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Economic Competitiveness in the Arab Region: Performance and Challenges

ESCWA working paper

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Abstract

While the Arab region has long been included in the most widely adopted index of economic competitiveness, the Global Competitiveness Index (GCI), few studies have analysed the results of the index and its implications for Arab countries. This paper attempts to fill this gap by looking at the performance of Arab countries in the latest GCI (2016-17) and in the GCI over time, to identify the main challenges to economic competitiveness currently affecting the region. The latest GCI shows that Arab countries have weaknesses in four pillars of economic competitiveness: labour market efficiency, macroeconomic environment, higher education and training, and innovation. The paper assesses the causes and implications of each of these challenges for the region, focusing in particular on the one in which Arab countries score the lowest in the GCI 2016-17: labour market efficiency. Finally, the paper offers policy recommendations to help address the challenges identified.

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Executive Summary

The Global Competitiveness Index (GCI), published annually since 2006 by the World Economic Forum (WEF), assesses the competitiveness of economies worldwide (138 countries in the 2016-17 edition), providing insight into the drivers of their productivity and prosperity. It is currently the most comprehensive global index of competitiveness available. Despite its breadth, the GCI does not fully capture the impact of geopolitical challenges on economic competitiveness, as few of the GCI pillars and indicators explicitly measure conflict and political instability. Given the current extent of conflict in the Arab region¹, and the fact that such impacts are only marginally captured by the GCI, this paper begins by summarising the main socio-political issues faced by the region, to place the analysis of economic competitiveness into the current context.

In addition to challenging socio-political conditions, Arab countries currently face macroeconomic volatility. The Arab region is highly dependent on international markets and overexposed to external shocks such as changes in commodity prices and global economic downturns. Such macroeconomic volatility is due to several characteristics of many Arab economies, such as low economic diversification, dependency on few key exports, and reliance on volatile sources of income such as tourism, Official Development Assistance (ODA), and remittances. While some of these factors are indirectly captured by the GCI, macroeconomic variables in the region deserve a closer look. In 2015, according to UNCTAD data, no single Arab country was a net exporter of manufactured goods and only Morocco was a net exporter of basic food products, while eleven Arab countries were net exporters of fuels. In the current environment of lower commodity prices (especially for oil), oil exporters are seeing their export revenues drop. Given the vulnerability of the region to swings in international markets, there is urgent need for diversifying economic drivers, in particular by reducing reliance on primary commodity exports.

This study examines the performance of Arab countries in the GCI over time, and finds that few Arab countries have improved their global competitiveness performance over the years, with some exceptions such as Qatar and the UAE. Recently, the Arab Spring period coincided with a reduction in economic competitiveness for the countries affected. Arab countries rank especially

¹ In this paper the "Arab region" refers to the 16 countries which have been covered by the GCI since its inception (*with the exception of analyses based on the 2016-17 GCI which only covered 14): Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya*, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Syria*, Tunisia, UAE and Yemen.

low (below 80th globally in the 2016-17 index) in four pillars: (i) Labour market efficiency; (ii) Macroeconomic environment; (iii) Higher education and training; and (iv) Innovation.

The Arab region shows the most significant shortcomings in the “Labour market efficiency” pillar of the GCI. Unpacking the indicators within “Labour market efficiency” reveals that Arab countries struggle to attract and retain talent, and that women’s participation in the labour force is particularly low in the region. Difficulties in attracting and retaining talent are partly due to the high brain drain from the region, to the low attractiveness of the region to international talent, and to skills gaps that affect the capacity of firms to find qualified local talent. In addition, Arab countries exhibit a wide disparity between women’s education and their labour force participation: despite acquiring high levels of education, three out of four women in the region remain out of the labour force. This paradox is due to a variety of factors, including legal frameworks penalising women; traditional gender roles placing the burden of unpaid care work on women and restricting their ability to work outside the home; inadequate support from employers and governments (e.g. absence of female-friendly policies in the workplace); and lack of effective gender-balancing instruments, such as well-designed female quotas.

The poor performance of Arab countries in the “Macroeconomic environment” pillar can be largely attributed to the recent downturn in commodity prices, and to the high costs of conflict and forced displacement, which weigh heavily on government budgets.

As for “Higher education and training”, the Arab region seems to face problems in the quality more than in the quantity of education, although some countries, especially among the lowest income groups, still need to increase enrollment rates. Although there is a lot of regional variance, overall, the region ranks particularly low (80th globally or below) in some indicators of the pillar, such as internet access in schools, local availability of specialised training services, and extent of staff training. Interestingly, higher education and training is the pillar in which high-income Arab countries (Gulf countries) rank the lowest globally.

The study shows that Arab countries punch below their weight in “Innovation”, particularly in patents applications, which are significantly below the global average. In order to better explain the poor performance of Arab countries in this pillar, their scores in the innovation-specific Global Innovation Index (GII) are considered. The GII confirms that innovation is a major weakness for the region, in particular when compared to the performance of other countries at similar income levels. This finding is supported by a literature review on the links between openness to diversity and innovation, which shows that increased tolerance and openness to diversity tend to go hand in hand with increased innovation and entrepreneurship, carrying interesting policy implications for Arab countries.

In light of these findings, policy recommendations for increasing economic competitiveness in the Arab region may include:

- creating better opportunities for talented individuals to reduce brain drain;
- investing in becoming more attractive to internationally mobile talent, not only through favourable tax regimes, but by offering a vibrant and entrepreneurial environment and a high quality of life;
- better aligning higher education and training with the actual needs of the local economy;
- investing in innovation, aiming in particular at boosting patents, company spending on research and development (R&D) and university-industry collaborations on R&D;
- promoting openness to diversity and tolerance to create an environment that is more attractive to global talent and where creativity and innovation can flourish;
- diversifying the economy away from commodities and into higher value-added activities; and
- boosting women's labour force participation through ad-hoc policies such as reforming legal systems that penalise women and promoting change in gender attitudes through instruments such as gender quotas.

Introduction

Most of the Arab region has been included in the main global index measuring economic competitiveness, the Global Competitiveness Index (GCI), since its inception in 2006. Few studies, however, have analysed the findings and implications of the GCI for the Arab region. A notable exception is the Arab World Competitiveness Report 2013, produced by the World Economic Forum based on the GCI 2012-13 results. While this study highlighted some common challenges faced by the region – in particular unemployment, – and briefly examined the GCI results for each Arab country included at the time, it did not identify common challenges for the region and did not delve into the causes and implications of such challenges. Moreover, since 2012, many socio-political changes have affected the Arab region, in particular the Arab Spring political uprisings and widespread and renewed conflict. These events, which changed the region's outlook, are only partially captured by the GCI. In addition, changes in global economic conditions - in particular the prolonged global economic downturn and depressed commodity prices- have shaken the economic fundamentals of the region. In light of these changes, a new assessment of the challenges to economic competitiveness for the Arab region is in order, based on the most recent data and placing the results into the current context of the region.

This paper aims to fill this gap by examining, in the current socio-political and macroeconomic context, the results of the GCI for Arab countries, both over time and in the latest edition (2016-17). As the countries examined have different levels of economic prosperity, results are presented for all Arab countries included in the index, as well as for groupings by income level (rather than geographical groupings as in the World Economic Forum 2013 report). This approach facilitates the analysis of common trends and challenges to competitiveness.

Sections 1 and 2 consider the socio-political and macroeconomic challenges currently faced by the Arab region that may affect economic competitiveness. Section 3 summarises the structure of the GCI and its coverage of the Arab region over the years, and analyses the performance of Arab countries. It focuses on the pillars of “Labour market efficiency”, “Macroeconomic environment”, “Higher education and training”, and “Innovation,” which are the ones in which the Arab region performs the weakest, examining the roots and implications of each of them. Section 4 explores in further detail the most significant of these challenges as identified by the GCI 2016-17: labour market efficiency. In particular, it analyses the three indicators of labour market efficiency in which Arab countries score the weakest: “Country capacity to retain talent”, “Country capacity to attract talent” and “Female participation in the labour force.” Policy recommendations offered at the conclusion of the paper, in Section 6, may inform policy-making to enhance competitiveness in the region.

1. Socio-political Challenges

Before discussing the economic competitiveness of the Arab region, it is important to highlight that in recent years the region has been shaken by significant increases in social and political unrest and violence. Conflict is only marginally captured by the GCI, as only few of the indicators in the index (namely “Business costs of terrorism” and “Business costs of crime and violence”, within the “Institutions” pillar) take into account conflict and political instability. For this reason, and given the wide spread of conflict across the Arab region, it is important that the analysis of Arab economic competitiveness reflects the current realities of the region.

As shown in Table 1 below, as of 2016, the countries of the Arab region that are included in the GCI have extremely varied economic and socio-political conditions. Economically, the list is comprised of six high income nations², all in the Gulf region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE); four upper middle income countries, mostly in the Levant but also in North Africa (Algeria, Jordan, Lebanon, and Libya); and six lower middle income countries (Egypt, Mauritania, Morocco, Syria, Tunisia, and Yemen).

As of 2017, three countries are in civil war (Libya, Syria, and Yemen). Virtually all the countries in the region have seen protests during the Arab Spring—ranging from moderate to violent - requesting more freedoms as well as better standards of living. Egypt, Tunisia and Libya underwent regime changes in the aftermath of the Arab Spring and only Tunisia arguably emerged more democratic. Besides conflict, terrorism is also having a significant negative impact on the region: according to the Global Terrorism Database³, 14 Arab countries have seen episodes of terrorism on their territory, with 2,558 fatalities in 2015 alone.

As shown in Table 1, four countries (Jordan, Lebanon, Libya, and Syria) have refugees and Internally Displaced Persons (IDPs) amounting to more than 15% of their total population. Such large refugee and displaced populations weigh on public finances and on the provision of public services. Syria was also among the countries of origin for the highest number of refugees in 2015 (UNHCR, 2016⁴).

The instability of Arab political regimes, as well as the weak level of democracy in the region, constrain competitiveness. Forms of government in the Arab region vary, and many have been severely weakened by internal conflict. The freedom rating of Freedom House⁵, a think tank, is the average of a country’s or territory’s political rights and civil liberties ratings. In the Arab region, only Tunisia is classified by Freedom House as fully free in its 2017 edition, while

² High, upper-middle, and lower-middle income country typology corresponds to the World Bank classification.

³ <https://www.start.umd.edu/gtd/>

⁴ <http://data2.unhcr.org/en/situations>

⁵ <https://freedomhouse.org/report/freedom-world/freedom-world-2017>

Kuwait, Lebanon, Jordan and Morocco are classified as partly free. The rest of the Arab region is rated as not free. As shown by Acemoglu et al. (2015), democracy has a significant and positive effect on GDP per capita even after controlling for a variety of other variables that could drive both GDP and democracy. The paper shows that democracy can increase GDP by encouraging investment, increasing schooling, inducing economic reforms, improving the provision of public goods, and reducing social unrest. This result suggests that the Arab region would gain by enhancing democracy and government accountability.

Table 1: Arab Countries’ Income Levels, Current Socio-political Challenges and Freedom Ratings.

Country	WB income classification 2016	Conflict as of 2016	Regime change after Arab spring	Refugees or IDPs > 15% of population	Freedom house 2017 classification and score (0 = worst , 100 = best)	Government form
Bahrain	High income	3 countries in civil war; 3 recent regime changes after Arab Spring; 4 countries with severe refugees or IDPs issues; 11 out of 16 countries rated as “not free” in political rights and civil liberties			Not free; 12	Constitutional monarchy
Kuwait	High income				Partly free; 36	Constitutional Emirate
Oman	High income				Not free; 25	Absolute monarchy
Qatar	High income				Not free; 26	Absolute monarchy
Saudi Arabia	High income				Not free; 10	Absolute monarchy
UAE	High income				Not free; 20	Federation of monarchies
Algeria	Upper middle income			Not free; 35	Presidential republic	
Jordan	Upper middle income			37% refugees	Partly free; 37	Parliamentary constitutional monarchy
Lebanon	Upper middle income			28.6% refugees	Partly free; 44	Parliamentary republic
Libya	Upper middle income	Civil war	Yes	15% IDPs	Not free; 13	In transition
Egypt	Lower middle income		Yes		Not free; 26	Presidential republic
Morocco	Lower middle income				Partly free; 41	Parliamentary constitutional monarchy
Syria	Lower middle income	Civil war		17% IDPs	Not free; -1	Presidential republic
Tunisia	Lower middle income		Yes		Free; 78	Parliamentary republic
Yemen	Lower middle income	Civil war			Not free; 14	In transition
Mauritania	Lower middle income				Not free; 30	Presidential republic

Sources: World Bank, The Economist, CIA World Fact book, international press. Refugees and IDP data come from both the World Bank and UNHCR. Democratic freedoms rating from Freedom House 2017 report.

2. External Volatility and Macroeconomic Challenges

Error! Reference source not found. shows some of the factors that render Arab countries vulnerable to external shocks and highly dependent on international markets, therefore increasing the volatility of their macroeconomic indicators.

Oil rents represent over 15% of GDP in eight Arab countries (with peaks such as 53% and 39% of GDP in Kuwait and Saudi Arabia). As a result, these economies are deeply affected by changes in commodity prices and highly correlated to global economic downturns. In 2016, oil prices hit a low of less than US\$ 30 a barrel and are expected to stay below US\$ 60 in 2017, according to market analysts such as Goldman Sachs⁶– far from the peak of US\$ 114 per barrel reached in June 2014⁷. Oil-exporters need to adjust to this new era of low commodity prices; however, exports from the region are poorly diversified. Food imports make up more than 10% of merchandise imports in twelve Arab countries. Therefore, changes in food prices put significant strains on their fiscal budget and current account position. Unemployment is higher than 10% in eight Arab countries, weighing on government budgets.

Volatile sources of Balance of Payments (BoP) such as ODA, remittances, and tourism represent high shares of GDP in some Arab countries, magnifying the impact of external factors on their economies. International tourism and remittances, which are deeply linked to global geopolitical and economic conditions, made up more than 15% of GDP in, respectively, seven and four Arab countries. While international tourism receipts in the Arab region on average almost doubled over 2006-14⁸, the sector recently experienced a setback, in particular in North African and Levant countries, due to mounting security risks and the global economic downturn. For example, in Egypt, recent terrorist attacks, and aviation and security incidents, have hit the once-thriving tourism sector, which is crucial for job creation and foreign currency reserves. According to the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS⁹, 2016), tourist arrivals into Egypt in March 2016 dropped 47.2% compared with the same month the year before. Terrorist incidents also affected the tourism industry in Tunisia: according to official figures from the Tunisian Ministry of Tourism and Handicrafts¹⁰, in 2010 Tunisia boasted 7.8m tourist arrivals and 3.5 million Tunisian Dinars in tourist receipts. In 2015, arrivals fell to 5.4m and tourism receipts decreased to 2.4 million Tunisian Dinars (Tunisian Ministry of Tourism and Handicrafts, 2016).

⁶ <http://www.platts.com/latest-news/oil/london/goldman-sachs-raises-2017-oil-price-forecast-26622256>

⁷ Bloomberg data.

⁸ World Development Indicators (World Bank), accessed October 2016. <http://data.worldbank.org/data-catalog/world-development-indicators>

⁹ <http://www.capmas.gov.eg/>

¹⁰ <http://www.tourisme.gov.tn/en/achievements-and-prospects/tourism-in-figures/figures-2016.html>

Remittances to the Arab region doubled in absolute value over 2005-15, but slightly declined in 2015¹¹. They decreased as a percentage of GDP, from 6.3% on average in 2005 to 4.9% in 2015, but remain nonetheless an important contributor to the economies of many Arab countries.

Table 2: Arab Countries' Exposure to External Volatility.

Latest data available over 2012-15	Food imports (% of merchandise imports)	International tourism, receipts (% of exports)	Personal remittances, received (% of GDP)	Manufactures exports (% of merchandise exports)	Oil rents (% of GDP)	Unemployment, total (% of labour force) (modeled ILO estimate)	ODA as % of GDP (2014)
Algeria	20.10	0.55	0.16	3.39	18.1	9.5	0.1%
Bahrain	9.52	7.95	7.95	19.73	15.3	3.9	n/a
Egypt	21.10	16.94	5.96	51.47	5.8	13.2	1.2%
Jordan	18.20	35.67	14.26	70.90	0.0	11.1	7.5%
Kuwait	15.92	0.55	0.03	4.14	53.0	3.0	n/a
Lebanon	17.85	34.88	15.88	62.57	..	6.4	1.8%
Libya	..	..	..	..	33.3	19.2	0.5%
Mauritania	12.05	1.89	..	0.04	3.2	31.0	4.7%
Morocco	12.21	25.15	7.04	69.02	0.0	10.2	2%
Oman	12.39	3.46	0.06	10.52	28.0	7.2	n/a
Qatar	14.06	7.54	0.26	0.05	19.5	0.3	n/a
Saudi Arabia	14.63	2.61	0.05	18.42	38.7	5.6	n/a
Syria	..	..	..	..	..	10.8	n/a
Tunisia	10.63	14.10	5.46	73.12	2.9	13.3	1.9%
UAE	7.56	..	..	7.49	19.0	3.6	n/a
Yemen	40.38	11.02	9.30	5.26	11.1	17.4	2.9% (2013)

Source: World Bank data, accessed October 2016.

In 2015, Arab countries exported an average of 189 products, compared to a world average of 260. As shown in below, the average concentration index of their exports was 0.35 (on a scale from 0 to 1 where 1 is maximum concentration), compared to a global average of 0.064. In 2015, no Arab country was a net exporter of manufactured goods and only Morocco was a net exporter of basic food products, while 8 Arab countries were net exporters of fuels¹². This data points to the importance of economic diversification to reduce export revenues risk. Dramatic falls in export revenues have the potential of jeopardising the social pact between Arab political regimes and their constituents.

¹¹ World Development Indicators (World Bank), accessed October 2016. <http://data.worldbank.org/data-catalog/world-development-indicators>

¹² ESCWA analysis of UNCTAD data, accessed December 2016. http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_referer=&sCS_ChosenLang=en

Table 3: Arab Countries' Status as Net Exporters of Commodities* and Export Concentration Index, 2015.

UNCTAD 2015 data	Net exporter of commodities	Net exporter of fuels	Net exporter of food basics	Net exporter of metals	Net exporter of manufactured goods	Number of products exported, 2015	Export concentration index (0-1)
Algeria	Yes	Yes	No	No	No	91	0.49
Bahrain	Yes	Yes	No	Yes	No	217	0.31
Egypt	No	No	No	No	No	244	0.14
Jordan	No	No	No	Yes	No	216	0.16
Kuwait	Yes	Yes	No	No	No	218	0.60
Lebanon	No	No	No	Yes	No	232	0.12
Libya	Yes	Yes	No	No	No	109	0.64
Mauritania	No	No	No	Yes	No	75	0.36
Morocco	No	No	Yes	Yes	No	229	0.16
Oman	Yes	Yes	No	Yes	No	219	0.45
Qatar	Yes	Yes	No	No	No	211	0.51
Saudi Arabia	Yes	Yes	No	No	No	247	0.53
Syria	No	No	No	No	No	181	0.15
Tunisia	No	No	No	No	No	211	0.14
UAE	Yes	Yes	No	Yes	No	258	0.24
Yemen	No	No	No	No	No	73	0.53

Source: ESCWA analysis of UNCTAD data.

*: According to UNCTAD's definition, "commodities" include food basics, beverages and tobacco, agricultural raw materials, non-ferrous metals, other ores and metals and fuels. Metals include non-ferrous metals and other ores and metals.

All the factors discussed above show that Arab countries are sensitive to external economic conditions such as fluctuations in commodity prices: their economies are highly dependent on global markets. Given the evidence presented in Section 1 and Section 3, the findings from the rest of the paper should be considered in the context of the high volatility – both socio-political and economic - facing the region.

3. Competitiveness Performance in the Arab Region

The best competitiveness index currently available internationally is the Global Competitiveness Index (GCI), published every year by the World Economic Forum (WEF). The report defines competitiveness as “the set of institutions, policies, and factors that determine the level of productivity of an economy” (WEF, 2016, p.4). The GCI is a composite index based on the twelve pillars shown below in “**Error! Reference source not found.**”. Each of the pillars has a number of sub-measures (indicators). Approximately one-third of the indicators are from international organizations, such as the World Bank, the International Monetary Fund, and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The remaining two-thirds are from WEF’s own annual Executive Opinion Survey, which captures more qualitative aspects of competitiveness.

Table 4: Pillars of the GCI

1	Institutions	7	Labour market efficiency
2	Infrastructure	8	Financial market development
3	Macroeconomic environment	9	Technological readiness
4	Health and primary education	10	Market size
5	Higher education and training	11	Business sophistication
6	Goods markets efficiency	12	Innovation

To take into account the fact that different dimensions of competitiveness are not of equal importance to all countries, the GCI attributes different weighting schemes to each country depending on its level of development. Thus, economies are grouped into three stages of development: factor-driven (pillars 1, 2, 3, and 4), efficiency-driven (pillars 5, 6, 7, 8, 9, and 10) and innovation-driven (pillars 11 and 12), based on GDP per capita and the share of natural resources exports in their economy.

As shown in some Arab countries has been sporadic, mostly due to conflict and lack of data. Somalia, Sudan, Comoros, Djibouti, Palestine and Iraq have never been covered by the index. In recent years, Libya and Yemen have been missing due to conflict, although Yemen was reinstated in the 2016-17 report.

Table 5: GCI Coverage of Arab Countries

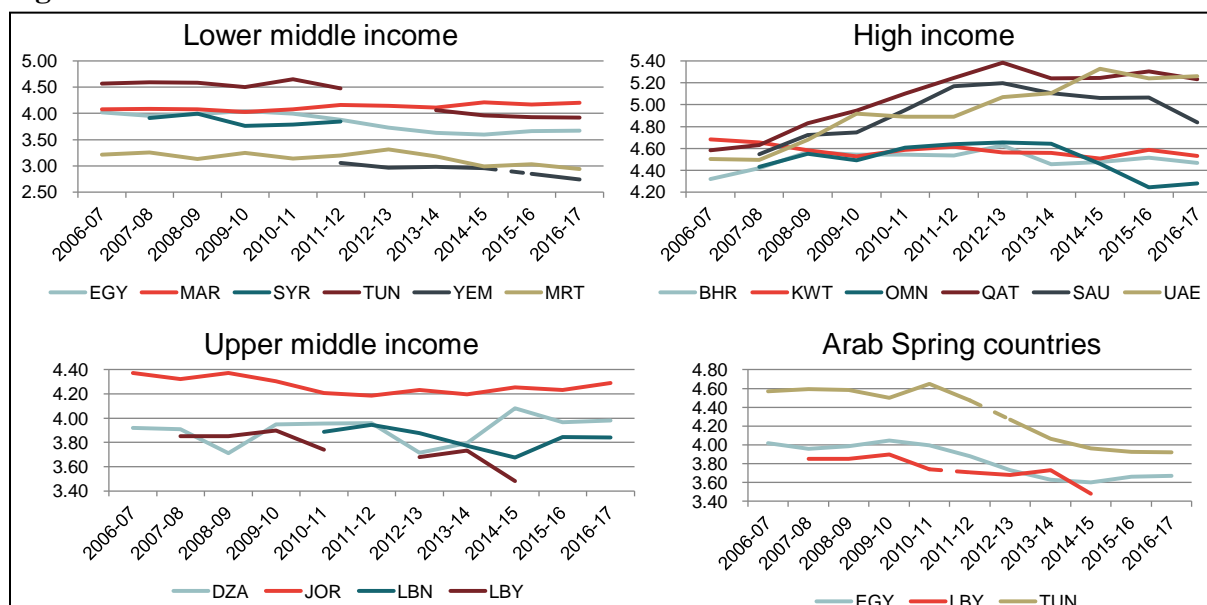
GCI edition	Algeria	Bahrain	Comoros	Djibouti	Egypt	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco	Oman	Palestine	Qatar	Saudi Arabia	Somalia	Sudan	Syria	Tunisia	UAE	Yemen
2016-17	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	Yes
2015-16	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	No
2014-15	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	Yes
2013-14	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	Yes
2012-13	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	Yes	Yes
2011-12	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes
2010-11	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	No
2009-10	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	No
2008-09	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	No
2007-08	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	No
2006-07	Yes	Yes	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes	Yes	No

Source: ESCWA analysis of GCI data

3.1 Trends and Common Challenges

Figure 1 shows the performance of Arab countries featured in the GCI over the years, grouped by income levels. The overall index goes from a minimum of 1 to a maximum of 7. In 2016-17, Switzerland, the top ranked country, had a score of 5.8 and no Arab country reached more than 5.3, which was the score of the UAE. Yemen was not part of the 2015-16 report: for the purpose of better visibility on the graph, the data point for this year has been extrapolated as an average between the years before and after.

Figure 1: Arab Countries' Overall GCI Score Over Time.



Source: ESCWA analysis of GCI data

The UAE and Qatar are the Arab countries which improved their performance the most since their first appearance on the index (2006-07). The index score for the UAE went up by 17% since 2006-07, reaching 5.3 in 2016-17, whereas the one for Qatar increased by 14%, reaching 5.2 in 2016-17. The performance of Lebanon, Kuwait, Jordan, Algeria and Mauritania remained

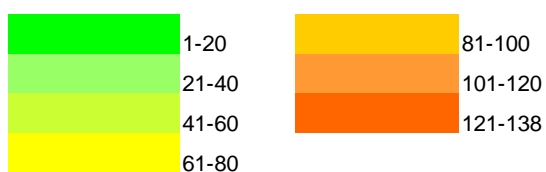
almost stable over time (no more than 3% fluctuation). The same goes for Syria before the crisis (its index stops at 2011), but, given the severity of the situation in Syria since 2011, it can be assumed that, if measured today, Syria would show a significant deterioration in its score. On the lower end of the spectrum, Tunisia, Libya, Egypt and Mauritania saw the biggest declines over the period with -14%, -10% and -9% drops respectively.

The last graph in Figure 1 shows the GCI performance of Arab Spring countries (Tunisia, Libya and Egypt), which witnessed a drop coinciding with the Arab Spring period (2010-12). Although this does not prove causality, it appears that there is a correlation between the Arab Spring socio-political turmoil and lower economic competitiveness.

Table 6 looks at how Arab countries fared in the latest GCI, 2016-17. The numbers in the cells are the positioning of each country along the global ranking for each dimension.

Table 6: GCI Ranking of Arab Countries in 2016-17 Edition.

	GCI	Institutions	Infrastructure	Macroeconomic environment	Health and primary education	Higher education and training	Goods market efficiency	Labour market efficiency	Financial market development	Technological readiness	Market size	Business sophistication	Innovation
UAE	16	7	4	38	40	34	3	11	28	18	27	13	25
Qatar	18	10	18	2	27	30	7	17	21	33	50	18	18
Saudi Arabia	29	24	31	68	51	46	41	65	47	41	14	31	42
Kuwait	38	59	52	6	76	94	85	115	65	60	51	61	110
Bahrain	48	25	32	113	34	44	22	35	43	37	92	33	45
Jordan	63	34	56	118	80	51	43	87	68	75	75	36	40
Oman	66	28	38	81	69	85	51	82	55	57	68	66	76
Morocco	70	50	58	49	77	104	64	124	83	81	55	76	96
Algeria	87	99	100	63	73	96	133	132	132	108	36	121	112
Tunisia	95	78	83	99	59	93	113	113	119	80	69	101	104
Lebanon	101	119	117	136	52	66	55	104	69	72	76	50	58
Egypt	115	87	96	134	89	112	112	135	111	99	25	85	122
Mauritania	137	135	129	106	130	138	136	131	137	133	128	138	137
Yemen	138	137	136	138	117	136	131	137	138	136	89	129	138



Source: Global Competitiveness Index 2016-17.

Aggregating the results by income groups shows the competitiveness strengths and weaknesses for the Arab region at different levels of income. It appears that labour market efficiency, macroeconomic environment, higher education and training, and innovation are the areas in which Arab countries on average perform the worst (ranking below 80th globally as a group).

Table 7: GCI 2016-17 Average Scores Across Pillars in the Arab Region.

	GCI	Institutions	Infrastructure	Macroeconomic environment	Health and primary education	Higher education and training	Goods market efficiency	Labour market efficiency	Financial market development	Technological readiness	Market size	Business sophistication	Innovation
All Arab countries	73	64	68	82	70	81	71	92	80	74	61	68	80
High income	30	25	27	45	46	50	32	49	41	38	47	31	48
Upper middle income	84	84	91	106	68	71	77	108	90	85	62	69	70
Lower middle income	111	97	100	105	94	117	111	128	118	106	73	106	119

Source: ESCWA analysis of GCI data

As shown by the data, challenges are diverse at the different levels of income. High-income Arab countries are weaker on higher education and training (50th), labour market efficiency (49th) and innovation (48th). Upper middle-income Arab countries rank low in labour market efficiency (108th), macroeconomic environment (106th) and infrastructure (91st). Lower middle income Arab countries rank low in labour market efficiency and show weaknesses in many other areas, chiefly innovation and higher education and training.

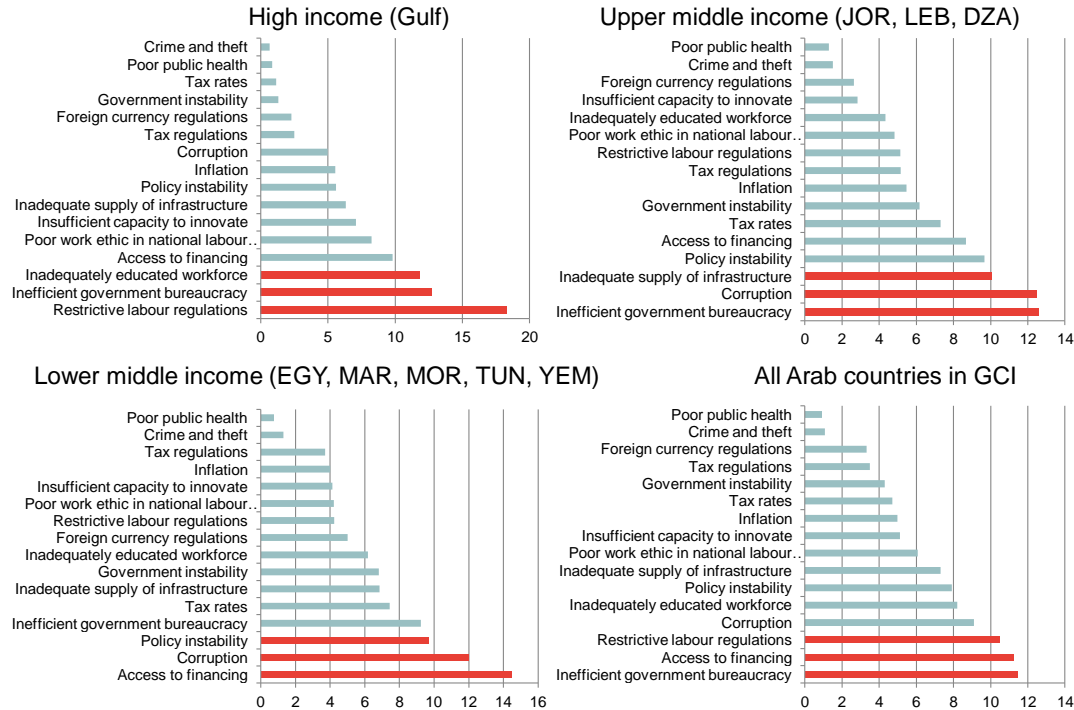
The Executive Opinion Survey, a key component of the WEF Global Competitiveness Report and of GCI calculations, collects the views of business leaders to identify the most problematic factors impeding conducting business in each country. The results of this survey further clarify the main challenges to economic competitiveness affecting the region. Looking at the findings for the Arab region in 2016-17 (Figure 2 below), grouped by the same income levels as above, challenges to doing business appear diverse across income groups, with the exception of “Inefficient government bureaucracy”, which comes up repeatedly among the most problematic factors (both for high income and for upper middle-income Arab countries). These results

corroborate findings from the World Bank Ease of Doing Business Survey¹³, which show many Arab countries lagging behind. The survey reflects the efficiency of government bureaucracy through many of its sub-indicators, such as the number of procedures, time and cost it takes to start a business, register property, paying taxes or getting electricity. Apart from the UAE, no Arab country appears in the top 30 countries for ease of doing business in the global 2017 report (the UAE is actually an outlier as the next Arab country in the ranking is Bahrain in 63rd position).

Other factors that appear most problematic for doing business according to the WEF executive survey in Arab countries are the following:

- In high-income countries: restrictive labour regulation, inefficient government bureaucracy and inadequately educated workforce. On the other hand, these countries exhibit low crime and theft, good public health and low tax rates.
- In upper middle-income countries: inefficient government bureaucracy, corruption and inadequate supply of infrastructure. On the other hand, these countries do relatively well in public health, have low crime and theft and have good foreign currency regulations.
- In lower middle-income countries access to financing is the most problematic factor, followed by corruption and political instability. On the other hand, these countries do relatively well in public health, crime and theft, and tax regulations.

Figure 2: Most Problematic Factors Affecting Doing Business in Arab Countries



Source: ESCWA analysis of GCI data.

¹³ <http://www.doingbusiness.org/rankings>

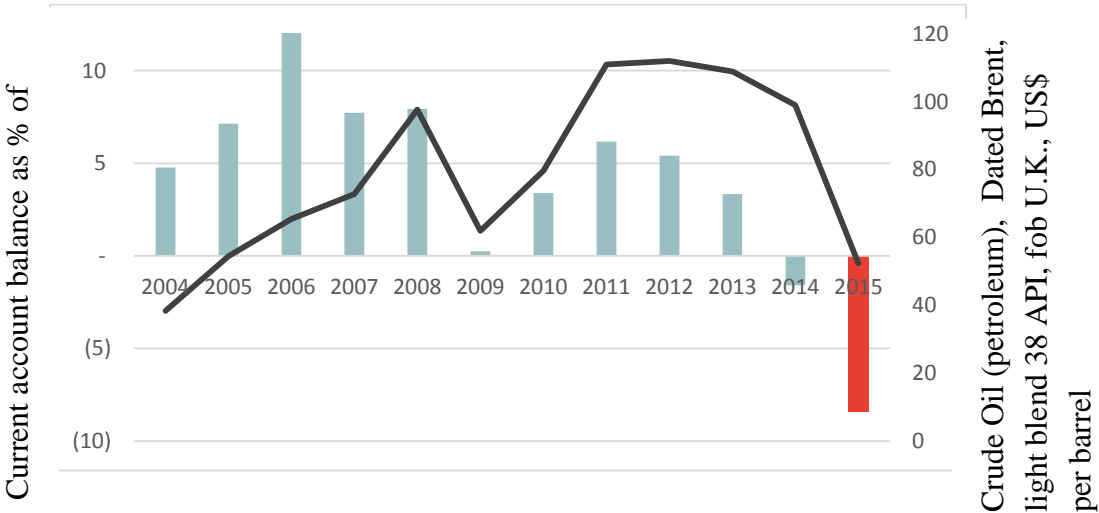
In the following sub-sections, the four most notable common weaknesses identified by the 2016-17 GCI for the region are discussed. The first three (macroeconomic environment, higher education and training, and innovation) are examined briefly, while the last one, labor market efficiency, is analysed in more detail as it is the area in which the region lags behind the most.

3.2 Macroeconomic Environment

The macroeconomic environment indicator in the GCI includes measures of government budget balance, national savings rate, inflation, government debt, and country credit rating.

As shown in Figure 3 below, current account balances across the region have deteriorated in recent years, mostly due to falling oil prices. The drops in government budget balances induced by the fall in commodity prices are a key factor behind the poor performance of Arab countries in “Macroeconomic environment” in the GCI 2016-17.

Figure 3: Current Account Balance in Arab Countries* and Crude Oil Prices.



Source: ESCWA analysis of IMF and Bloomberg data.

*The average includes the 16 Arab countries examined in the GCI: Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Mauritania, Morocco, Saudi Arabia, Syria, Tunisia, Yemen and UAE.

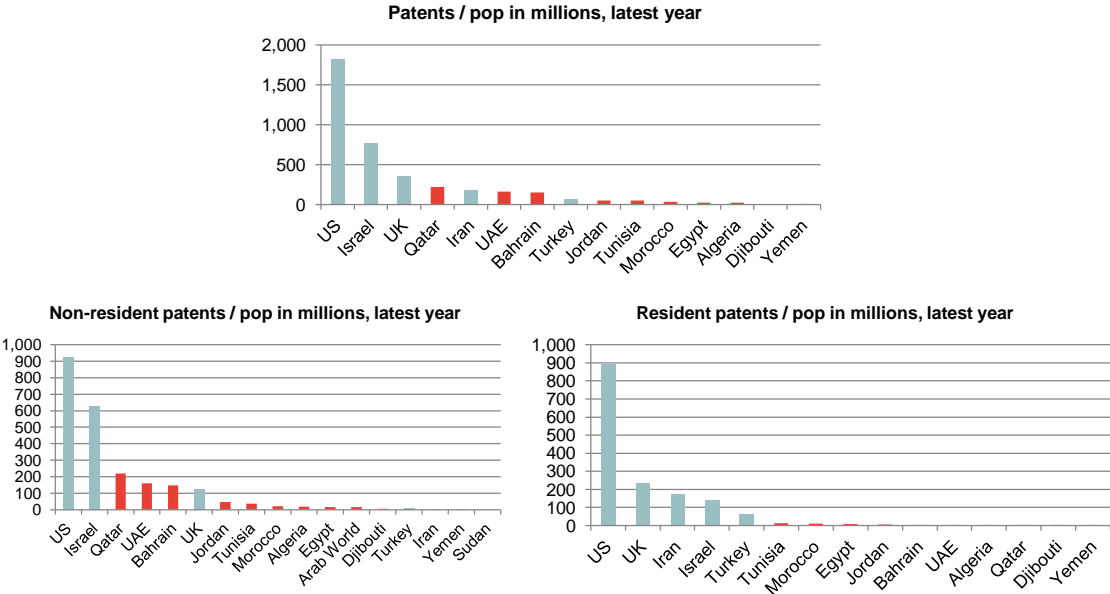
The oil sector remains predominant in many Arab countries, with oil rents as a share of GDP ranging from 19.5% in Yemen to 62.9% in Kuwait. Oil-exporting countries are experiencing lower growth, higher fiscal deficits, and rising unemployment. Growth in Gulf Cooperation Council (GCC) economies averaged 5.2% between 2000 and 2012, but fell to 2.5% in 2015. The forecast for 2016 is also 2.5% and rising oil supplies are expected to keep prices low and limit growth expectations for the coming years (World Economic Forum, 2016).

As discussed in Section 3, other factors besides oil prices contribute to a volatile macroeconomic environment for Arab countries. These include a lack of economic and export diversification, dependency on key imports such as basic food products, as well as large shares of volatile sources of revenues in GDP, such as tourism, remittances and ODA.

3.3 Innovation

Lack of innovation is one of the main obstacles to competitiveness facing Arab countries, as demonstrated, among other factors, by the paucity of patents in the region. Among the sub-measures of the “Innovation” pillar in the GCI, “PCT patents applications” is the indicator which is pulling down the scores of Arab countries the most. As shown in the graphs below, which include some non-Arab countries for comparison, Arab countries (in red) produce few patents given their level of per capita income. Also, there is a tendency in the region to file patents abroad (non-resident patents), possibly indicating weak intellectual property protection at home.

Figure 4: Patent Applications in the Arab Region



Source: ESCWA analysis of World Development Indicators (latest year available for each country).

Arab countries also performed poorly on several other indicators of innovation in the GCI, such as “Company spending on R&D” and “University-industry collaborations on R&D.”

The lack of a structured approach to R&D and low investment in these areas contribute to the brain drain experienced by many Arab countries. According to UNESCO data¹⁴, Arab

¹⁴ <http://data.uis.unesco.org/?queryid=74>

governments account for less than 1% of total global R&D spending, despite the fact that Arab countries produce 5.9% of the world's GDP. Bahrain spends just 0.04% of GDP; Egypt spends 0.7%. By contrast India spends about 0.8% and Britain 1.6%.

Youth unemployment in the Arab region is alarmingly high at 26 % - double the world average - and in some countries as extreme as 40% (ESCWA, 2014) - presenting a major socioeconomic challenge. During the Arab Spring, young people actively demanded more and better jobs; they challenged existing and often inadequate educational structures and pushed the boundaries of established social and cultural norms that hinder their access to decent jobs.¹⁵ Creating better opportunities - especially in areas such as technology and entrepreneurship - for a youth population that is increasingly educated should be a priority for Arab countries and would help them to attract and retain talent.

Arab countries also have a comparatively low number of researchers, with 576 researchers per million on average¹⁶, far below the world average of 1,282 in 2010. Consequently, Arab-authored articles accounted for only 1.3% of all articles published in scientific and technical journals in 2012. Turkey and Iran together published twice as many with less than half of the population. When population is taken into account, Arab countries publish on average 41 scientific articles per million yearly, while the world average stands at 147 (Veale, 2015).

3.3.1 Arab Countries on the Global Innovation Index

The Global Innovation Index¹⁷ (GII) 2016 helps to explain why Arab countries underperform in innovation. The GII measures not only quantity but also quality of innovation, assessing the worth of universities, scientific output, and patents. The table below shows the ranking of the Arab countries analyzed in the GII 2016, which covers 128 countries.

¹⁵ UN ESCWA (2014): Working for a Just and Prosperous Arab World, ESCWA at 40

¹⁶ Average of latest available data between 2005 and 2014 from World Bank. Data are missing for Jordan, Lebanon, Libya, Mauritania, Saudi Arabia, Syria, the UAE and Yemen.

¹⁷ <https://www.globalinnovationindex.org/>

Table 8: Arab Countries' Rankings in GII 2016.

Country	Rank	Country	Rank
UAE	41 st	Oman	73 rd
Saudi Arabia	49 th	Tunisia	77 th
Qatar	50 th	Jordan	82 nd
Bahrain	57 th	Egypt	107 th
Kuwait	67 th	Algeria	113 rd
Lebanon	70 th	Yemen	128 th
Morocco	72 nd		

Source: GII 2016.

The GII confirms the GCI's conclusion: the Arab region is punching below its weight in innovation. In 2015, Qatar had a GDP per capita not far from that of Switzerland (US\$ 74,667 versus US\$ 80,215), and yet, while Switzerland ranked first in the current and past issues of GII, Qatar is just 50th in the rankings. Similarly, Kuwait and the UAE have GDP per capita similar to those of some European countries, but rank much below these countries in innovation. The underachievement of rich Gulf countries may be due to their dependency on oil: their resource-extracting activities tend to crowd out investment in other productive sectors and hinder innovation, as documented historically and across-regions (GII, 2016).

The same goes for Arab countries at the lower end of the GDP scale: there are many countries poorer than Yemen (GDP per capita of US\$ 1,408 in 2013, compared to, for example, US\$ 926 for Tajikistan and US\$ 676 for Uganda). Nevertheless, while Uganda and Tajikistan both outperform their peers in 2016, Yemen is the last ranked country on the GII globally. No Arab country in the GII performs at least 10 percent higher than their peers for their level of GDP, as achieved by countries such as Armenia, India and Vietnam.

In the GII scatter plot showing GII achievements relative to GDP (GII, 2016, p. 33), the only Arab country above the curve (meaning that it is outperforming in innovation relative to its GDP) is Morocco. All other Arab countries are underperforming. As the GII 2015 report explains, overall expenditure on education, in particular government expenditure on secondary education per pupil, is the main reason behind Morocco's success in the index.

3.3.2 The Twin Problems of Innovation and Diversity/Tolerance

A low level of diversity and tolerance may help explain the poor performance of Arab countries in innovation. The correlation between the two dimensions is evident. Attracting talent requires being open to diversity, and low religious tolerance and restrictions on personal freedom are significant obstacles to being perceived as a desirable base for highly talented individuals who are today more mobile than ever.

Several studies have found that tolerance and social freedom support innovation and entrepreneurship (Lehman and Seitz, 2016). Florida, Mellander and Stolarick (2008) found that tolerance “*makes local resources more productive and efficient*”, as locations with greater diversity signal low barriers to entry, environments that support knowledge transfers, regional values that are open minded, meritocratic, tolerant of risk and oriented to self-expression, and underlying mechanisms which increase the productivity of entrepreneurial activity (p. 17). Moreover, these environments are correlated with increased individual incomes and regional development, as technology, talent and tolerance support each other to bring about economic development (Florida, 2014). Finally, Alesina et al. (2003) find that religious fractionalisation has a positive impact on economic growth, as it is a proxy of more tolerant and free societies. Their findings show that all countries in the Arab region have a lower level of religious diversity than the world average, with the exception of Lebanon, Kuwait and Bahrain. Religious diversity reflects the presence of minorities and migrant groups. Ottaviano and Peri (2005) argued that the diversity of talent pools that comes about through immigration increases productivity. Benabou, Ticchi and Vindigni (2013) find that, both international and cross-state U.S. data, there is a significant negative relationship between religiosity and innovativeness (patents per capita), even after controlling for the standard empirical determinants of innovation.

The Arab region scores low on both tolerance and diversity. According to the Global Creativity Index, which ranks countries on talent, technology and tolerance for economic development, countries in the Arab region are ranked between 75 (Syria) and 139 (Iraq) out of 139 countries. According to the report, the low performance of oil-based Arab economies in particular may be a result of their commodity wealth, which removes economic incentives to improve tolerance. Without tolerance (and the associated talent and technology) the economic strength of these nations is unsustainable as they are reliant on finite and volatile natural resources (Florida, Mellander, & King, 2015). Overall, research suggests that increased tolerance and openness to diversity in the Arab region would contribute to higher economic prosperity, in particular through talent attraction, and would enhance innovation and entrepreneurship.

3.4 Effect of Higher Education and Training

In the GCI, the “Higher education and training” pillar measure secondary and tertiary enrolment rates as well as the quality of education as evaluated by business leaders. Staff training is also taken into consideration.

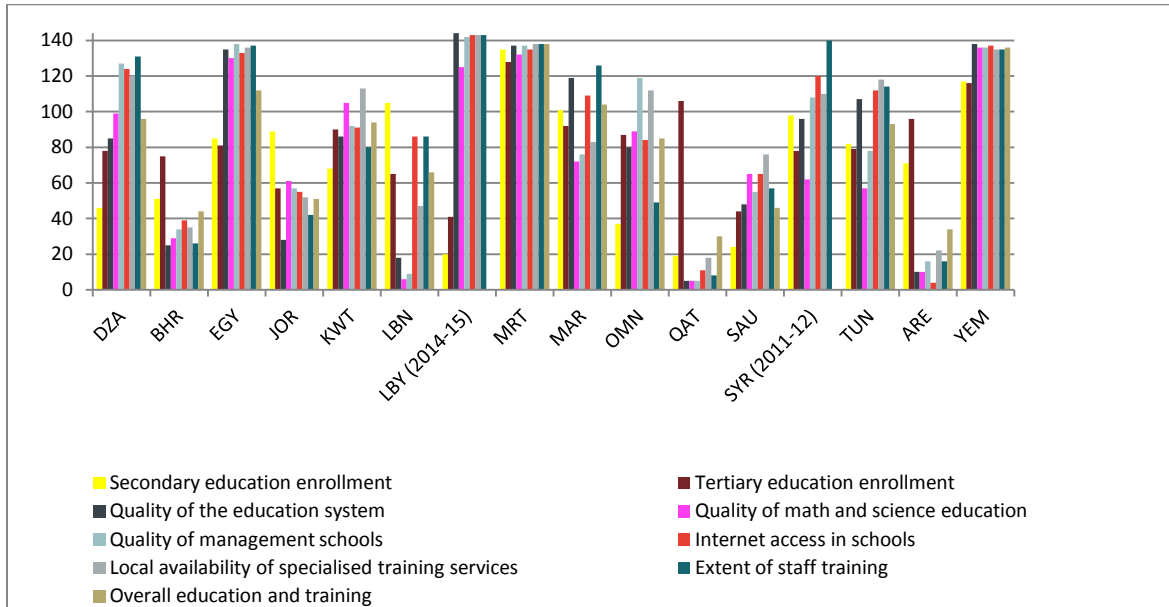
In the Arab region, the quality of education appears to be more problematic than the quantity. Training in particular appears to be a weak area. It is worth noting that “Higher education and training” is the weakest pillar for high-income Gulf countries, none of which rank above 50th place globally according to the 2016-17 index. This might indicate that low quality in education is not primarily a result of a lack of financial resources, but rather a result of ineffective use of such resources to improve education and training. Moreover, according to the GCI Executive Opinion Survey, an inadequately educated workforce is identified by business leaders as one of the top obstacles to doing business in high-income Arab countries (GCI, 2016).

In general, the Arab region ranks particularly low (80th globally or below) in the following sub-indicators of the “Higher education and training” pillar:

- “Internet access in schools”: 91st on average, with Qatar and Saudi Arabia performing significantly above average;
- “Local availability of specialised training services”: 91st on average, with Qatar, Saudi Arabia and Bahrain performing significantly above average;
- “Extent of staff training”: 89th on average, with Gulf countries performing better than average;
- “Quality of management schools”: 83rd on average, with Lebanon, Qatar and Saudi Arabia performing much better than average.

As indicated above, when looking at individual countries there are significant discrepancies. Figure 5 shows the ranking of each Arab country on the sub-indicators of the higher education and training pillar (not that higher rankings actually indicate a weaker performance). The rankings show evidence of significant regional diversity when it comes to the quality of education. Lebanon is ranked 6th and 9th globally for “Quality of math and science education” and for “Quality of management schools” respectively (against an average for the region of 62nd and 59th). On the other hand, Mauritania ranks 135th and 128th, respectively, in “Secondary education enrolment” and “Tertiary education enrolment”, while Yemen ranks 117th and 116th (against an average placement for the region of 63rd and 64th). Also, Egypt lags considerably behind in quality of education, ranking 135th and 130th on “Quality of the education system” and “Quality of math and sciences education”, respectively, compared to an average placement of 79th and 74th for the Arab region.

Figure 5: Global Ranking of Arab Countries Across the Indicators Within “Higher Education and Training” (GCI 2016-17)



Source: ESCWA analysis of GCI 2016-17 data.

4. Labour Market Efficiency

In the latest GCI, “Labour market efficiency” is the pillar in which Arab countries perform the worst. There are many factors that contribute to labour market efficiency. The GCI identifies ten of them: cooperation in labor-employer relations, flexibility of wage determination, hiring and firing practices, redundancy costs, effect of taxation on incentives to work, pay and productivity, reliance on professional management, country capacity to retain talent and attract talent, and women in labor force.

Table 9: Breakdown of Labour Market Efficiency - Arab Countries Average

Average Arab countries										
	Cooperation in labor-employer relations, 1-7 (best)	Flexibility of wage determination, 1-7 (best)	Hiring and firing practices, 1-7 (best)	Redundancy costs, weeks of salary	Effect of taxation on incentives to work, 1-7 (best)	Pay and productivity, 1-7 (best)	Reliance on professional management, 1-7 (best)	Country capacity to retain talent, 1-7 (best)	Country capacity to attract talent, 1-7 (best)	Women in labor force, ratio to men
2006-07	4.8	5.4	4.12	58.5		4.1	4.1			0.43
2007-08	4.7	5.2	3.80	57.4		4.1	4.2			0.40
2008-09	4.6	5.2	3.72	55.6		4.0	4.2			0.41
2009-10	4.5	5.2	3.86	52.7		4.0	4.1			0.40
2010-11	4.4	5.3	4.00	50.1		3.9	4.0			0.40
2011-12	4.4	5.4	4.08	47.9		3.9	4.0			0.40
2012-13	4.3	5.4	4.07	16.1		3.9	4.0			0.37
2013-14	4.4	5.3	3.94	15.8	4.3	3.9	3.9	3.6	3.6	0.37
2014-15	4.4	5.3	3.94	15.5	4.4	3.9	3.8	3.6	3.6	0.37
2015-16	4.5	5.2	3.94	14.9	4.6	3.9	4.0	3.7	3.8	0.37
2016-17	4.5	5.1	3.92	15.8	4.4	3.8	3.9	3.6	3.5	0.38

Source: ESCWA analysis of GCI data 2016-17.

As we have seen above in the results of WEF’s Executive Opinion Survey, restrictive labour regulations are identified by business leaders as one of the top constraints to doing business in the Arab region. As shown in the table above, trends relating to the flexibility of employment in the region are contradictory. On one hand, "Hiring¹⁸ and firing practices¹⁹", which measure the rigidity of the procedures for hiring and firing, have slightly deteriorated across the Arab region in recent years, meaning that procedures have become more rigid. On the other hand, redundancy costs in weeks of salary²⁰, which measures the compensatory cost of firing, has gone down dramatically, dropping from 58.8 weeks in 2006-07 to 15.8 in 2016-17. While this is a positive improvement through the lenses of the GCI, it also indicates that workers who are laid-off receive significantly less compensation (although 15.8 weeks of salary is still a higher compensation than those offered by some European countries, such as GCI leader Switzerland which offered 10.1 weeks on average as measured by the GCI 2016-17).

Table 9 also shows that “Pay and productivity” has gone down in recent years across the Arab region. In the GCI, “Pay and productivity measures” responses to the question: “In your country,

¹⁸ Data on hiring cover four questions: (i) whether fixed-term contracts are prohibited for permanent tasks; (ii) the maximum cumulative duration of fixed-term contracts; (iii) the minimum wage for a cashier, age 19, with one year of work experience and (iv) the ratio of the minimum wage to the average value added per worker. Source: Global Competitiveness Report 2015-16.

¹⁹ Measured in the GCI as answer to: “In your country, to what extent do regulations allow flexible hiring and firing of workers? [1 = not at all; 7 = to a great extent]”. Source: Global Competitiveness Report 2015-16.

²⁰ Redundancy cost measures the cost of advance notice requirements and severance payments due when terminating a redundant worker, expressed in weeks of salary. The average value of notice requirements and severance payments applicable to a worker with 1 year of tenure, a worker with 5 years and a worker with 10 years is considered. One month is recorded as 4 and 1/3 weeks. Source: Global Competitiveness Report 2015-16.

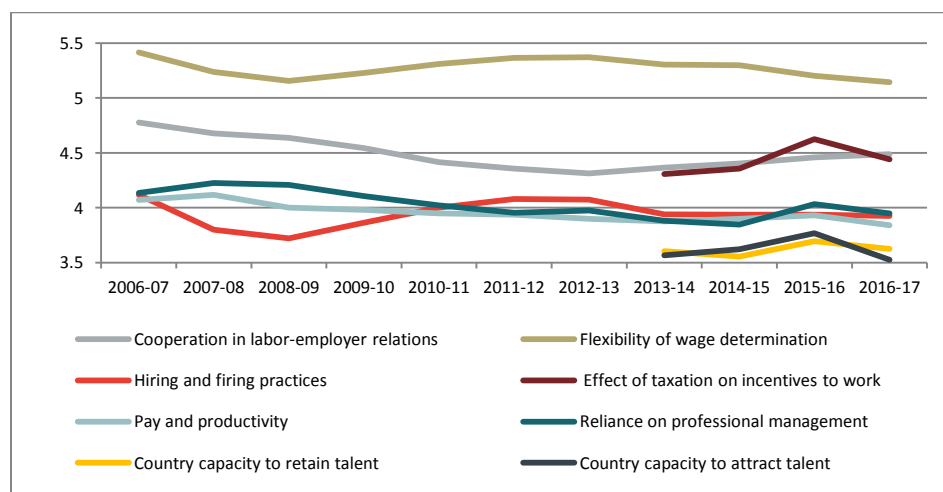
to what extent is pay related to employee productivity? [1 = not at all; 7 = to a great extent].” This means that employers in the Arab region perceive an increasing discrepancy between their expenditure on wages and employee productivity.

Most significantly, as shown in Table 9, in the majority of the Arab region, the “Capacity to retain and attract talent” and “Women’s participation in the labour force” are the most problematic factors within the pillar of “Labour market efficiency”. In order to improve competitiveness in the region, these two areas need further examination, and consideration of possible policy changes.

4.1 Arab Countries’ Capacity for Retaining and Attracting Talent

Maintaining a healthy workforce is an essential element of a well performing economy and a key component of social and political stability. Data from the GCI shows that Arab countries perform particularly poorly in the indicators “Country capacity to retain talent” and “Country capacity to attract talent” (3.6 and 3.5 scores respectively on average across the region in the GCI 2016-17). Figure 6 compares the eight (out of ten) indicators from the “Labour Market Efficiency” pillar of the GCI which are measured from 1-7, clearly showing that these two indicators are the areas where Arab countries need to improve the most. The last two indicators “Women in the labour force” and “Redundancy cost” are measured on a different scale, and discussed separately in the paper.

Figure 6: Arab Countries Performance in Selected Indicators of Labour Market Efficiency

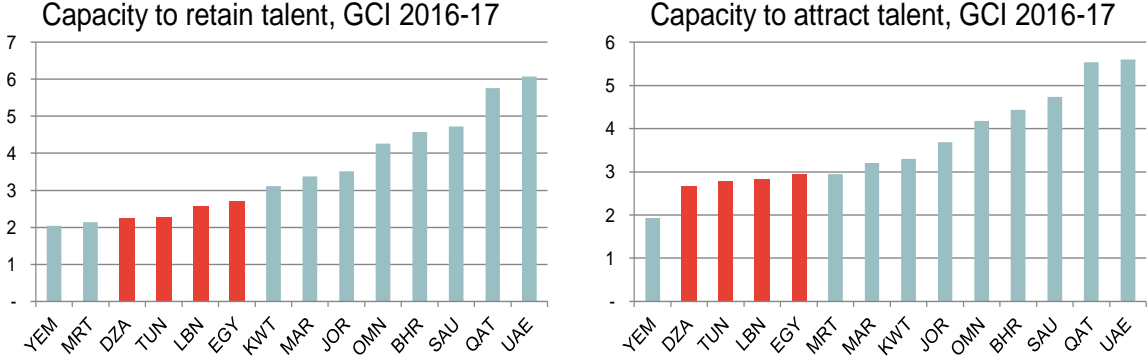


Source: ESCWA analysis of GCI data, 2016-17

Figure 7 shows the scores of Arab countries for the indicators of “Country capacity to retain talent” and “Country capacity to attract talent” in the 2016-17 GCI. Capacity to retain talent is

highly correlated with GDP per capita (0.81 correlation coefficient), but some countries – the ones highlighted in red – underperform in their capacity to retain talent given their level of income. This is particularly true for Lebanon and Algeria, which are upper middle-income countries and yet are sandwiched between countries with lower GDP per capita in their capacity to attract and retain talent. Egypt and Tunisia are lower middle-income countries and also underperform for these indicators given their level of income.

Figure 7: Arab Countries’ Capacity to Attract and Retain Talent, GCI 2016-17



Source: ESCWA analysis of GCI data.

Many Arab countries experience heavy brain drain due to talented workers seeking better opportunities abroad. A Gallup survey conducted over 2007-09 found that 23% of respondents in the MENA²¹ region would like, if given the opportunity, to move permanently to another country. Considering the escalation of political uprising and conflicts which has taken place in the region since 2007-09 (when the survey was conducted), one can expect this percentage to be higher nowadays. The percentage compares with 19% in Europe and 38% in Sub-Saharan Africa (Esipova and Ray, 2009).

According to the latest World Bank data²² available (2000), the average emigration rate of tertiary educated people from the Arab region was 8.3%, compared with 5.4% globally. Since this figure dates from before the Arab Spring, and given the recent wars in Libya, Iraq, Syria and Yemen, it would be fair to assume that the current number is much higher. In Algeria, for example, 71,500 researchers left the country to seek better opportunities abroad between 1994 and 2006 according to the Algerian Economic and Social Council (Veale, 2015).

²¹ The countries covered in Gallup surveys as part of the Middle East and North Africa region are: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Morocco, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, UAE and Yemen.

²² <http://data.worldbank.org/indicator/SM.EMI.TERT.ZS?page=2>

Considering that the unemployment rate for individuals with tertiary education is 28% on average across the Arab region²³, these numbers are not surprising. On the other hand, this Arab diaspora contributes considerably to local economies through remittances. For example, remittances flowing into Lebanon from its diaspora have been estimated by the World Bank to have averaged 15-20% of GDP (Tierney, 2015) over the past five years. Despite the apparent economic benefits of remittances, the loss of such a large number of talented individuals adversely affects the competitiveness of the Arab region, in particular when it comes to areas such as innovation, entrepreneurship and productivity.

Brain drain is one of the problems faced by Arab countries trying to retain talent, but there is another side of the coin. Some Arab countries, for example in the Gulf, face a deficiency in certain skills among their citizens that has to be filled by foreign workers (Hertog, 2013). According to IMF research (Behar, 2015), expatriates make up 68% of employment in GCC countries on average (of which 62% of private sector jobs). These numbers are particularly high in some countries: for example, expatriates make up more than 90% of the workforce in Qatar (IMF, 2015). In order to deal with this problem, Gulf countries have put significant effort into attracting international talent, primarily through favourable tax regimes, as captured by the “effect of taxation on incentives to work” indicator of the GCI, in which Arab countries score rather highly. Additionally, local content clauses may help countries achieve their employment objectives, but they need to be designed according to the local availability of skills and talents or they risk being counterproductive and discouraging investors. For example, Saudi Arabia recently announced a plan to increase the levy on companies for the expat workers they employ, but firms may struggle to find the equivalent skills they need among locals, many of whom have no private sector experience (Hertog, 2013).

4.2 The Paradox of Women in Arab Countries: Highly Educated but Unemployed

Many Arab countries have highly educated and skilled women who could considerably add to economic productivity but who do not participate in the labour force. In general, the education gap between men and women in the Arab region has greatly reduced over the past decades - although significant exceptions remain: in Iraq, Egypt and Lebanon, educational attainments of women are still considerably lower than those of men. Despite high levels of education, three out of four Arab women remain outside the labour force. - only 18% of working-age Arab women have jobs. At this rate, it would take 150 years to reach today’s world female labor force participation average (Jalbout, 2015).

A 2015 McKinsey Global Institute report estimated that if women participated in the economy at the same rate as men globally, this would add up to \$28 trillion, or 26%, of annual global GDP in 2025 compared with a business-as-usual scenario. The Arab region would benefit even more

²³ Latest data available between 1996 and 2013, World Bank data, based on World Bank definition of “Arab World” countries which may differ from the sample of countries studied in this paper.

from equal women's participation, given that regions with low gender equality in society can reap the highest potential economic gains from bridging the gender gap, according to the report. While globally there is significant positive correlation between gender parity scores (GPSs) and GDP per capita, in Arab countries, and especially in Saudi Arabia, the UAE, Qatar, Kuwait and Oman, this correlation is weak. The McKinsey report found that extreme gender inequality in the region is not restricted to labour force participation but appears in other dimensions, including ratio of women to men in leadership positions (0.1165 female to male ratio) and unpaid care work (0.161 male to female ratio) (McKinsey Global Institute, 2015).

A recent ESCWA study on unemployment amongst young women in the Arab region found stark differences between the unemployment rates of women and men. The unemployment rates of young Arab women and men stand at 47.9% and 23.2%, respectively, which is staggering when compared to the global average female and male youth unemployment rates of 15.7% and 13.4%, respectively (ILO, 2013). The ESCWA report identifies five main causes for the high unemployment rates of young Arab women, namely: limited job creation, gender-blind economic policy, mismatch between educational outcomes and labour market demands, social and cultural constraints, and regulatory and policy issues (ESCWA, 2016).

In some Arab countries, laws that discriminate against women (e.g. limiting their ability to travel, prohibiting them from driving, or having control of their own finances), as well as traditional gender roles and cultural expectations, make it more difficult for women to pursue private sector careers or entrepreneurship. Gonzales, Jain-Chandra, Kochhar and Newiak (2015) have highlighted the link between equality in legal provisions and the increased labour-force participation rate of women. Across the Arab region, legal protection for women remains on average lower than that accorded to men. This can be evidenced, for example, by reviewing the participation of Arab countries in the UN Convention on the Elimination of Discrimination Against Women (CEDAW). Yemen, Syria, Morocco, Egypt, Libya, Lebanon, Jordan, UAE, Saudi Arabia, Qatar, Oman, Kuwait and Bahrain have all rejected parts of the convention relating to inheritance, guardianship, citizenship and freedom of movement.

In order to achieve a shift in entrenched gender attitudes, governments can promote role models, e.g. women in prominent roles such as on executive boards, in parliament, at universities. In situations where disparity is pervasive, quotas and reputational pressure can help change entrenched habits. Quotas have been identified by researchers as one of the most effective ways of promoting change in gender balance ("Confronting gender inequality" 2014). As examples of recent quotas, in 2011 France introduced a law obliging large companies to have 20% female directors in 2014 and 40% in 2017. In 2016, Germany passed a law that requires women to hold 30% of companies top board seats. In order to be effective, however, quotas need to be properly designed. In Egypt, a quota policy led to 65 women MPs elected in the 2010 election, but this fell to 9 in the 2011/12 transitional election because the quota was indicative only and not compulsory (Domingo et al., 2015).

5. Conclusions and Policy Recommendations

Given the analysis and discussion in the paper, it is possible to derive a number of policy recommendations, which can be grouped by the main themes identified.

5.1 Reduce socio-political and macroeconomic volatility:

- Conflict remains the main challenge to the Arab region's competitiveness. In 2016, about 87 million people from four Arab countries —Iraq, Libya, Syria, and Yemen – were directly affected by conflict. While solving the on-going conflicts is a prerequisite for enhancing the region's competitiveness, Arab countries also need to preserve socio-political stability in the long-term, and aspire towards more open, democratic and inclusive societies.
- Arab countries need to reduce their exposure to external volatility. This can be done chiefly by diversifying the economy into activities with high value-added. Many Arab economies are based on natural resources exports, which ultimately expose them to boom and bust cycles. Diversification strategies do not imply abandoning primary commodities but rather exploiting them strategically – for example by building sectors linked to mining (such as petrochemicals or other activities that can use existing advantages such as oil abundance, and add value to raw commodities).

5.2 Create better opportunities to attract talent, reduce brain drain and gainfully employ local workforce:

- Arab countries may seek to reduce brain drain by creating more and better opportunities for their population, especially the skilled and highly educated. This can be achieved by pursuing economic diversification and growth; improving the business environment and supporting entrepreneurship; providing the necessary infrastructure for business to flourish; cutting corruption that reduces motivation for talented individuals to compete and improving meritocracy; and offering incentives for emigrated talent to return.
- Arab countries should invest in attracting internationally mobile skilled workers, not only through tax incentives but by offering attractive living standards, a vibrant business environment, and open and tolerant societies.
- The Arab region needs to improve higher education and training so that locals can gainfully fill private sector jobs. Educational programmes should be better aligned with labour market needs (e.g. offering study programmes and vocational education tailored to the needs of local industries). This can be done through collaborations with the private sector (e.g. in designing the curricula and offering training opportunities) and through ad-hoc local content clauses requiring foreign investors to contribute to developing local skills. Some Arab countries, in particular lower income ones, also need to continue improving their enrolment rates.
- Local content clauses for foreign investors can help but they need to be realistic (linked to what is available locally) and attractive. If not enough local talent is available, a clause that

obliges firm to hire a large percentage of locals will discourage investments. Local content clauses can be progressive in nature, for example requiring firms to gradually hire an increasingly larger share of locals as they become better trained.

5.3 Unlock the potential of innovation to promote economic competitiveness:

- The Arab region should increase its innovation potential, in particular the capacity to patent innovations, company spending on R&D, and university-industry collaborations on R&D. According to recent literature, increasing openness and tolerance to diversity could create an environment that is more conducive to innovation and talent attraction.

5.4 Increase the economic and social participation of women:

- Arab countries need to tackle the low participation of women in the labour force, which significantly reduces their economic competitiveness. Achieving gender equality in economic participation requires addressing gender disparity in a variety of areas, from legal rights to cultural norms.
- Many Arab countries still have legal frameworks that penalise women, so improving women's legal protection is a good place to start.
- Cultural norms and traditional gender expectations also need to shift. For example, governments should aim to make it more "socially acceptable" for women to pursue careers outside traditional sectors and the public sector by reducing reputational and safety concerns.
- Supportive government and employers' policies such as affordable child care, flexible working hours and generous maternity leave are also important for increasing women's participation in the labour force.
- According to research, quotas are one of the most effective ways of reducing gender disparity and promoting change in cultural norms, but they need to be properly designed in order to be effective.

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