the economy and the country in the right – and safe – direction.

## Box 14: Enhancing the Competitiveness of Egypt through Quality Institutions

By Omneia Helmy and Iman Al-Ayouty, Egyptian Center for Economic Studies (ECES)

More than two years on since the outbreak of the revolution of 25 January, Egypt continues to face competitiveness-related challenges, with its ranking in the GCI 2012-2013 slipping to 107th position out of 144 countries down from 94th (out of 142) in the 2011-2012 edition. With improvements achieved in individual areas, such as corporate ethics and favouritism of government officials, flexibility of wage determination, or the use of some ICTs, other aspects covered by the GCI have deteriorated. The data points to a number of areas where Egypt's has slipped in the rankings, including the quality of institutions, corruption, the effectiveness of the legal framework and on corporate governance. Egypt's competitiveness is further affected by a challenging macroeconomic situation as well as by significant infrastructure deficits. Moreover, many of the structural challenges remain, including in the areas of higher education and training, the efficiency of goods and labour markets, the development of the financial market, the level of business sophistication, and a strategy for greater innovation. All these aspects have implications for the business environment and consequently for growth.

The analysis further reveals that there is a need to raise efficiency in the provision of public goods and services. This stems, among other factors, from the lack of transparency, as well as irregular payments related to imports and exports, tax settlements and the awarding of public contracts. Red tape provides an additional burden for businesses when complying with government regulations.

In addition, connected to the efficiency in the provision of public goods and services is enhancing the efficiency of the legal framework either in challenging government actions and regulations or in settling private business disputes. This needs to be complemented with the existence of sound corporate governance practices that strengthen the rights of shareholders and guarantee a higher level of transparency in company transactions.

Macroeconomic imbalances are reflected in a widening government budget deficit, high, albeit lowering in 2012, inflation and a weakening of the country's credit ratings (the most recent of which was on 21 March 2013). Increased

government spending on wages, subsidies and interest payments has come at the expense of investment expenditure. Moreover, banking intermediation has been feeble under the impact of excessive shouldering of the budget deficit. Egypt thus needs to strengthen the role of other financial intermediaries (e.g. mutual funds and the mortgage sector). It is equally important that expenditure be prioritized with special emphasis on infrastructure – to address a serious competitiveness constraint – health and education. Egypt further needs to raise additional revenue through a broader tax base and better tax compliance.

Further, sound labour-market policies that balance the flexibility of hiring and firing with the maintenance of adequate worker protection need to be in place. The independence of labour unions may help provide workers with viable venues for dispute settlement, thus letting off much steam that has so far culminated in frequent production stoppages. Labour policies need to be paired with an overhaul of primary and higher education and the advancement of vocational and technical training for better matching of demand and supply of worker skills. Moreover, although Egypt has made strides in the direction of its competition policy (with increased autonomy of its Competition Authority), this has yet to bear fruit.

Egypt has seen a mixed picture with respect to business sophistication factors. On the one hand results suggest that it needs to derive its competitiveness not merely from low production cost and the availability of natural resources, but also from developing its products and processes. On the other hand, cluster development for stronger inter-firm linkages is improving, and greater value chain engagement may be steps in the right direction. Finally, better innovation calls for Egypt's firms to raise their spending on research and development (R&D). It also calls for the government to enforce a research strategy that addresses the modest quality of public research institutions and the absence of collaboration between universities and the business sector, and to ensure that public R&D agendas cater to contemporary research priorities and interests. Without such moves, greater competitiveness in today's knowledge-based economy will remain difficult.

Egypt occupies the 107th place in the GCI. This assessment was arguably influenced by the uncertainty caused by the political transition the country has experienced since the events of the Arab Spring. According to the business community, government efficiency has deteriorated by 22 positions to 106th, and the security situation, which was particularly affected by the events, has dropped 40 ranks to 128th. At the same time, the country has improved in individual areas captured by the institutions pillar, such as less favouritism being displayed by government officials (up by 31 ranks) and stronger corporate ethics (up by 17), suggesting the potential for further positive developments in the future. Many economic policy challenges lie ahead for the new Government to put the country on a sustainable and equitable growth path. For Egypt to more fully benefit from the considerable potential that lies in its large market size and proximity to key global markets, the country will have to raise its productive potential across the

domestic economy. According to the GCI, three areas are of particular importance. First, the macroeconomic environment has deteriorated over recent years to reach 138th position, mainly because of a widening fiscal deficit, rising public indebtedness and persisting inflationary pressures. A credible fiscal consolidation plan will be necessary to maintain macroeconomic stability in the country. This may prove difficult in times of high energy prices, as energy subsidies account for a considerable share of public expenditure. However, better targeting of subsidies could allow for fiscal consolidation while protecting the most vulnerable. Second, measures to intensify domestic competition would result in efficiency gains and contribute to energizing the economy by allowing for new entrants. And third, making labour markets flexible (135th) and more efficient (141st) would allow the country to increase employment in the medium term. Box 14 sheds additional light on the situation in the country.

Despite its undeniable potential, **Algeria**'s competitiveness lags behind many other economies of the region, ranked a low 110th overall. Although the country performs poorly on most of the categories of the GCI, the results point to a number of important advantages that support Algeria's potential going forward (see also Box 15). First of all, the country has a fairly stable macroeconomic environment (23rd) with almost no government debt and a healthy national savings rate (50.1% of GDP in 2011) that could potentially provide funds for domestic investment.

Together with Algeria's considerable domestic market size (49th), this advantage provides a good base for future development. The country also stands out positively in some aspects of the business environment, such as the relatively flexible labour markets and good participation in education as reflected in enrolment rates of 94.9% for secondary level and 95.6% for primary level.

However, a number of challenges to improving competitiveness remain to be tackled for Algeria to become more productive. Overhauling the institutional set-up and enhancing the efficiency of markets for goods and services and labour, and further developing financial markets would help the business sector to become more efficient. Public institutions remain ridden with corruption (138th) and are subject to undue influence (132nd) and excessive red tape (140th). Moreover, the security situation imposes significant cost on

doing business in the country (138th). The efficiency of markets for goods and services could be heightened by fostering more intense competition domestically and further opening the country to foreign trade and investment. Like some other countries in the region, Algeria is not a member of the WTO and, as a result, tariff rates remain high (14.0% on average) and domestic rules discriminate against foreign investment (138th). With respect to labour-market efficiency, a somewhat more mixed picture emerges. While hiring and firing practices are considered as not too burdensome (81st), companies are not in a position to fully determine wages (125th) and talent is not used efficiently (144th). Reforming financial markets remains perhaps the most important task that Algeria's policy-makers need to tackle to enhance competitiveness. As it stands, the market is not fulfilling efficiently its function as provider of finance to the business community. Financial services are not available (143rd) and expensive, (144th) and regulation and prudential supervision do not ensure that the financial system is sound and trustworthy (142nd). The country ranks 143rd on the indicator measuring the soundness of banks. Provided that competitiveness-enhancing policy measures are put in place and that targeted investments are made, Algeria is well positioned to move quickly to a higher growth trajectory, given the country's endowments in natural resources and its geographical proximity to Europe.

## Box 15: Algeria's Competitiveness By Sofiane Khatib, World Economic Forum

In the past year, Algeria has faced an unstable and complex regional context, managing to uphold both a strong macroeconomic position and its social stability. This results from cautious management of hydrocarbon windfalls in recent decades and an institutional capacity to swiftly implement counter-cyclical policies.

Despite last December's gas plant attack in In-Amenas, 50 km west of the Libyan border, the security situation in the country remained under control. The instability in Mali and Libya had no further impact on Algeria and security has been reinforced around all major energy assets.

Although the current US\$ 190 billion foreign reserves provide a cushion to support expansionary economic policies, and external debt represents less than 2% of GDP, the large increase in government spending has put even more emphasis on the need to address the longstanding structural challenges of the Algerian economy. Indeed, over the last year Algeria has increased its exposure to changes in energy prices; oil and gas income accounts for more than two-thirds of budget revenues and with a fiscal breakeven price of US\$ 120 per barrel (IMF), the present stimulus efforts are not sustainable over time. Inflation increased from 4.5% in 2011 to 8.9% (a 15-year high) in 2012. However the current government fiscal consolidation measures are expected to curb it back to 5% in 2013, according to the IMF. According to the same source, growth in 2012 is estimated at 2.5% and could reach 3.4% in 2013.

Government action led to significant successes in the last decade, particularly on youth unemployment which decreased from almost 50% to a, still concerning, 20%. The new government led by Prime Minister Sellal, appointed in September 2012, has committed to continue implementing the US\$ 286 billion 2009-14 development plan, principally

aimed at increasing economic diversification and driving investments in housing, infrastructure, agriculture, education, ICT and SME support. Significant efforts are also being made to push development outcomes in the regions of central and southern Algeria. The Government is also pursuing WTO accession by 2014 and has already reported four bilateral agreements to the WTO Secretariat.

To sustain hydrocarbon exports and cater to the increasing national energy consumption, the Government has committed US\$ 100 billion to the exploration of conventional and nonconventional (shale gas) reserves. Significant efforts are also being made to increase the weight of renewables (solar, wind) in the energy mix with the objective to reaching one-third of total energy consumption by 2030.

Triggering new growth drivers is critical to anchor social stability and secure sustainable and inclusive growth. The private sector weight in the economy is far below its potential, hindering the capacity of the Algerian economy to create jobs. The development of the private sector is facing three main roadblocks as highlighted by the Survey on the "most problematic factors for doing business":

Access to finance: The level of development of the financial sector, which ranks Algeria 142nd over 144 economies in the GCI, restricts private-sector growth. The ratio of domestic credit to the private sector to GDP in Algeria is one of the lowest among peer upper-middle-income countries; it was only 14.8% in 2011, while it represented, for instance, 18% in Azerbaijan, 20.4% in Venezuela, 21.1% in Angola, 69.1% in the United Arab Emirates and 71.2% in Chile. 16 Indeed most of the resources are channelled to the public sector with Algeria's banks lending almost 50% more to the Government than to the private sector.

<sup>&</sup>lt;sup>16</sup> Domestic credit to private sector (% of GDP), World Bank 2013b

## Box 15: Algeria's Competitiveness

By Sofiane Khatib, World Economic Forum

- Inefficient government bureaucracy: The burden of government regulation negatively impacts Algeria's competitiveness. The country ranks 140th out of 144 countries in the CGI. As an example, according to World Bank Doing Business data, it takes 25 days to start a business, 451 hours each year for a business to pay its taxes and 630 days and 45 procedures to enforce a
- Corruption: Several scandals linked mainly to the energy by the judiciary, exemplifying the depth of the problem, and also highlighting the willingness of decision-makers to seriously address the issue. Recent law-enforcement measures are driving both multinationals and local players to higher ethical standards when faced with this challenge.

To continue advancing the transition from a factor-driven to an efficiency-driven economy, Algeria should strengthen the relatively weak institutional framework (ranks 141th out

contract.17 sector and to large infrastructure projects are being tackled of 144). The Government should also continue its efforts to improve Algeria's innovation capacity and facilitate the build-up of know-how, infrastructure and legal framework conducive to the absorption and use of new technologies and to the improvement of business sophistication.

Algeria boasts a large market size, human capacities and access to resources that provide a solid base to develop a vibrant private sector. More private economic activity would not only contribute to sustainable job creation, it would also free precious government resources which can be rechanneled to strengthening basic competitiveness requirements, such as critical infrastructure and institutions, while stepping up efforts in efficiency enhancers, such as higher education and technological readiness.

<sup>17</sup> World Bank 2012

## Box 16: The National Competitiveness of the Libyan Economy By Mohamed A. Wefati, Libya Development Policy Center

The national competitiveness of the Libyan economy has been negatively affected by a structural legacy that has negatively affected the business environment. In the quest of identifying a key policy reform agenda, The Global Competitiveness Report reaffirms the messages that have been identified by international organizations with regard to developing the business environment, namely:

- Develop a policy mix to enhance the productivity and competiveness of the Libyan workforce, as well as increasing private-sector job creation
- Establish a framework for developing the financial sector and introduce new instruments that enhance innovation and productivity
- Develop the capacity to diversify the local economy and attract more foreign investment focused on knowledge transfer

On the upside, due to abundant natural resources, Libya's stable macroeconomic situation has yielded much international interest in the economic growth prospects of the country. Indeed, Libya ranked favourably in the macroeconomic environment pillar of the competitiveness ranking. Moreover, in spite of the concerns surrounding the security situation in Libya, The Global Competitiveness Report 2012-2013 shows that the perception of the business community overall is positive with regard to the effect of the security situation on their business. These positive trends present a very favourable prospect, especially when taking into account the existing political will to get the country back on the international map again.

However, there are concerns with some policies that are potentially damaging the medium- and long-term competitiveness of the country. The first of these concerns is the increased government spending on recurrent expenditure (through subsidies and public wages). This post-conflict phenomenon has contributed to an increased concern about inflationary pressures on the economy.

These pressures are specifically witnessed in the labour market, as the cost of labour has grown and the increase in public wages was higher than the increase in productivity of Libya's youthful workforce. The business community seems

to have confirmed that labour market efficiency is one of the top three policy reform initiatives that need to be addressed, with Libya ranking 137th in this pillar. It seems the crucial factor here is the flexibility of wage determination (Libya ranks 113th). So far, classical policy solutions have been introduced to tackle these issues, including the establishment of SME programmes. Unless the tools for solving these chronic problems are modernized, Libya will continue to face labourmarket inefficiency.

To enhance private-sector job creation, the restructuring of Libya's financial sector is crucial, with Libya ranking 140th on the financial market development pillar. The country has not leveraged its significant financial assets to enhance productivity and innovation. Both the availability and affordability of financial services is of concern to the private sector, with Libya ranking 135th and 139th respectively on both indicators. The Central Bank of Libya has moved to engage with the IMF and World Bank to introduce policy reforms to the financial sector. However the reform agenda is influenced by constant pressure on the enlarged banking system to cater for wealth redistribution and social spending programmes, rather than focus on enhancing entrepreneurship. Thus the emergence of non-banking financial services is a priority. Recent regulatory reforms in this regard are positive, but need to be expedited.

Finally, Libya's ability to diversify the economy and attract foreign investment could be compromised by short-term monopoly and the emergence of special-interest groups. This is clearly a concern for the business community, with Libya ranking 117th on the indicator measuring the effect of anti-monopoly policies. There is therefore a concern about the emerging inward-looking culture with these private-sector monopolies.

In summary, the new Libya is taking positive steps in developing its economy, and there is solid public backing for the Government. The challenges ahead are in the adaptation of the appropriate policy mix to tackle long-term structural problems. Thus the outlook in the medium to long term is positive for the country. In the short term, the leadership of Libya is showing signs of increased stability and is focusing on tackling the legacy issues that have plagued the country in the past.

Libya, returning to the ranking after recent events, occupies a low 113th position. As the country continues its transition, it is important that it lays the foundation for the economy to embark on a sustainable economic development path that could bring prosperity to future generations. The country's hydrocarbon reserves provide a good base for solid macroeconomic environment, already reflected in the 73rd position the country occupies on the related pillar. The absence of government debt, coupled with a solid budget surplus, provides a good base going forward. Some aspects of the institutional framework (81st) are also encouraging. Notably, there appears to be a high level of trust in the ethical standards of politicians in the country (39th), which bodes well for future political decisions. Moreover, the

electricity supply appears to be functioning and the use of mobile phones is spreading very quickly, replacing fixed lines and other forms of communication. Libya occupies the 10th rank in terms of mobile penetration. Going forward, two aspects are in urgent need of attention by decision-makers. The first is education; While enrolment rates are relatively high, the quality of education is among the poorest in the world (143rd). The second aspect relates to the functioning of goods and labour which remain burdened by rigidities stemming from government regulations and protection of incumbents. Related to this are financial markets, which are not yet efficient at providing finance for growth and remain unstable. Box 16 provides an additional analysis of the situation.

## Box 17: Yemen's Competitiveness: Evolution in Recent Years By the Yemeni Business Club

It is well known that Yemen is one of the Arab Spring Countries that suffered and still is suffering from ssignificant economic and political damage. In January 2010, the international community established the Friends of Yemen group that aims to support Yemen moving towards real economic and political reform. Their efforts resulted in the current National Dialogue Conference. The political situation in 2010-2011 caused GDP to plunge more than 10% in 2011, but a modest recovery began in 2012. The economic contraction resulted in per capita income falling to US\$ 1070 in 2011 from US\$ 1160 in 2010.

Generally, economic growth performance in Yemen has been held back by declining investment, reliance on oil, a lack of reform, poor infrastructure and corruption. These problems were further intensified with the deteriorating political and economic situation of 2010 which negatively affected population growth (3% per annum, 2010), 19 and the already high poverty rate, estimated to have increased from 42% of the population to 54.5% in 2012<sup>20</sup> (in 2005, the last year for which internationally comparable data is available, 47% of people lived below the US\$ 2 a day poverty line).<sup>21</sup> Other figures show that 44.5% of the population has limited or no access to sufficient, nutritious food, and have a poor or borderline diet, according to agreed international standards.<sup>22</sup> In addition to increased unemployment, firms reported an average of a 12% decline in employment, with small firms being hit worst.<sup>23</sup> Furthermore, water resources are declining.

All of the above factors have had a negative impact on Yemen's competitiveness. The country is now in a two-year transitional period. The National Unity Government, with support from donors, has developed a two-year plan to tackle the development challenges. Donors have pledged US\$ 7.8

billion in aid to help Yemen address the immediate issues and support recovery. After a year of political transition, Yemen's economy is showing signs of recovery and is emerging from the 2011 crisis. After contracting by 10.5%<sup>24</sup> in 2011, the economy was stagnant at 0.1 %<sup>25</sup> in 2012. The recovery is forecast to pick up in 2013 to reach 4.4%.26 Macroeconomic stability has been largely restored, with inflation decreasing, a manageable fiscal deficit and a stable exchange rate. These were achieved through short-term measures, including implementation of the IMF short-term programme and significant grants from Saudi Arabia. This stabilization has been achieved quickly, but paradoxically the measures taken have also undermined other prospects for economic recovery in Yemen, and created further hardship for the poorest households already suffering from the crisis. Eventually, with the support of neighbour countries, the economy has been brought back into fiscal, monetary and external balance.

It is imperative for the Yemeni Government to start urgent economic reforms to address the fundamental issues that determine Yemen's medium-term prospects. Without action to tackle the above-mentioned persistent constraints to economic growth, particularly the toxic investment climate, weak transparency, accountability and fiscal policy, Yemen's economic recovery will be fragile and short-lived. Yemen's dependence on oil for income and as a source of growth is no longer tenable.

Once the security situation is improved and the political direction confirmed, local and foreign investors will find their way to Yemen.

<sup>&</sup>lt;sup>18</sup> World Bank et al. 2012.

<sup>&</sup>lt;sup>19</sup> World Bank 2013a.

<sup>&</sup>lt;sup>20</sup> World Bank et al. 2012.

<sup>&</sup>lt;sup>21</sup> World Bank 2013a.

<sup>&</sup>lt;sup>22</sup> World Food Programme 2012.

<sup>&</sup>lt;sup>23</sup> World Bank et al. 2012.

 $<sup>^{\</sup>rm 24}$  IMF 2013; Yemeni Government estimated GDP contraction of 20% in 2011.

<sup>&</sup>lt;sup>25</sup> IMF 2013.

<sup>&</sup>lt;sup>26</sup> IMF 2013.

The regional ranking closes with **Yemen** at a low 140th place. The low ranking reflects the numerous challenges the country faces to improve competitiveness and enhance economic growth (Box 17). Among the limitations to be addressed as a priority, given the country's factor-driven stage of development, are its weak institutional framework (139th) as it relates to both public-sector and private-sector governance, and its poor educational and health outcomes (122nd), as well as its underdeveloped infrastructure (139th). Tackling these challenges would enable the country to experience some productivity improvements, building on strengths such as its market size, the economy's openness to trade and its flexible labour markets.

This chapter has analysed the performance of 13 Arab countries in terms of national competitiveness using the framework of the Global Competitiveness Index 2012-2013. The countries analysed are Algeria, Bahrain, Egypt, Jordan, Lebanon, Libya, Morocco, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates and Yemen.

## Conclusion

Improving competitiveness is imperative for the region to create a higher number of jobs for the growing population. Creating sufficient employment in the Arab economies will require dynamic private-sector growth, which in most countries remains constrained due to low productivity. Challenges related to education and skills and the labour market emerge as important constraints to private-sector growth and competitiveness, pointing to a close link between competitiveness and employment. Yet, given the diversity of the region, improving competitiveness will require different responses depending on the subregion and the country. North African economies will require improvements to the institutional framework and to labour-market efficiency. For Levantine economies, infrastructure and institutions remain key challenges and Gulf countries should continue to focus on education and innovation.

The chapter closes with an analysis of strengths and weaknesses of each country of the region covered by the GCI. Competitiveness-enhancing reforms will pave the way for more private-sector activity that will lead to the creation of gainful and sustainable employment across the region for the benefit of both present and future generations.

## References

AMEinfo.com, 2013, "Queen Alia International Airport recognized by IFC and Infrastructure Journal", 3 April 2013. Available at http://www.ameinfo.com/queen-alia-international-airport-recognized-ifc-336155.

Arabian Business.com, 2012, "Middle East lags world in 2012 tourism growth", 15 July 2012. Available at http://www.arabianbusiness.com/middle-east-lags-world-in-2012-tourism-growth-465937.html.

Browne, Ciara, Thierry Geiger and Tania Gutknecht, 2012, The Executive Opinion Survey: The Voice of the Business Community. In *The Global Competitiveness Report 2012-2013*, Geneva: World Economic Forum.

Foster + Partners, 2013, "Official opening of Queen Alia International Airport in Amman", Press Release, 21 March 2013. Available at http://bit.ly/Zeoes3.

International Monetary Fund (IMF), 2013, World Economic Outlook Database, April 2013.

Emirates Competitiveness Council, 2013, Measuring Research & Development in the United Arab Emirates, Abu Dhabi, forthcoming.

Medicaltourismco.com, 2010: Medical Tourism Jordan – Jordan Health Travel – Jordan Medical Tourism, Retrieved 15 June 2010.

Periodical Islamic Chamber of Commerce & Industry Magazine. Retrieved 22 April 2013.

J.F.Rischard, J.White, S.Chung and J.S.Kim, 2010, A Candid Review of Jordan's Innovation Policy, World Bank mission to Jordan, World Bank.

Sala-i-Martin, Xavier, Beñat Bilbao-Osorio, Jennifer Blanke, Roberto Crotti, Margareta Drzeniek Hanouz, Thierry Geiger and Caroline Ko, 2012, The Global Competitiveness Index 2012-2013: Strengthening Recovery by Raising Productivity. In *The Global Competitiveness Report 2012-2013*, Geneva: World Economic Forum.

World Bank, 2010, Innovation Policy: A Guide for Developing Countries. Washington DC: World Bank. Available at https://openknowledge.worldbank.org/handle/10986/2460.

World Bank, 2012, *Doing Business 2013*. Washington DC: World Bank.

World Bank, 2013a, World Bank Development Indicators Data Base.

World Bank, 2013b, World Bank Data Catalog

World Bank; United Nations; European Union; Islamic Development Bank, 2012, *Joint Social and Economic Assessment for the Republic of Yemen*. Washington DC. Available at https://openknowledge.worldbank.org/handle/10986/11920.

World Economic Forum, 2012, *The Global Competitiveness Report* 2012-2013, Geneva: World Economic Forum.

World Food Programme (WFP), 2012, "Comprehensive Food Security Survey", June 2012, Rome.

## Appendix A: Computation and structure of the Global Competitiveness Index 2012-2013

This appendix presents the structure of the Global Competitiveness Index 2012-2013 (GCI). The computation of the GCI is based on successive aggregations of scores from the indicator level (i.e. the most disaggregated level) all the way up to the overall GCI score. Unless mentioned otherwise, we use an arithmetic mean to aggregate individual variables within a category.<sup>a</sup> For the higher aggregation levels, we use the percentage shown next to each category. This percentage represents the category's weight within its immediate parent category. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI. For example, the score a country achieves in the 9th pillar accounts for 17% of this country's score in the efficiency enhancers subindex, irrespective of the country's stage of development. Similarly, the score achieved on the subpillar transport infrastructure accounts for 50% of the score of the infrastructure pillar.

Unlike the case for the lower levels of aggregation, the weight put on each of the three subindexes (basic requirements, efficiency enhancers, and innovation and sophistication factors) is not fixed. Instead, it depends on each country's stage of development, as discussed in the chapter.<sup>b</sup> For instance, in the case of Burundi – a country in the first stage of development – the score in the basic requirements subindex accounts for 65% of its overall GCI score, while it represents just 20% of the overall GCI score of Norway, a country in the third stage of development. For countries in transition between stages, the weighting applied to each subindex is reported in the corresponding profile at the end of this volume. For instance, in the case of Algeria, currently in transition from stage 1 to stage 2, the weight on each subindex is 59%, 36% and 5%, respectively.

Variables that are not derived from the Executive Opinion Survey are identified by an asterisk (\*) in the following pages. The Technical Notes and Sources in Appendix B provide detailed information about these indicators. To make the aggregation possible, these variables are transformed onto a 1-to-7 scale to align them with the Survey results. We apply a min-max transformation, which preserves the order of, and the relative distance between, country scores.°

Indicators that are followed by the designation "1/2" enter the GCI in two different pillars. To avoid double counting, we assign a half-weight to each instance.<sup>d</sup>

Weight (%) within immediate parent category **Basic Requirements** 1st Pillar: Institutions 25% A. Public institutions 75% 1. Property rights 20% 1.01 Property rights 1.02 Intellectual property protection 1/2 2. Ethics and corruption 20% 1.03 Diversion of public funds 1.04 Public trust of politicians 1.05 Irregular payments and bribes 3. Undue influence 20% 1.06 Judicial independence 1.07 Favouritism in decisions of government officials 4. Government inefficiency 20% 1.08 Wastefulness of government spending 1.09 Burden of government regulation 1.10 Efficiency of legal framework in settling disputes 1.11 Efficiency of legal framework in challenging regulations 1.12 Transparency of government policy-making 1.13 Provision of government services for improved business performance 20% Security 1.13 Business costs of terrorism 1.15 Business costs of crime and violence 1.16 Organized crime 1.17 Reliability of police services B. Private institutions 25% 1. Corporate ethics 50% 1.18 Ethical behaviour of firms 2. Accountability 50% 1.19 Strength of auditing and reporting standards 1.20 Efficacy of corporate boards 1.21 Protection of minority shareholders' interests 1.22 Strength of investor protection\* 2nd Pillar: Infrastructure 25% A. Transport infrastructure 50% 2.01 Quality of overall infrastructure 2.02 Quality of roads 2.03 Quality of railroad infrastructure 2.04 Quality of port infrastructure 2.05 Quality of air transport infrastructure 2.06 Available seat kilometres\* B. Energy and telephony infrastructure 50% 2.07 Quality of electricity supply 2.08 Fixed telephone lines\* 1/2 2.09 Mobile telephone subscriptions\* 1/2 3rd Pillar: Macroeconomic Environment 25% 3.01 Government budget balance\* 3.02 National savings rate\* 3.03 Inflation\* e 3.04 Government debt\*

3.05 Country credit rating\*

4th Pillar: Health and Primary Education	25%	B. Efficient use of talent	50%	
A. Health	50%	7.06 Pay and productivity		
4.01 Business impact of malaria <sup>f</sup>		7.07 Reliance on professional management 1/2		
4.02 Malaria incidence* <sup>f</sup>		7.08 Brain drain		
4.03 Business impact of tuberculosis f		7.09 Female participation in labour force*		
4.04 Tuberculosis incidence* f		·		
4.05 Business impact of HIV/AIDS <sup>f</sup>		8th Pillar: Financial Market Development	17%	
4.06 HIV prevalence* f		A. Efficiency	50%	
4.07 Infant mortality*		8.01 Availability of financial services	3370	
4.08 Life expectancy*		8.02 Affordability of financial services		
B. Primary education	50%	8.03 Financing through local equity market		
4.09 Quality of primary education	30 /0	8.04 Ease of access to loans		
4.10 Primary education enrolment rate*		8.05 Venture capital availability		
4.10 Filliary education enrollnent rate				
F#i-i Falsana		8.06 Restriction on capital flows	<b>E0</b> 0/	
Efficiency Enhancers	,	B. Trustworthiness and confidence	50%	
5th Pillar: Higher Education and Training	17%	8.07 Soundness of banks		
A. Quantity of education	33%	8.08 Regulation of securities exchanges		
5.01 Secondary education enrolment rate*		8.09 Legal rights index*		
5.02 Tertiary education enrolment rate*				
B. Quality of education	33%	9th Pillar: Technological Readiness	17%	
5.03 Quality of the educational system		A. Technological adoption	50%	
5.04 Quality of math and science education		9.01 Availability of latest technologies		
5.05 Quality of management schools		9.02 Firm-level technology absorption		
5.06 Internet access in schools		9.03 FDI and technology transfer		
C. On-the-job training	33%	B. ICT use	50%	
5.07 Local availability of specialized research and tra	aining services	9.04 Internet users*		
5.08 Extent of staff training		9.05 Broadband Internet subscriptions*		
-		9.06 Internet bandwidth*		
6th Pillar: Goods Market Efficiency	17%	9.07 Mobile broadband subscriptions*		
A. Competition	67%	2.08 Fixed telephone lines* 1/2		
Domestic competition variable <sup>g</sup>	<b>3.</b> 70	2.09 Mobile telephone subscriptions* 1/2		
6.01 Intensity of local competition		·		
6.02 Extent of market dominance		10th Pillar: Market Size	17%	
6.03 Effectiveness of anti-monopoly policy		A. Domestic market size	75%	
6.04 Extent and effect of taxation		10.01 Domestic market size index* j	, ,	
6.05 Total tax rate*		B. Foreign market size	25%	
	200* h	10.02 Foreign market size index* k	25 /0	
6.06 Number of procedures required to start a busin	iess	10.02 Foreign market size index		
6.07 Time required to start a business* h		Innerestian and Combistication Footons		
6.08 Agricultural policy costs		Innovation and Sophistication Factors	<b>50</b> 0/	
2. Foreign competition variable <sup>9</sup>		11th Pillar: Business Sophistication	50%	
6.09 Prevalence of trade barriers		11.01 Local supplier quantity		
6.10 Trade tariffs*		11.02 Local supplier quality		
6.11 Prevalence of foreign ownership		11.03 State of cluster development		
6.12 Business impact of rules on FDI		11.04 Nature of competitive advantage		
6.13 Burden of customs procedures		11.05 Value chain breadth		
6.14 Imports as a percentage of GDP* i		11.06 Control of international distribution		
B. Quality of demand conditions	33%	11.07 Production process sophistication		
6.15 Degree of customer orientation		11.08 Extent of marketing		
6.16 Buyer sophistication		11.09 Willingness to delegate authority		
		7.07 Reliance on professional management 1/2		
7th Pillar: Labour Market Efficiency	17%			
A. Flexibility	50%	12th Pillar: Innovation	50%	
7.01 Cooperation in labour-employer relations		12.01 Capacity for innovation		
7.02 Flexibility of wage determination		12.02 Quality of scientific research institutions		
7.03 Rigidity of employment*		12.03 Company spending on R&D		
7.04 Hiring and firing practices		12.04 University-industry collaboration in R&D		
7.05 Redundancy costs*		12.05 Government procurement of advanced technology	ology products	
6.04 Extent and effect of taxation <sup>1/2</sup>		12.06 Availability of scientists and engineers	. 57   20000	
5.5 . Excelled and direct of taxagon		12.07 PCT patent applications*		
		1.02 Intellectual property protection <sup>1/2</sup>		
		1.02 Intellectual property protection		

## Notes

a. Formally, for a category *i* composed of *K* indicators, we have:

$$category_i = \frac{\sum_{k=1}^{K} indicator_k}{K}$$

b. As described in the chapter, the weights are as specified below. Refer to Table 2 of the chapter for country classification according to stage of development:

	Stage of development					
	Factor-driven stage (1)	Transition from stage 1 to stage 2	Efficiency-driven stage (2)	Transition from stage 2 to stage 3	Innovation-driven stage (3)	
GDP per capita (US\$) thresholds*	<2,000	2,000–2,999	3,000-8,999	9,000–17,000	>17,000	
Weight for basic requirements subindex	60%	40–60%	40%	20–40%	20%	
Weight for efficiency enhancers subindex	35%	35–50%	50%	50%	50%	
Weight for innovation and sophistication factors subindex	5%	5–10%	10%	10–30%	30%	

<sup>\*</sup> For economies with a high dependency on mineral resources, GDP per capita is not the sole criterion for the determination of the stage of development. See text for details.

c. Formally, we have:

The sample minimum and sample maximum are, respectively, the lowest and highest country scores in the sample of economies covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those indicators for which a higher value indicates a worse outcome (e.g. disease incidence, government debt), the transformation formula takes the following form, thus ensuring that 1 and 7 still correspond to the worst and best possible outcomes, respectively:

d For those categories that contain one or several half-weight variables, country scores are computed as follows:

$$\frac{\text{(sum of scores on full - weight variables)} + \frac{1}{2} \times \text{(sum of scores on half - weight variables)}}{\text{(count of full - weight variables)} + \frac{1}{2} \times \text{(count of half - weight variables)}}$$

- e. To capture the idea that both high inflation and deflation are detrimental, inflation enters the model in a U-shaped manner as follows: for values of inflation between 0.5 and 2.9%, a country receives the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these values.
- f. The impact of malaria, tuberculosis and HIV/AIDS on competitiveness depends not only on their respective incidence rates but also on how costly they are for business. Therefore, to estimate the impact of each of the three diseases, we combine its incidence rate with the Survey question on its perceived cost to businesses. To combine these data, we first take the ratio of each country's disease incidence rate relative to the highest incidence rate in the whole sample. The inverse of this ratio is then multiplied by each country's score on the related Survey question. This product is then normalized to a 1-to-7 scale. Note that countries with zero reported incidence receive a 7, regardless of their scores on the related Survey question.
- g. The competition subpillar is the weighted average of two components: domestic competition and foreign competition. In both components, the included variables provide an indication of the extent to which competition is distorted. The relative importance of these distortions depends on the relative size of domestic versus foreign competition. This interaction between the domestic market and the foreign market is captured by the way we determine the weights of the two components. Domestic competition is the sum of consumption (C), investment (I), government spending (G) and exports (X), while foreign competition is equal to imports (M). Thus we assign a weight of (C + I + G + X + M) to domestic competition and a weight of M/(C + I + G + X + M) to foreign competition.
- h. Variables 6.06 and 6.07 combine to form one single variable.
- i. For variable 6.14, imports as a percentage of GDP, we first apply a log-transformation and then a min-max transformation. This indicator was formerly numbered 10.04. It still enters the computation of the market size indexes (see note j).
- j. The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at purchased power parity (PPP) plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data are then normalized on a 1-to-7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the data tables section (see Tables 10.03, 6.14 and 10.05) of *The Global Competitiveness Report 2012-2013*.
- k. The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1-to-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the data tables.

# Appendix B: Technical Notes and Sources for the Global Competitiveness Index

This section provides detailed definitions and sources for all the indicators that enter the Global Competitiveness Index 2012–2013 (GCI). For further information, see *The Global Competitiveness Report 2012-2013*.

Two types of data are used in the GCI: Executive Opinion Survey data and data from sources other than the World Economic Forum (national authorities, international agencies and private sources). The latter were updated at the time *The Global Competitiveness Report 2012-2013* was prepared.

For each indicator, the title appears on the first line, preceded by its number to allow for quick reference. The numbering refers to the data tables section in *The Global Competitiveness Report 2012-2013*. Underneath is a description of the indicator or, in the case of the Executive Opinion Survey data, the full question and the associated response. The data used represent the best available estimates at the time *The Global Competitiveness Report 2012-2013* was prepared. It is possible that some data will have been updated or revised after publication.

## 1st Pillar: Institutions

## 1.01 Property rights

How would you rate the protection of property rights, including financial assets, in your country? [1 = very weak; 7 = very strong] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.02 Intellectual property protection

How would you rate intellectual property protection, including anti-counterfeiting measures, in your country? [1 = very weak; 7 = very strong] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.03 Diversion of public funds

In your country, how common is diversion of public funds to companies, individuals or groups due to corruption? [1 = very common; 7 = never occurs] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.04 Public trust in politicians

How would you rate the level of public trust in the ethical standards of politicians in your country? [1 = very low; 7 = very high] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.05 Irregular payments and bribes

Average score across the five components of the following Executive Opinion Survey question: In your country, how common is it for firms to make undocumented extra payments or bribes connected with (a) imports and exports; (b) public utilities; (c) annual tax payments; (d) awarding of public contracts and licences; (e) obtaining favourable judicial decisions. In each case, the answer ranges from 1 (very common) to 7 (never occurs). | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.06 Judicial independence

To what extent is the judiciary in your country independent from influences of members of government, citizens or firms? [1 = heavily influenced; 7 = entirely independent] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.07 Favouritism in decisions of government officials

To what extent do government officials in your country show favouritism to well-connected firms and individuals when deciding upon policies and contracts? [1 = always show favouritism; 7 = never show favouritism] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.08 Wastefulness of government spending

How would you rate the composition of public spending in your country? [1 = extremely wasteful; 7 = highly efficient in providing necessary goods and services] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.09 Burden of government regulation

How burdensome is it for businesses in your country to comply with governmental administrative requirements (e.g. permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.10 Efficiency of legal framework in settling disputes

How efficient is the legal framework in your country for private businesses in settling disputes? [1 = extremely inefficient; 7 = highly efficient] | 2011-12 weighted average Source: World Economic Forum, Executive Opinion Survey

## 1.11 Efficiency of legal framework in challenging regulations

How efficient is the legal framework in your country for private businesses in challenging the legality of government actions and/or regulations? [1 = extremely inefficient; 7 = highly efficient] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.12 Transparency of government policymaking

How easy is it for businesses in your country to obtain information about changes in government policies and regulations affecting their activities? [1 = impossible; 7 = extremely easy] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.13 Government provision of services for improved business performance

To what extent does the government in your country continuously improve its provision of services to help businesses in your country boost their economic performance? [1 = not at all; 7 = extensively] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.14 Business costs of terrorism

To what extent does the threat of terrorism impose costs on businesses in your country? [1 = to a great extent; 7 = not at all] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.15 Business costs of crime and violence

To what extent does the incidence of crime and violence impose costs on businesses in your country? [1 = to a great extent;  $7 = \text{not at all}] \mid 2011-12 \text{ weighted average}$ 

Source: World Economic Forum, Executive Opinion Survey

## 1.16 Organized crime

To what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses in your country? [1 = to a great extent; 7 = not at all] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.17 Reliability of police services

To what extent can police services be relied upon to enforce law and order in your country? [1 = cannot be relied upon at all; 7 = can be completely relied upon] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.18 Ethical behaviour of firms

How would you compare the corporate ethics (ethical behaviour in interactions with public officials, politicians and other enterprises) of firms in your country with those of other countries in the world? [1 = among the worst in the world; 7 = among the best in the world] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.19 Strength of auditing and reporting standards

In your country, how would you assess financial auditing and reporting standards regarding company financial performance? [1 = extremely weak; 7 = extremely strong] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.20 Efficacy of corporate boards

How would you characterize corporate governance by investors and boards of directors in your country? [1 = management has little accountability to investors and boards; 7 = investors and boards exert strong supervision of management decisions] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.21 Protection of minority shareholders' interests

In your country, to what extent are the interests of minority shareholders protected by the legal system? [1 = not protected at all; 7 = fully protected] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.22 Strength of investor protection

## Strength of Investor Protection Index on a 0-10 (best) scale | 2011

This variable is a combination of the Extent of disclosure index (transparency of transactions), the Extent of director liability index (liability for self-dealing), and the Ease of shareholder suit index (shareholders' ability to sue officers and directors for misconduct). For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World* 

## 2nd Pillar: Infrastructure

## 2.01 Quality of overall infrastructure

How would you assess general infrastructure (e.g. transport, telephony, and energy) in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 2.02 Quality of roads

How would you assess the roads in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 2.03 Quality of railroad infrastructure

How would you assess the railroad system in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

NOTE: N/Appl. is used for economies where the railroad network totals less than 50 km.

## 2.04 Quality of port infrastructure

How would you assess the port facilities in your country? [1 = extremely underdeveloped; 7 = well developed and efficient by international standards] For landlocked countries, the question is as follows: How accessible are port facilities? [1 = extremely inaccessible; 7 = extremely accessible] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 2.05 Quality of air transport infrastructure

How would you assess passenger air transport infrastructure in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 2.06 Available airline seat kilometres

Scheduled available airline seat kilometres per week originating in country (in millions) | Jan2012-Jul2012

This variable measures the total passenger-carrying capacity of all scheduled flights, including domestic flights, originating in a country. It is computed by taking the number of seats available on each flight multiplied by the flight distance in kilometres, summing the result across all scheduled flights in a week during January (winter schedule) and July (summer schedule) 2012, and taking the average capacity of the two weeks.

Source: International Air Transport Association, SRS Analyser

## 2.07 Quality of electricity supply

How would you assess the quality of the electricity supply in your country (lack of interruptions and lack of voltage fluctuations)? [1 = insufficient and suffers frequent interruptions; 7 = sufficient and reliable] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 2.08 Mobile telephone subscriptions

## Number of mobile telephone subscriptions per 100 population | 2011

A *mobile telephone subscription* refers to a subscription to a public mobile telephone service that provides access to the public switched telephone network (PSTN) using cellular technology, including the number of pre-paid SIM cards active during the past three months. This includes both analogue and digital cellular systems (IMT-2000, Third Generation, 3G) and 4G subscriptions, but excludes mobile broadband subscriptions via data cards or USB modems. Subscriptions to public mobile data services, private trunked mobile radio, telepoint or radio paging, and telemetry services are also excluded. It includes all mobile cellular subscriptions that offer voice communications.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators Database 2012 (June 2012 edition)

## 2.09 Fixed telephone lines

## Number of active fixed telephone lines per 100 population | 2011

A fixed telephone line is an active line connecting the subscriber's terminal equipment to the public switched telephone network (PSTN) and that has a dedicated port in the telephone exchange equipment. Active lines are those that have registered an activity in the past three months.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators Database 2012 (June 2012 edition)

## 3rd Pillar: Macroeconomic Environment

## 3.01 Government budget balance

## General government budget balance as a percentage of GDP | 2011

Net lending (+)/ borrowing (-) is calculated as general government revenue minus total expenditure. This is a core Government Finance Statistics (GFS) balance that measures the extent to which the general government is either putting financial resources at the disposal of other sectors in the economy and non-residents (net lending), or utilizing the financial resources generated by other sectors and non-residents (net borrowing). This balance may be viewed as an indicator of the financial impact of general government activity on the rest of the economy and non-residents. Revenue consists of taxes, social contributions, grants receivable and other revenue. Revenue increases a government's net worth, which is the difference between its assets and liabilities. General government total expenditure consists of total expenses and the net acquisition of nonfinancial assets.

Sources: International Monetary Fund, World Economic Outlook Database (April 2012 edition) and Public Information Notices (various issues); national sources

## 3.02 Gross national savings

Gross national savings as a percentage of GDP | 2011

Aggregate national savings is defined as public- and private-sector savings as a percentage of nominal GDP. National savings equals gross domestic investment plus the current-account balance.

Sources: International Monetary Fund, World Economic Outlook Database (April 2012 edition) and Public Information Notices (various issues); national sources

## 3.03 Inflation

Annual percent change in consumer price index (year average) | 2011

Annual percent change in year average consumer price index.

Sources: International Monetary Fund, World Economic Outlook Database (April 2012 edition); national sources

NOTE: For inflation rates between 0.5 and 2.9%, a country received the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these values.

## 3.04 Government debt

## Gross general government debt as a percentage of GDP | 2011

Gross debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. This includes debt liabilities in the form of special drawing rights, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable. Thus, all liabilities in the Government Finance Statistics Manual 2001 system are debt, except for equity and investment fund shares and financial derivatives and employee stock options.

Sources: International Monetary Fund, World Economic Outlook Database (April 2012 edition) and Public Information Notices (various issues); national sources

## 3.05 Country credit rating

Expert assessment of the probability of sovereign debt default on a 0–100 (lowest probability) scale | March 2012

Institutional Investor's Country Credit ratings developed by Institutional Investor are based on information provided by senior economists and sovereign-debt analysts at leading global banks and money management and security firms. Twice a year, the respondents grade each country on a scale of 0 to 100, with 100 representing the least chance of default. For more information, visit http://www.institutionalinvestor.com/Research/3633/Global-Rankings.html.

Source: Institutional Investor

## 4th Pillar: Health and Primary Education

## 4.01 Business impact of malaria

How serious an impact do you consider malaria will have on your company in the next five years (e.g. death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey NOTE: This indicator does not apply to economies where malaria is not endemic (n/appl.).

## 4.02 Malaria incidence

Number of malaria cases per 100,000 population | 2009

Data are estimates and are provided only for economies in which malaria is considered to be endemic. In the corresponding data table, "NE" denotes an economy where malaria is not endemic.

Source: Cibulskis, R.E., M. Aregawi, R. Williams, M. Otten, and C. Dye. 2011. "Worldwide Incidence of Malaria in 2009: Estimates, Time Trends, and a Critique of Methods". *PLoS Med* 8 (12): e1001142. doi: 10.1271/journal/pmed.1001142.

NOTE: (NE) indicates that malaria is not endemic.

## 4.03 Business impact of tuberculosis

How serious an impact do you consider tuberculosis will have on your company in the next five years (e.g. death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 4.04 Tuberculosis incidence

Number of tuberculosis cases per 100,000 population | 2010

Incidence of tuberculosis is the estimated number of new pulmonary, smear positive, and extra-pulmonary tuberculosis cases.

Sources: The World Bank, World Development Indicators & Global Development Finance Catalog (April 2012 edition); national sources

## 4.05 Business impact of HIV/AIDS

How serious an impact do you consider HIV/AIDS will have on your company in the next five years (e.g. death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = a impact at all |1 = a 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 4.06 HIV prevalence

HIV prevalence as a percentage of adults aged 15-49 years | 2009

HIV prevalence refers to the number of infections at a particular point in time, no matter when infection occurred.

Sources: The World Bank, World Development Indicators & Global Development Finance Catalog (April 2012 edition); UNAIDS, Global Report on the Global AIDS Epidemic (2008 edition); national sources

## 4.07 Infant mortality

Infant (children aged 0-12 months) mortality per 1,000 live births | 2010

Infant mortality rate is the number of infants dying before reaching one year of age per 1,000 live births in a given year.

Sources: The World Bank, World Development Indicators & Global Development Finance Catalog (April 2012 edition); national sources

## 4.08 Life expectancy

Life expectancy at birth (years) | 2010

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Sources: The World Bank, World Development Indicators & Global Development Finance Catalog (April 2012 edition); national sources

## 4.09 Quality of primary education

How would you assess the quality of primary schools in your country? [1 = poor; 7 = excellent – among the best in the world] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 4.10 Primary education enrolment rate

Net primary education enrolment rate | 2010

The reported value corresponds to the ratio of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age. Primary education (ISCED level 1) provides children with basic reading, writing and mathematics skills, along with an elementary understanding of such subjects as history, geography, natural science, social science, art and music.

Sources: UNESCO Institute for Statistics (accessed 10 May 2012); The World Bank, EdStats Database (accessed 27 June 2012); Organisation for Economic Co-operation and Development (OECD), Education at a Glance 2011; national sources

## 5th Pillar: Higher Education and Training

## 5.01 Secondary education enrolment rate

Gross secondary education enrolment rate | 2010

The reported value corresponds to the ratio of total secondary enrolment, regardless of age, to the population of the age group that officially corresponds to the secondary education level. Secondary education (ISCED levels 2 and 3) completes the provision of basic education that began at the primary level, and aims to lay the foundations for lifelong learning and human development by offering more subject- or skills-oriented instruction using more specialized teachers.

Sources: UNESCO Institute for Statistics (accessed 10 May 2012); UNICEF ChildInfo. org Country Profiles; The World Bank, *EdStats Database* (accessed 25 June 2012); national sources

## 5.02 Tertiary education enrolment rate

Gross tertiary education enrolment rate | 2010

The reported value corresponds to the ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Tertiary education (ISCED levels 5 and 6), whether or not leading to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Sources: UNESCO Institute for Statistics (accessed 10 May 2012); national sources

## 5.03 Quality of the educational system

How well does the educational system in your country meet the needs of a competitive economy? [1 = not well at all; 7 = very well] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 5.04 Quality of math and science education

How would you assess the quality of math and science education in your country's schools? [1 = poor; 7 = excellent – among the best in the world] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 5.05 Quality of management schools

How would you assess the quality of management or business schools in your country? [1 = poor; 7 = excellent - among the best in the world] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 5.06 Internet access in schools

How would you rate the level of access to the Internet in schools in your country? [1 = very limited; 7 = extensive] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 5.07 Local availability of specialized research and training services

In your country, to what extent are high-quality, specialized training services available? [1 = not available; 7 = widely available] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 5.08 Extent of staff training

To what extent do companies in your country invest in training and employee development? [1 = hardly at all; 7 = to a great extent] | 2011-12 weighted average Source: World Economic Forum, Executive Opinion Survey

## 6th Pillar: Goods Market Efficiency

## 6.01 Intensity of local competition

How would you assess the intensity of competition in the local markets in your country? [1 = limited in most industries; 7 = intense in most industries] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.02 Extent of market dominance

How would you characterize corporate activity in your country? [1 = dominated by a few business groups; 7 = spread among many firms] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.03 Effectiveness of anti-monopoly policy

To what extent does anti-monopoly policy promote competition in your country? [1 = does not promote competition; 7 = effectively promotes competition] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.04 Extent and effect of taxation

What impact does the level of taxes in your country have on incentives to work or invest? [1 = significantly limits incentives to work or invest; 7 = has no impact on incentives to work or invest] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.05 Total tax rate

This variable is a combination of profit tax (% of profits), labour tax and contribution (% of profits), and other taxes (% of profits) | 2011

The total tax rate measures the amount of taxes and mandatory contributions payable by a business in the second year of operation, expressed as a share of commercial profits. The total amount of taxes is the sum of five different types of taxes and contributions payable after accounting for deductions and exemptions: profit or corporate income tax, social contributions and labour taxes paid by the employer, property taxes, turnover taxes and other small taxes. For more details about the methodology employed and the assumptions made to compute this indicator, please visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World* 

## 6.06 Number of procedures required to start a business

Number of procedures required to start a business | 2011

For details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World* 

## 6.07 Time required to start a business

Number of days required to start a business | 2011

For details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World* 

## 6.08 Agricultural policy costs

How would you assess the agricultural policy in your country? [1 = excessively burdensome for the economy; 7 = balances the interests of taxpayers, consumers and producers] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.09 Prevalence of trade barriers

In your country, to what extent do tariff and non-tariff barriers limit the ability of imported goods to compete in the domestic market? [1 = strongly limit; 7 = do not limit] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.10 Trade tariffs

Trade-weighted average tariff rate | 2011

This indicator is calculated as a weighted average of all the applied tariff rates, including preferential rates that a country applies to the rest of the world. The weights are the trade patterns of the importing country's reference group (2010 data). An applied tariff is a customs duty that is levied on imports of merchandise goods.

Source: International Trade Centre

## 6.11 Prevalence of foreign ownership

How prevalent is foreign ownership of companies in your country? [1 = very rare; 7 = highly prevalent] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.12 Business impact of rules on FDI

To what extent do rules governing foreign direct investment (FDI) encourage or discourage it? [1 = strongly discourage FDI; 7 = strongly encourage FDI] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.13 Burden of customs procedures

How would you rate the level of efficiency of customs procedures (related to the entry and exit of merchandise) in your country? [1 = extremely inefficient; 7 = extremely efficient] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.14 Imports as a percentage of GDP

Imports of goods and services as a percentage of gross domestic product | 2011

Total imports are the sum of total imports of merchandise and commercial services.

Sources: World Trade Organization, Statistical Database: Time Series on merchandise and commercial services (accessed 4 June 2012); International Monetary Fund, *World Economic Outlook Database* (April 2012 edition); national sources

## 6.15 Degree of customer orientation

How do companies in your country treat customers? [1 = generally treat their customers badly; 7 = are highly responsive to customers and customer retention] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 6.16 Buyer sophistication

In your country, how do buyers make purchasing decisions? [1 = based solely on the lowest price; 7 = based on a sophisticated analysis of performance attributes] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7th Pillar: Labour Market Efficiency

## 7.01 Cooperation in labour-employer relations

How would you characterize labour-employer relations in your country? [1 = generally confrontational; 7 = generally cooperative] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.02 Flexibility of wage determination

How are wages generally set in your country? [1 = by a centralized bargaining process; 7 = up to each individual company] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.03 Hiring and firing practices

How would you characterize the hiring and firing of workers in your country? [1 = impeded by regulations; 7 = flexibly determined by employers] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.04 Redundancy costs

Redundancy costs in weeks of salary | 2011

This variable estimates the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker, expressed in weekly wages. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Sources: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World*; authors' calculations

## 7.05 Pay and productivity

To what extent is pay in your country related to productivity? [1 = not related to worker productivity; 7 = strongly related to worker productivity] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.06 Reliance on professional management

In your country, who holds senior management positions? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.07 Brain drain

Does your country retain and attract talented people? [1 = no, the best and brightest normally leave to pursue opportunities in other countries; 7 = yes, there are many opportunities for talented people within the country] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 7.08 Female participation in labour force

Ratio of women to men in the labour force | 2010

This measure is the percentage of women aged 15-64 participating in the labour force divided by the percentage of men aged 15-64 participating in the labour force.

Sources: International Labour Organization, Key Indicators of the Labour Markets Net (accessed 5 June 2012); national sources

## 8th Pillar: Financial Market Development

## 8.01 Availability of financial services

Does the financial sector in your country provide a wide variety of financial products and services to businesses? [1 = not at all; 7 = provides a wide variety] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.02 Affordability of financial services

To what extent does competition among providers of financial services in your country ensure the provision of financial services at affordable prices? [1 = not at all; 7 = extremely well] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.03 Financing through local equity market

How easy is it to raise money by issuing shares on the stock market in your country?  $[1 = \text{very difficult}; 7 = \text{very easy}] \mid 2011-12 \text{ weighted average}$ 

Source: World Economic Forum, Executive Opinion Survey

## 8.04 Ease of access to loans

How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? [1 = very difficult; 7 = very easy] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.05 Venture capital availability

In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? [1 = very difficult; 7 = very easy] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.06 Soundness of banks

How would you assess the soundness of banks in your country? [1 = insolvent and may require a government bailout; 7 = generally healthy with sound balance sheets] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.07 Regulation of securities exchanges

How would you assess the regulation and supervision of securities exchanges in your country? [1 = ineffective; 7 = effective] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 8.08 Legal rights index

Degree of legal protection of borrowers and lenders' rights on a 0-10 (best) scale | 2011

This index measures the degree to which collateral and bankruptcy laws protect borrowers' and lenders' rights and thus facilitate lending. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, *Doing Business 2012: Doing Business in a More Transparent World* 

## 9th Pillar: Technological Readiness

## 9.01 Availability of latest technologies

To what extent are the latest technologies available in your country? [1 = not available; 7 = widely available] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 9.02 Firm-level technology absorption

To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 9.03 FDI and technology transfer

To what extent does foreign direct investment (FDI) bring new technology into your country? [1 = not at all; 7 = FDI is a key source of new technology] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 9.04 Internet users

Percentage of individuals using the Internet | 2011

Internet users refers to people using the Internet from any device (including mobile phones) in the last 12 months. Data are based on surveys generally carried out by national statistical offices or estimated based on the number of Internet subscriptions.

Source: International Telecommunication Union, World Telecommunication/ICT Indicators 2012 (June 2012 edition)

## 9.05 Fixed broadband Internet subscriptions

Fixed broadband Internet subscriptions per 100 population | 2011

This refers to total fixed (wired) broadband Internet subscriptions (that is, subscriptions to high-speed access to the public Internet – a TCP/IP connection – at downstream speeds equal to or greater than 256 kb/s).

Source: International Telecommunication Union, World Telecommunication/ICT Indicators 2012 (June 2012 edition)

## 9.06 Internet bandwidth

International Internet bandwidth (kb/s) per Internet user | 2011

International Internet bandwidth is the sum of capacity of all Internet exchanges offering international bandwidth measured in kilobits per second (kb/s).

Source: International Telecommunication Union, World Telecommunication/ICT Indicators 2012 (June 2012 edition)

## 9.07 Mobile broadband subscriptions

Mobile broadband subscriptions per 100 population | 2011 Mobile broadband subscriptions refers to active SIM cards or, on CDMA networks, connections accessing the Internet at consistent broadband speeds of over 512 kb/s, including cellular technologies such as HSPA, EV-DO, and above. This includes connections being used in any type of device able to access mobile broadband networks, including smartphones, USB modems, mobile hotspots, and other mobile-broadband connected devices

Sources: International Telecommunication Union, ITU World Telecommunication/ICT Indicators Database 2012 (June 2012 edition); Informa Telecoms & Media; national sources

## 10th Pillar: Market Size

## 10.01 Domestic market size index

Sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services, normalized on a 1-7 (best) scale | 2011

The size of the domestic market is calculated as the natural log of the sum of the gross domestic product valued at PPP plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data is then normalized on a 1–7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.

Source: Authors' calculations. For more details, refer to Appendix A in the first chapter of this *Report*.

## 10.02 Foreign market size index

Value of exports of goods and services, normalized on a 1-7 (best) scale | 2011

The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.

Source: Authors' calculations. For more details refer to Appendix A in the first chapter of this *Report*.

#### 10.03 GDP (PPP)

Gross domestic product valued at purchasing power parity in billions of international dollars I 2011

Sources: International Monetary Fund, World Economic Outlook Database (April 2012 edition): national sources

#### 10.04 Exports as a percentage of GDP

Exports of goods and services as a percentage of gross domestic product | 2011 or most recent year available

Total exports are the sum of total exports of merchandise and commercial services.

Sources: World Trade Organization, Online statistics database (accessed 4 June 2012); International Monetary Fund, World Economic Outlook Database (April 2012 edition); national sources

#### 11th Pillar: Business Sophistication

#### 11.01 Local Supplier Quantity

How numerous are local suppliers in your country? [1 = largely non-existent; 7 = very numerous] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 11.02 Local supplier quality

How would you assess the quality of local suppliers in your country? [1 = very poor; 7 = very good] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 11.03 State of cluster development

In your country's economy, how prevalent are well-developed and deep clusters? [1 = non-existent; 7 = widespread in many fields] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 11.04 Nature of competitive advantage

What is the nature of competitive advantage of your country's companies in international markets based upon? [1 = low-cost or natural resources; 7 = unique products and processes] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

# 11.05 Value chain breadth

In your country, do exporting companies have a narrow or broad presence in the value chain? [1 = narrow, primarily involved in individual steps of the value chain (e.g. resource extraction or production); 7 = broad, present across the entire value chain (i.e. do not only produce, but also perform product design, marketing sales, logistics and after-sales services)] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 11.06 Control of international distribution

To what extent are international distribution and marketing from your country owned and controlled by domestic companies? [1 = not at all, they take place through foreign companies; 7 = extensively, they are primarily owned and controlled by domestic companies] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 11.07 Production process sophistication

In your country, how sophisticated are production processes? [1 = not at all – labour-intensive methods or previous generations of process technology prevail; 7 = highly – the world's best and most efficient process technology prevails] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

# 11.08 Extent of marketing

In your country, to what extent do companies use sophisticated marketing tools and techniques? [1 = very little; 7 = extensively] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

# 11.09 Willingness to delegate authority

In your country, how do you assess the willingness to delegate authority to subordinates? [1 = low – top management controls all important decisions; 7 = high – authority is mostly delegated to business unit heads and other lower-level managers] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12th Pillar: Innovation

#### 12.01 Capacity for innovation

In your country, how do companies obtain technology? [1 = exclusively from licensing or imitating foreign companies; 7 = by conducting formal research and pioneering their own new products and processes] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12.02 Quality of scientific research institutions

How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12.03 Company spending on R&D

To what extent do companies in your country spend on R&D? [1 = do not spend on R&D; 7 = spend heavily on R&D] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12.04 University-industry collaboration in R&D

To what extent do business and universities collaborate on research and development (R&D) in your country? [1 = do not collaborate at all; 7 = collaborate extensively] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12.05 Government procurement of advanced technology products

Do government procurement decisions foster technological innovation in your country? [1 = no, not at all; 7 = yes, extremely effectively] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 12.06 Availability of scientists and engineers

To what extent are scientists and engineers available in your country? [1 = not at all; 7 = widely available] | 2011-12 weighted average

Source: World Economic Forum, Executive Opinion Survey

# 12.07 PCT patent applications

Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2008-2009

This measures the total count of applications filed under the Patent Cooperation Treaty (PCT), by priority date and inventor nationality, using fractional count if an application is filed by multiple inventors. The average count of applications filed in 2008 and 2009 is divided by population figures for 2009.

Sources: Organisation for Economic Co-operation and Development (OECD), *Patent Database*, June 2012; United Nations, Department of Economic and Social Affairs, Population Division, 2011; *World Population Prospects: The 2010 Revision*, CD-ROM Edition: authors' calculations

# The Unfinished Business of Structural Reforms in the Southern and Eastern Mediterranean Countries

By Hanan Morsy and Nafez Zouk, European Bank for Reconstruction and Development

The political transitions that began two years ago at the start of what is now known as the Arab Spring or Arab Awakening have highlighted the key socio-economic challenges facing the Southern and Eastern Mediterranean (SEMED) region, some of which are rooted in uneven implementation of structural reforms carried out in the mid-1980s. In particular, Egypt, Jordan, Morocco and Tunisia embarked on a process of market-oriented structural reform in the mid-1980s to create legal and institutional frameworks conducive to investment and market-driven growth, and to promote privatization in their inflated and unproductive public sectors. The SEMED countries also carried out financial-sector reforms, reduced tariffs and adopted a number of measures to improve the business environment.

However, despite the implementation of more market-oriented reforms, the presence of the state in the economy remained heavy. New bargains were formed between governments and various interest groups, leading to a precipitation of special privileges, monopoly rights and favourable access to markets, credit and government services. In fact, during the period of reform, companies connected to the political leadership typically outperformed their rivals. Effective state institutions were lacking and the state's role as regulator, guarantor of competition and enforcer of contracts was weak. As a result, the region witnessed low competitiveness, innovation and productivity, as barriers to entry, price-distorting subsidies and low levels of corporate governance prevailed.

Although these reforms were partly successful in achieving higher growth, unemployment remained chronically high, especially (and unusually) among the educated youth, and the benefits of growth were not evenly distributed. The reform agenda remains incomplete and inadequately implemented and the SEMED countries face significant challenges in improving their business environments, consolidating fiscal positions, and increasing institutional capacity.

Nevertheless, the momentum for change unleashed by the Arab Awakening provides a historic opportunity for the SEMED countries to enact fundamental reforms that have the potential to foster much-needed robust and more inclusive growth. The single highest priority for all governments in the region is to create jobs for a large young population. Past experiences of emerging countries, most notably in Eastern Europe, have shown that sustained job creation is primarily driven by a competitive private sector, underpinned by favourable business environment, strong regulatory framework and effective state institutions. Especially relevant for the Arab countries, the private sector is uniquely poised to foster the higher economic growth rates needed to absorb new entrants into the labour force.

Yet, the institutions tasked with setting and implementing private sector policies in many of the Arab countries need strengthening to support market mechanisms and promote competition and equal access to opportunities. Reforms need to be made more credible, and steps have to be taken to ensure that they are implemented fairly and consistently across all sectors and businesses. Crucially, the proper sequencing of such reforms can go a long way in attaining desired goals. Policy uncertainty and discretion in implementing the rules constrain investment and hinder the development and dynamism of the private sector. The region's lagging business environment poses the greatest impediment to high and sustainable growth, but there is enormous potential in reaping the benefits involved in enacting such enabling reforms.

The rest of this chapter characterizes the SEMED countries' current structural and institutional development, including at the sector level. The analysis indicates that the region is in "midtransition", defined as ahead of most Central Asian countries, but behind most in Central and Eastern Europe, and on a rough par with the Caucasus countries, Kazakhstan and Ukraine. As

detailed in the following sections, the SEMED countries still face a significant number of reform challenges going forward that need be addressed to successfully navigate their socio-economic transition. Trade and capital flows in the SEMED region have been largely liberalized and large parts of the economy are in private hands, albeit with important exceptions. However, subsidies for basic foods and fuels tend to be more pervasive, distorting markets and placing heavy burdens on state budgets. At the sector level, power and energy stand out as the least reformed areas.

# **Country Transition Indicators**

The SEMED countries score reasonably well on the country transition indicators compiled by EBRD, having benefited from the earlier opening up of their economies, along with substantial price and tariff liberalization, through the reforms starting in the 1980s. With respect to "first-phase" transition reforms – small-scale privatization, price liberalization and trade and foreign exchange system – the four countries scored relatively well, with a slightly lower score for Egypt relating to price liberalization (see Table 1). However, the scores for the remaining indicators – large-scale privatization, governance and enterprise restructuring, and competition policy – were significantly lower.

All four SEMED countries are members of the WTO and most have full current account convertibility and floating exchange rates (except for Jordan, which maintains a fixed exchange rate). However, full capital account convertibility has not yet been achieved in all countries. In Morocco, restrictions on residents remain, including surrender requirements for export proceeds and limits on foreign investments by local institutional investors, such as pension funds. In Tunisia, repatriation requirements on export proceeds are in place, in addition to limitations on foreign currency transactions by institutional investors and commercial banks.

Also, with economies heavily reliant on trade, the SEMED countries have removed almost all export and import restrictions (with a few sector exceptions, such as agriculture). There has been large-scale privatization since the reforms of the 1980s, which is almost complete in Morocco, but there is still significant state involvement in key economic sectors in Egypt, Jordan and Tunisia. However, most smaller enterprises operate firmly within the private sector and there are no legislative barriers to ownership of land or capital.

Some of the greatest challenges concern competition policy and governance, where the four countries typically rank in the middle, or the lower half, of the transition spectrum (Chart 1). Competition policy implementation remains weak (except in Tunisia, where an independent competition authority is in line with international standards), and is hampered by weak enforcement, the continued presence of state monopolies, and low institutional capacity. Although steps have been taken to create or improve competition agencies in Jordan, Egypt and Morocco, these still lack enforcement capability and/or independence. In general, there remains a significant shortfall between de jure institutional frameworks and their operation and effectiveness. All four countries have average scores on governance and enterprise restructuring, largely due to the continued subsidization of key industries and poor governance at most state-owned enterprises. In particular, energy subsidies have created market distortions, and state involvement has deterred private-sector participation.

Table 1: Transition Indicator scores, 2012

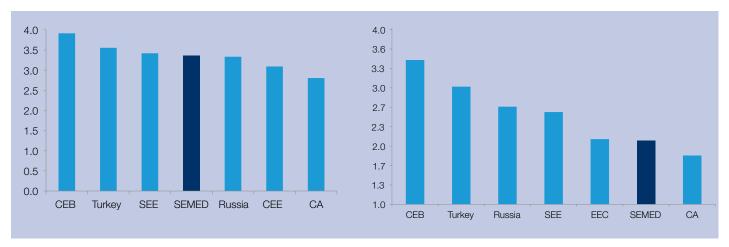
	Enterprises			Markets and trade		
	Large-scale privatisation	Small-scale privatisation	Governance and enterprise restructuring	Price liberalisation	Trade and foreign exchange system	Competition policy
Albania	4-	4	2+	4+	4+	2+
Armenia	4-	4	2+	4	4+	2+
Azerbaijan	2	4-	2	4	4	2-
Belarus	2-	2+	2-	3	2+↑	2
Bosnia and Herzegovina	3	3	2	4	4	2+
Bulgaria	4	4	3-	4+	4+	3
Croatia	3+	4+	3+	4	4+	3
Estonia	4	4+	4-	4+	4+	4-
FYR Macedonia	3+	4	3-	4+	4+	3-
Georgia	4	4	2+	4+	4+	2
Hungary	4	4+	4-	4+	4+	4-
Kazakhstan	3	4	2	4-	4-	2
Kyrgyz Republic	4-	4	2	4+	4+	2
Latvia	4-	4+	3+↑	4+	4+	4-
Lithuania	4	4+	3	4+	4+	4-
Moldova	3	4	2	4	4+	2+
Mongolia	3+	4	2	4+	4+	3-
Montenegro	3+	4-	2+	4	4+↑	2
Poland	4-	4+	4-	4+	4+	4-
Romania	4-	4-	3-	4+	4+	3+
Russia	3	4	2+	4	4↑↑	3-
Serbia	3-	4-	2+	4	4	2+
Slovak Republic	4	4+	4-	4+	4+	4-
Slovak Republic Slovenia	3	4+ 4+	3	4+	4+ 4+	4- 3-↓
Tajikistan	3 2+	4+	2	4	4+ 3+	3-↓ 2-
	2+ 3+	4	3-	4	0+ 4+	3
Turkey Turkmenistan	3+ 1	4 2+	3- 1	4 3↑	4+ 2+↑	1
		4	2+			
Ukraine Uzbekistan	3 3-	4 3+	2+	4 3-	4 2-	2+ 2-
UZDEKISTAN	3- 	3+ 	2-	3-	2-	2-
Egypt	3	4-	2	3+	4	2-
Jordan	3	4-	2+	4-	4+	2
Morocco	3+	4-	2+	4	4-	2
Tunisia	3	4-	2	4	4	3-

Source: EBRD

Note: The transition indicators range from 1 to 4+, with 1 representing little or no change from a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy. For a detailed breakdown of each of the areas of reform, see the methodological notes on page [x]. Jand arrows indicate one-notch upgrades or downgrades from the previous year.

Chart 1: TR Competition Policy Indicator score, average 2012

Chart 2: EBRD Transition Indicators, average, 2012



#### **Sectoral Transition Indicators**

For the first time, the EBRD has compiled sector transition scores for the four countries of the SEMED region. These scores reveal both the size of the challenges facing each country across the different sectors and also how the new region compares with the existing countries of operation. In this regard, the SEMED countries score somewhere in the middle of the transition gap spectrum

between the experiences of Eastern Europe and Caucusus, and Central Asia (Chart 2). In addition, the region also faces crosscutting sectoral challenges that are shared by existing countries of operations, whether at present or in the recent past. A more detailed sectoral comparison of these challenges is displayed in Table 2, which suggests significant transition gaps across the four broad sector categories (corporate, energy, financial and infrastructure).27

<sup>&</sup>lt;sup>27</sup> The sectoral methodology underlying numerical assessment of progress in transition can be found in Chapter 1 of EBRD's 2010 Transition report.

Table 2: Sector Transition Indicators 2012: Overall scores



The main challenges facing the manufacturing and services sector relate to the general business environment. While reforms carried out over the past two decades have improved the ease of doing business in the SEMED countries, market structure and institutional reforms still need to be accelerated to enhance competitiveness, efficiency and productivity. In Egypt, the privatization agenda remains unfinished and weak institutional capacity (such as lack of judicial and competition authority independence), together with continued state involvement in many sectors, have hampered private business growth (as has similarly been the case in Bulgaria and the Russian Federation). To a lesser extent, Jordan and Morocco also need to improve competition policy and the business environment in key industrial sectors (and face similar challenges to those of FYR Macedonia and Georgia, for example). However, privatization efforts have generally proceeded at a faster pace in Jordan and Morocco than in Egypt. Meanwhile, Tunisia's successful reform efforts- from price and trade liberalization to privatization and tax incentives - have created a thriving offshore sector, although the onshore sector's development is hampered by legal complexities, such as weak contract enforcement and low investor protection.

In the agricultural sector, the SEMED countries face comparable reform challenges, although Morocco (where the government's Plan Maroc Vert aims to reform the sector to increase production by improving the quality and efficiency of value chains and increasing crop diversity) and Tunisia score better than Egypt and Jordan. As net importers of food, all are vulnerable to the volatility of global prices for commodities such as grain, on which they are highly dependent. In addition, fuel and food subsidies have led to market distortions and inefficiencies along the whole food value-chain. In Jordan, Morocco, and Tunisia particularly, efficient use of scarce water resources is crucial to improving agricultural productivity, while all four countries are disadvantaged by underdeveloped processing, logistic and distribution capacity, and (as in Russia and Serbia) fragmented land holdings. The state remains heavily involved in the agricultural sector across the SEMED region, whether through its presence in rural financing provision or through price controls and guarantees for core commodities (as in Turkey). Untargeted subsidies for consumers and producers are also in place in all four countries.

The SEMED countries have significant challenges in the energy sector, most comparable to those in Central Asia and Eastern Europe. Heavy state involvement and the prevalence of vertically integrated utility companies are defining characteristics of the sector across the region (and indicate a stage of development similar to that in Serbia and Ukraine). Privatization has not progressed substantially and the different subsectors have not been fully unbundled. Together with continued fuel and electricity subsidies, this has led to poor energy efficiency and distorted markets. In all four SEMED countries, electricity tariffs are not cost reflective, placing additional fiscal burdens on governments. At the institutional level, there is a gap between reform intentions and actual implementation. The regulatory agencies that exist in Egypt and Jordan have no tariff-setting authority, and political interference in their activities and in price control is considerable (as in Bulgaria). In Morocco and Tunisia, with no independent energy regulators, tariffs and prices are set directly by government. Jordan and Morocco, however, face slightly narrower transition gaps as efforts have been made to reduce Jordan's dependence on imported fuels and to achieve energy sustainability in Morocco.

According to the transition scores, the SEMED region's level of infrastructure development is most comparable to that of the countries of Eastern Europe and the Caucasus. Significant challenges still loom. This is partly due to the weak municipal infrastructure across the region, which reflects low private-sector participation, poor regulatory frameworks and limited financing options outside of central government. There is a need to formulate transparent PPP schemes for greater private-sector involvement, especially with regard to decentralized financing solutions in the transport and municipal sectors. In all four SEMED countries, the water and wastewater sector is characterized by heavy state involvement and/or centralization, low tariffs below cost- and investment-recovery levels and extensive subsidization across sectors and of consumers (as in Belarus and Georgia). In Jordan, a National Water Advisory Council was created at the end of 2011 to oversee and coordinate institutional efforts towards a harmonized water policy. Across the SEMED region, urban transport sector commercialization and cost recovery are low. Jordan and Morocco, however, fare slightly better, due mainly to greater private-sector participation and decentralization. This is similarly the case in

Georgia and Moldova, although municipal transport services continue to suffer from weak regulatory capacity and service quality.

A more varied picture emerges in the SEMED region's financial sector, the level of development of which (apart from Tunisia) is most comparable to that of south-eastern Europe on the institutional side, but closer to Central Europe in terms of market structure. In Egypt the greatest challenges are improving access to finance for MSMEs and deepening insurance and other financial services (as is the case in Moldova). Jordan, on the other hand, has a stronger banking sector (and is comparable to Croatia with respect to financial market development), but needs to strengthen the effectiveness and enforcement of bankruptcy procedure. Plans to establish a private credit bureau were taken at the end of 2012, which should help broaden bank lending capacity. Morocco's financial sector is sound overall and relatively well developed, but suffers from liquidity shortages, and there is a need to mobilize additional resources to maintain credit growth. Tunisia's financial sector, however, is hampered by balance-sheet weakness, high non-performing loans and state involvement in the leading banks (similar to Slovenia), as well as poor governance and capital market development.

A number of challenges across the board in SEMED countries remain with regard to improving access to finance. The financial sectors remain primarily bank-based. There is inadequate competition and, in most cases, banks are unable to allocate credit efficiently. Previously, the prevalence of concentrated lending, especially to well-connected larger businesses, came at the expense of providing credit to larger segments of the population and enterprises, especially to SMES. Moreover, most of the local banking systems struggle to secure long-term funding to ease maturity mismatch risk. To varying degrees in each country, the banking regulatory and supervisory regimes also need to be strengthened and competition agencies created or strengthened.

Beyond banking, the region is lagging behind in some important areas of financial infrastructure reform, particularly on creditors' rights. Insolvency laws tend to be geared towards liquidation and piecemeal sale of the enterprise's assets. Collateral regimes are limited and creditors typically face considerable delay – hampered sometimes by the lack of robust collateral registers – and costs when enforcement becomes necessary. The regulation of the SME and microfinance sectors, especially in Egypt and Tunisia, remains key to expanding access to a greater portion of businesses. Finally, there is a need to further develop local capital markets and local currency lending to make them viable to lenders, borrowers and investors.

# What Can Be Learned from Other Countries' Transition Experience?

The Arab region is not the first to undergo a dramatic socio-political-economic transformation. Two decades ago, after the fall of the Berlin Wall, countries of the former Soviet bloc began to develop market-oriented economies and promote private and entrepreneurial initiative. Reforms were taken to enhance the regulatory and business environments, and sustainable market structures were developed. The EBRD can add value in the SEMED region by drawing on its rich experiences over the past two decades in helping the economies of Central and Eastern Europe and Central Asia navigate transition, improve their investment climates and better deliver growth.<sup>28</sup>

In some aspects, SEMED shares some similarities with EBRD's traditional region of operation, most notably Eastern Europe, especially a decades-long experience of heavy state involvement in most aspects of the economy and dysfunctional market mechanisms, followed by a progression to market-oriented reform. However, the parallels between SEMED and Eastern Europe two decades ago can be made only insofar as the direction of transition is involved, but not necessarily the initial conditions or current status. The economic structure of the SEMED countries relies heavily on state involvement, whether through the dominance of state ownership in banks (Egypt and Tunisia) or the ubiquitous subsidies for basic foods and fuels that distort markets and place heavy burdens on state budgets.

However, there are many factors that distinguish the new region from the existing one. When the communist countries of Europe embarked on their reforms two decades ago, they had the advantage of being able to put together their legal and regulatory frameworks from scratch. In the SEMED countries, however, a series of reforms enacted in the last two decades remain largely incomplete and institutional capacity remains weak. In addition to adopting new laws, there is a need to repeal and streamline a vast array of regulations that have become obsolete or impede business development. Another difference is the initial level of development of a functional private banking sector. Moreover, the SEMED countries lack a strong external anchor to support and guide the transition process, similar to the way in which the EU played that role in Eastern Europe's transition, propelling a number of reforms in the accession countries. Another important aspect that distinguishes the SEMED countries is demographic-linked: a youth bulge in population (unseen in post-communist Eastern European experience) has put pressure on the labour markets, and structural unemployment has translated into alarming youth unemployment, especially among the educated. In addition, the SEMED countries fare worse on most social indicators than did the existing region of operation in the early 1990s. For example, Eastern Europe started from very low levels on income inequality and high female labour force participation, in contrast to the SEMED region.

The Eastern European experience offers a number of crucial insights. It is important to develop the private sector not only through privatization but also by facilitating new private enterprises. While the changing landscape during the transition provides an opportunity for pursuing reforms that would not have been feasible under the old regime, building consensus becomes more difficult. Therefore, social and political inclusion in reforms, as well as building constituencies for those reforms, will be key for their success. Having a policy anchor and an end goal for transition helps sustain and guide the reform momentum.

<sup>&</sup>lt;sup>28</sup> In the wake of the socioeconomic and political changes that swept the region in early 2011, and in response to calls from the international community and the emerging Arab democracies themselves, the European Bank for Reconstruction and Development (EBRD) was asked to extend its activities to the Arab transition countries. In May 2011, the EBRD's shareholders gave unanimous backing to the expansion of the Bank's mandate to the SEMED region.

#### Conclusion

Since the Arab Spring, the pace of structural reforms has been slow. While in Egypt and Tunisia, this is mostly attributed to protracted political transitions, undertaking politically-sensitive reforms nevertheless remains difficult in all SEMED countries. In some countries, most notably Egypt, the lack of political consensus poses serious implementation risks to much-needed economic measures. However, while overall progress remains limited, governments in the SEMED countries have taken positive steps in reforming energy subsidies to reduce their distortionary effects on other segments of the economy.

The SEMED countries are at a crossroads. The socioeconomic and political upheavals of the past two years provide the opportunity to break with the past and adopt new strategies for achieving sustained, broad-based, inclusive growth. While the political transitions in some SEMED countries are expected to be fraught with difficulties in the near future, policy-makers must nevertheless face the daunting challenges of responding to the clear and vocal aspirations brought forth by the Arab Awakening.

Looking forward, any credible structural reforms must rest on an institutional framework that increases the effectiveness and consistency in which public agencies interact with businesses and enforce regulations. There is a need to move away from a rentseeking model based on privilege towards a regulatory system that fosters fair competition and expands equal access to opportunities. While this chapter has highlighted the nature of reforms needed, equally important is the way in which they are designed and communicated. Governments must eliminate policy uncertainty and discretionary implementation, which have previously bred nepotism and rent-seeking behaviour, constraining investment and job creation. Instead, the rules must be consistently and credibly applied to level the playing field for all. This, in essence, is a "good governance" agenda, which should be reinforced by greater transparency and accountability of policy formulation. If well executed, these reforms have the ability to reduce many of the hurdles that stand in the way of the region realizing its full potential.

#### Reference

European Bank for Reconstruction and Development, 2010, Transition Report 2010: Recovery and Reform, London: EBRD.

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