





## IV. PPP Results: Detailed Description and Major Findings for the Arab Region

### 2017 PPP results and major findings

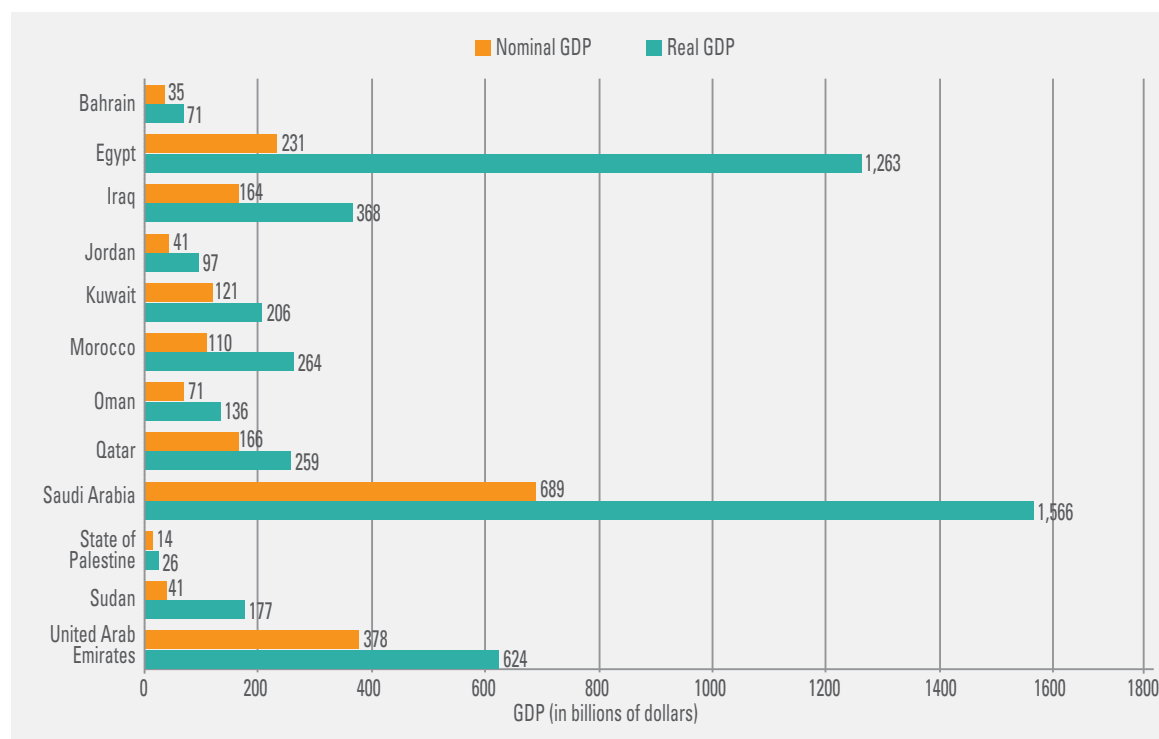
The regional implementation of the global 2017 ICP cycle in the Arab region covered 12 countries. Consequently, for the purpose of the analysis in the present report, the 'Arab region' will denote the group of 12 participating countries only, namely Bahrain, Egypt, Iraq, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, the State of Palestine, the Sudan and the United Arab Emirates.

Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, the State of Palestine, the Sudan and the United Arab Emirates.

- **Real size of Arab economies**

PPP-based GDP in the Arab region in 2017 was around \$5,057 billion, accounting for around 4 per cent of global real GDP, whereas exchange

**Figure 4.1.** Real versus nominal GDP, 2017



rate-based GDP was only \$2,061 billion, equivalent to 3 per cent of global GDP. This means that the real size of the Arab economy more than doubles when measured in nominal terms, and that the Arab region constitutes a bigger share of the global economy when measured in real terms. Figure 4.1 compares Arab countries' real versus nominal GDP in 2017. The data in the following figures were computed by ESCWA and the World Bank.

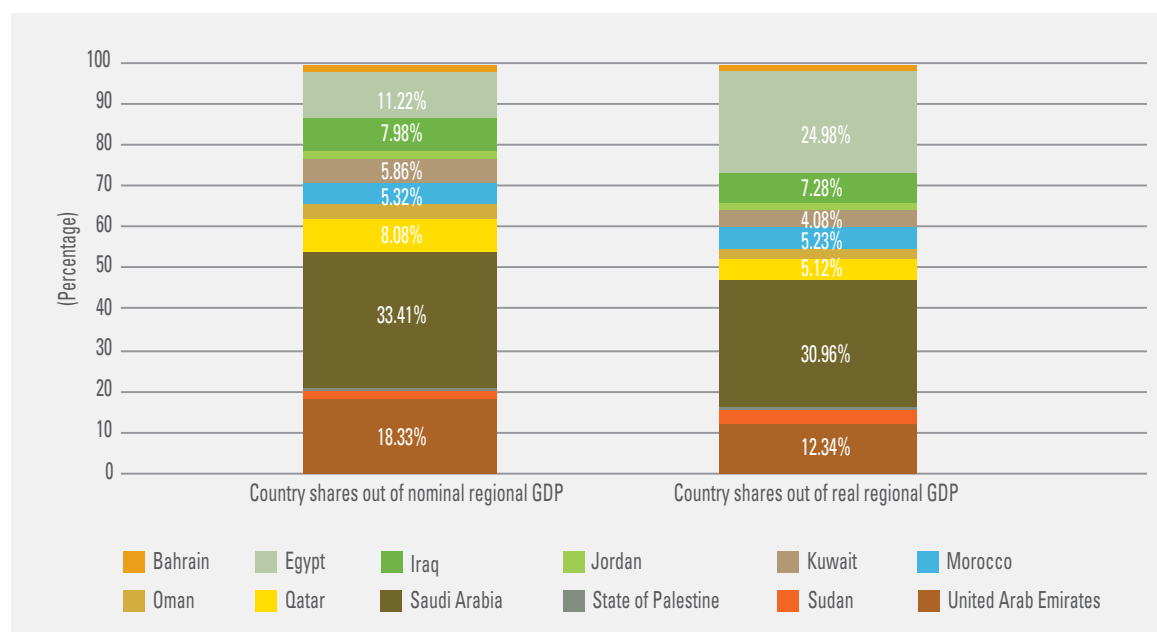
In PPP terms, the biggest economy in the Arab region is Saudi Arabia, contributing 31 per cent of the Arab region's real GDP. Its real GDP is \$1,566 billion, followed by Egypt with a real GDP of \$1,263 billion, contributing 25 per cent of regional GDP. In nominal terms, Saudi Arabia remains the biggest economy in the Arab region, but is followed by the United Arab Emirates instead of Egypt. On the other hand, the smallest economy in the Arab region in real terms and in nominal terms is the State of Palestine, representing less than 1 per cent of regional

GDP in both terms. Country shares of the Arab region's GDP in 2017 are shown in figure 4.2.

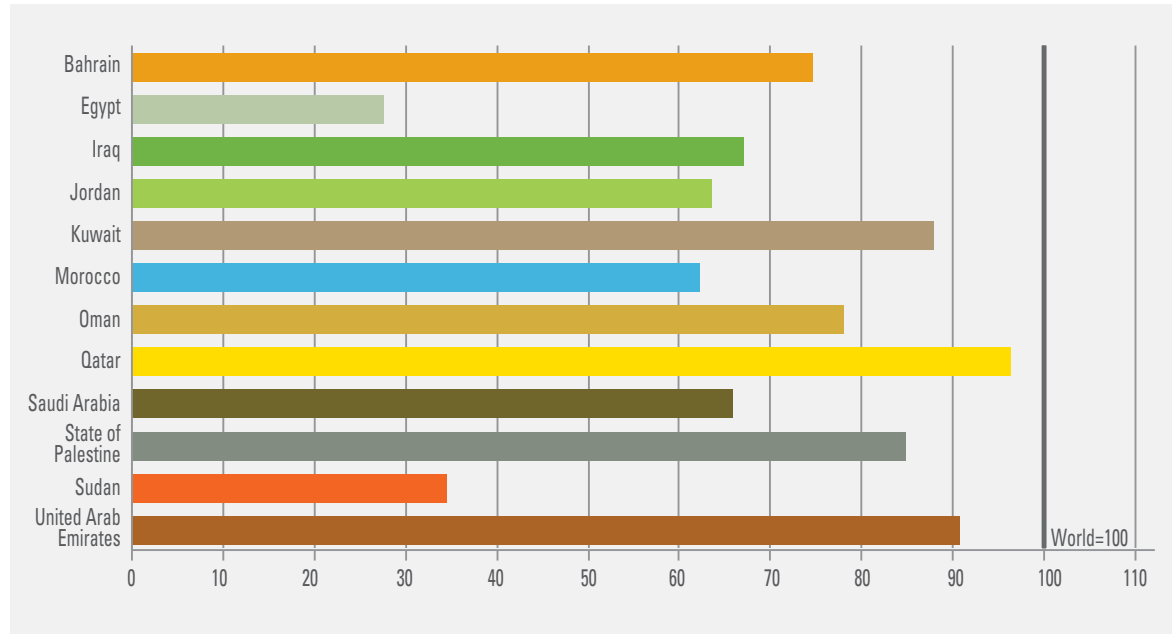
#### • General price-level index

In 2017, the average price-level index (PLI) at the GDP level of the Arab region stood at 61, which is 39 per cent lower than the global price level of 100. PLI in all the Arab countries was lower than 100, as seen in figure 4.3, with the highest price level observed in Qatar at 96 and the lowest in Egypt at 27. This indicates that prices in the Arab region were lower overall than the average global prices. The two most expensive Arab countries, and hence closest to the global PLI averages, were Qatar at 96 and the United Arab Emirates at 91. The two countries with the lowest price levels in the region were Egypt and the Sudan at 27 and 34, respectively - the only two countries with PLI less than 50. Figure 4.4 shows PLIs of Arab countries at major aggregate levels compared with the world's PLI set as 100. Figure 4.5 sets out PLIs of Arab countries compared with PLI of the Arab region set as 100.

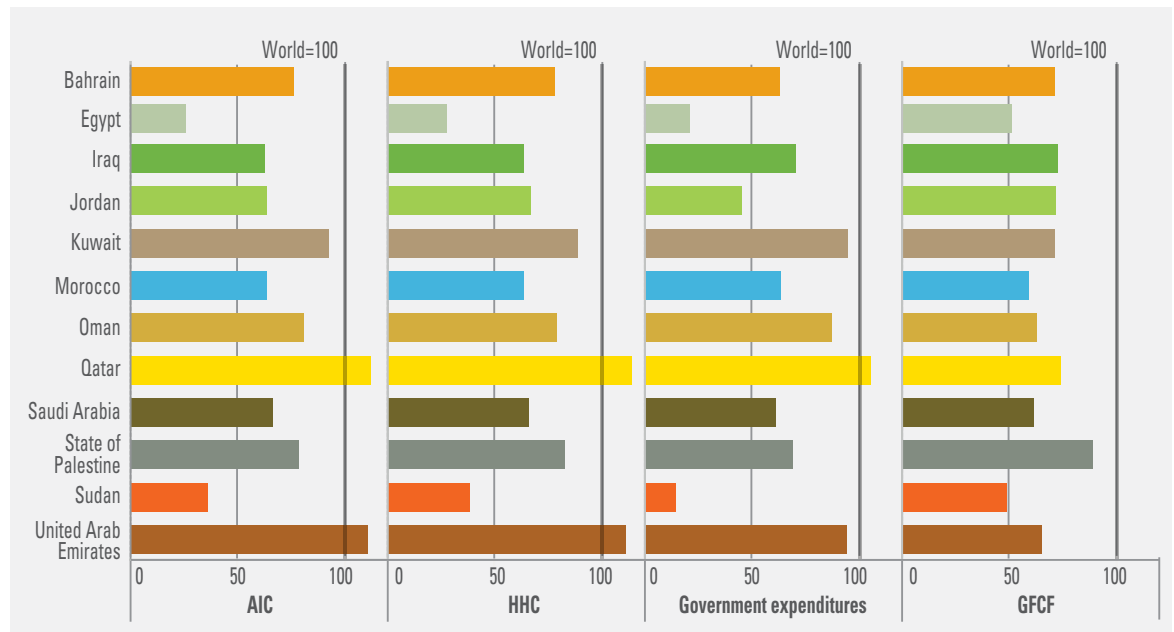
**Figure 4.2.** Country shares out of the Arab region's real and nominal GDP, 2017



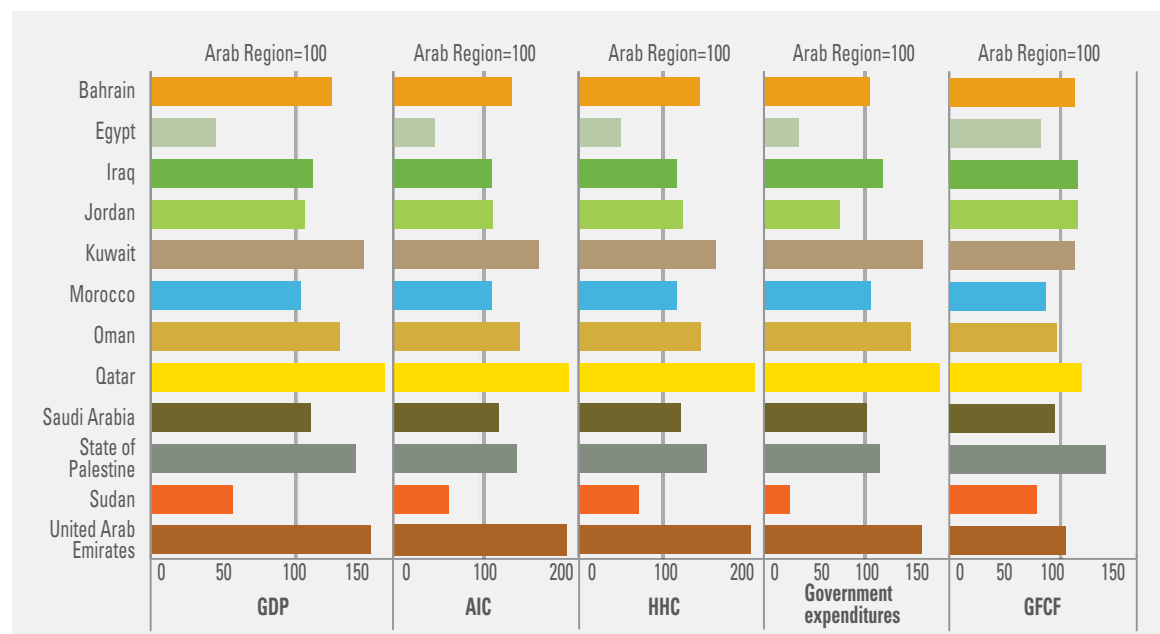
**Figure 4.3.** Arab countries' general PLI, 2017 (world = 100)



**Figure 4.4.** Arab countries' PLIs at major aggregate levels, 2017 (world = 100)



**Figure 4.5. Arab countries' PLIs at major aggregate levels, 2017 (Arab region = 100)**



#### • Per capita income and material well-being

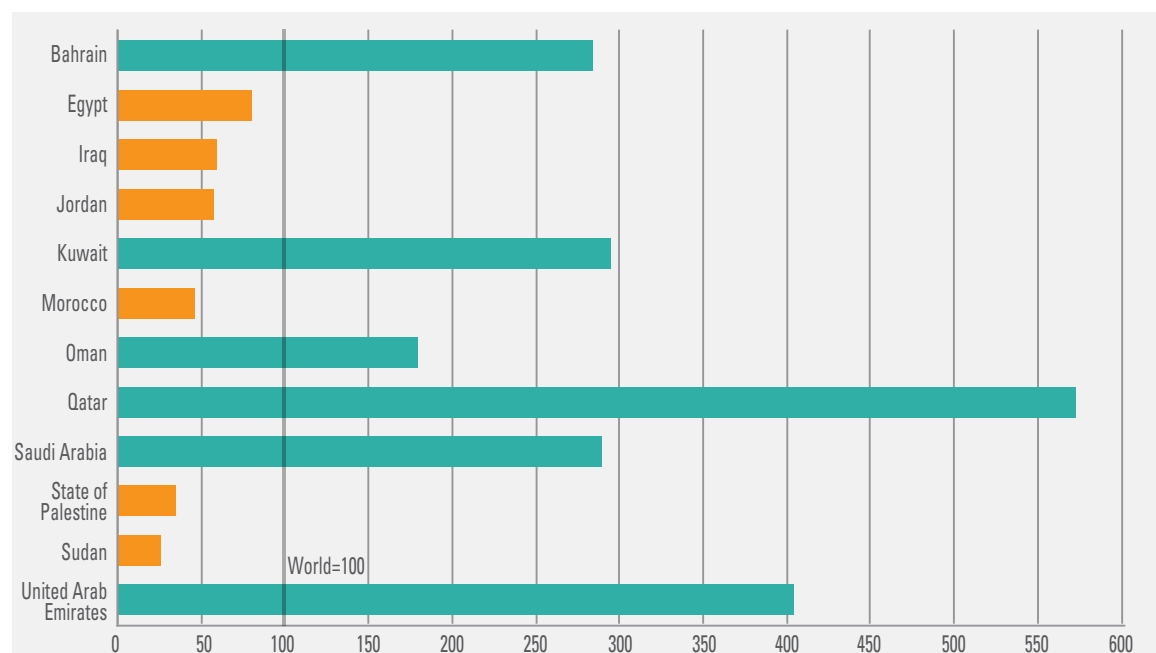
Overall, the average real per capita GDP in the Arab region for 2017 was \$18,266, 10 per cent higher than the real global average per capita GDP of \$16,596. The regional nominal average per capita GDP was 33 per cent lower than the global nominal average. There are many disparities in per capita income across Arab countries. For instance, Qatar has the highest real per capita income in the region at \$95,063, which is the second highest in the world, preceded only by Luxembourg. In contrast, the real per capita income in the Sudan falls to \$4,331. The index of real per capita income compared with the world as base (world=100) indicates significant variations between Arab countries (26 for the Sudan compared with 573 for Qatar), as shown in figure 4.6. All GCC countries have an index greater than 100, while all non-GCC countries have an index below 100.

If a spatial comparison of per capita income were performed using exchange rate-based conversion, Saudi Arabia would have a lower per capita GDP than Bahrain. However, in real

terms, a PPP-based comparison would show that per capita GDP in Saudi Arabia was higher than in Bahrain. Similarly, while an exchange rate-based comparison would reflect a lower per capita income in Egypt than in Iraq, Jordan, Morocco and the State of Palestine, a PPP-based comparison would show that real per capita income in Egypt was higher than that of the four other countries. Figure 4.7 depicts a 2017 multidimensional comparison of Arab economies based on real economy size, price-level index at the total GDP level, and real per capita income where the Arab region is set as base with a PLI equal to 100, and where the bubble size reflects the real GDP of each economy.

Material well-being is measured by the value of per capita AIC. The average real per capita AIC of the Arab region in 2017 was \$11,699, 8 per cent higher than the world's average of \$10,858. However, the regional nominal per capita average AIC was 41 per cent lower than the global one. The United Arab Emirates recorded the highest real per capita AIC in the region at \$25,794, while the Sudan recorded the lowest at \$3,717. Observing the index of real per capita AIC with the world as base,

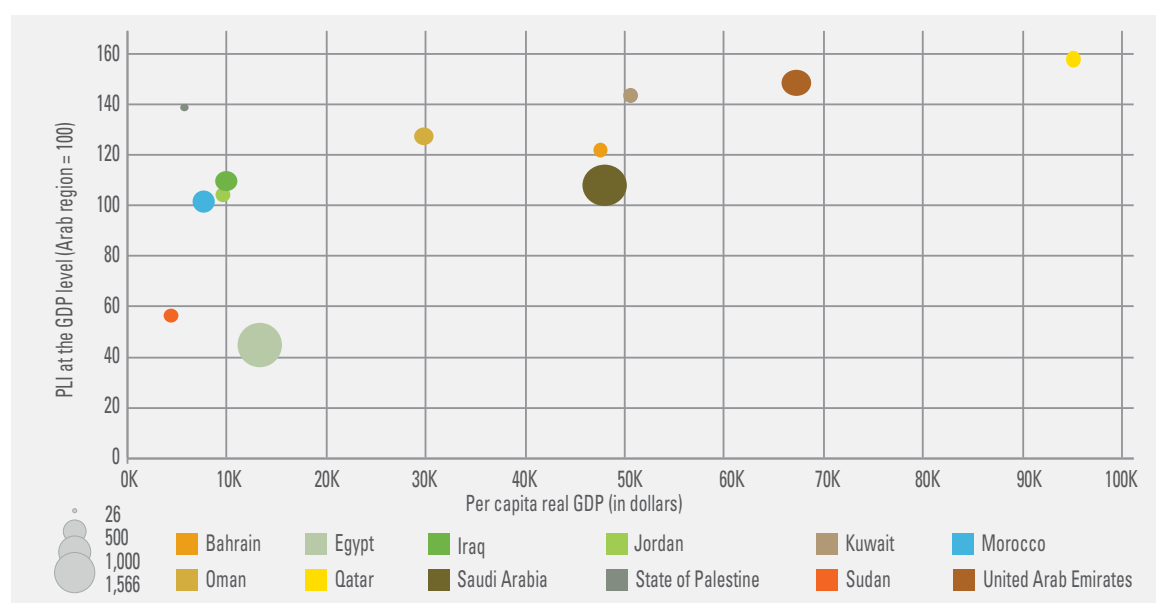
**Figure 4.6.** 2017 Index of real per capita income (world = 100)



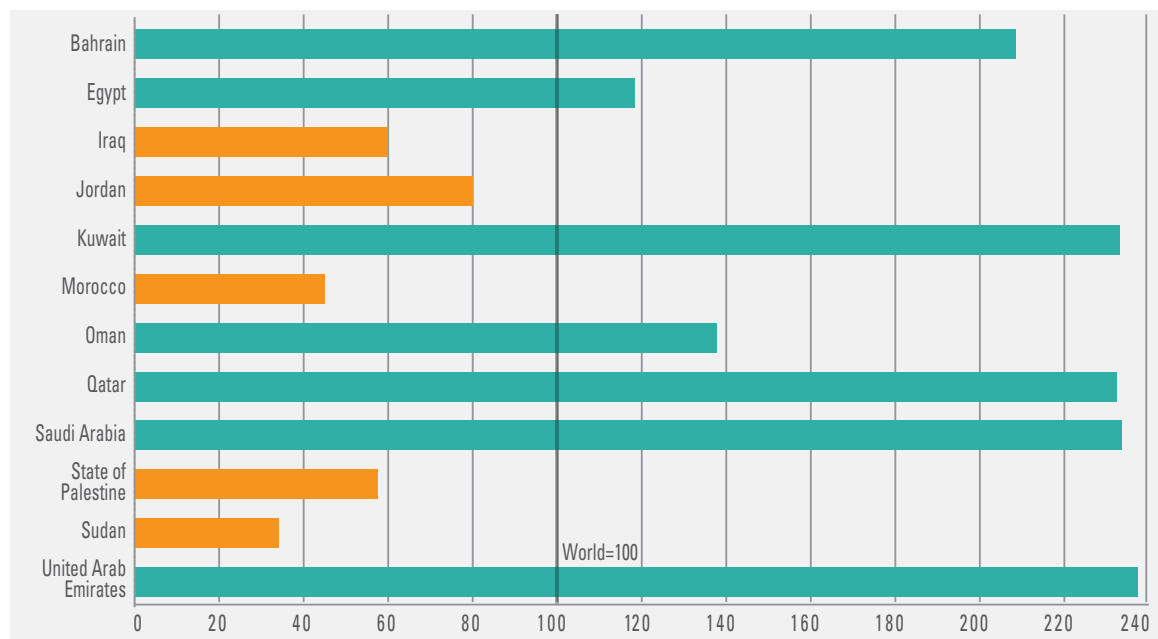
variations in the Arab region ranged from 34 in the Sudan to 238 in the United Arab Emirates, as shown in figure 4.8. Figure 4.9 presents a comparison of real per capita GDP and real per capita AIC for 2017 for the 12 Arab countries. The real per capita

AIC in Qatar is still among the highest in the Arab region although it is much smaller than the national real per capita income, in contrast to Egypt where the real per capita AIC dominates most of the national real per capita income.

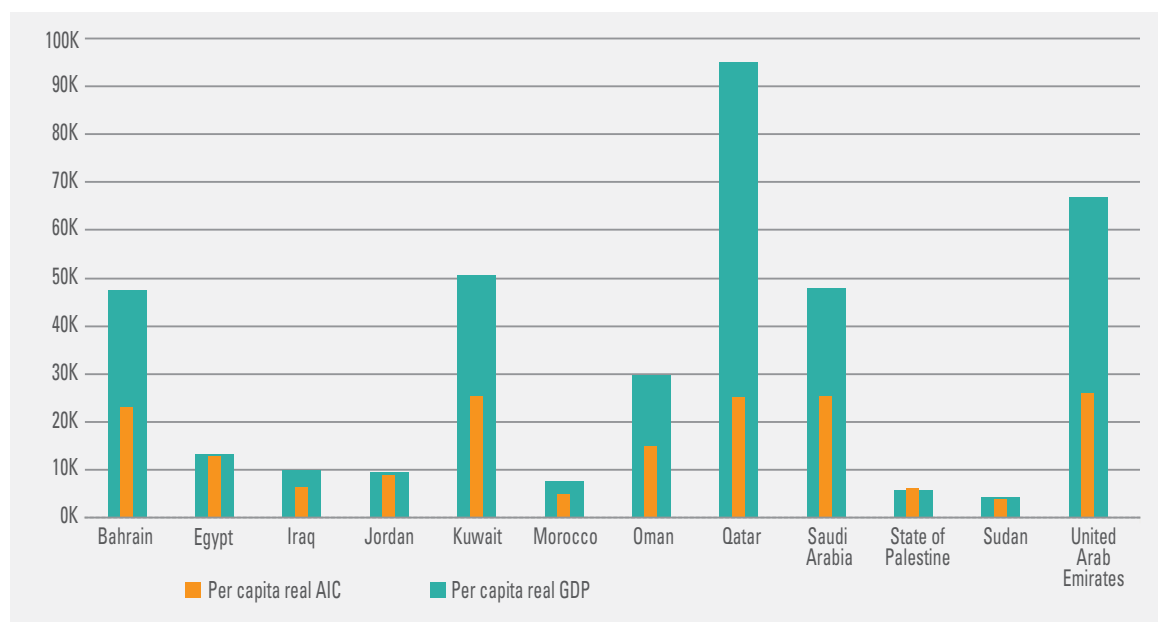
**Figure 4.7.** Bubble graph on the relationship between real GDP, per capita real GDP and PLI at the GDP level in Arab countries, 2017



**Figure 4.8.** 2017 Index of real per capita AIC expenditures (world = 100)



**Figure 4.9.** Real per capita GDP and AIC, 2017

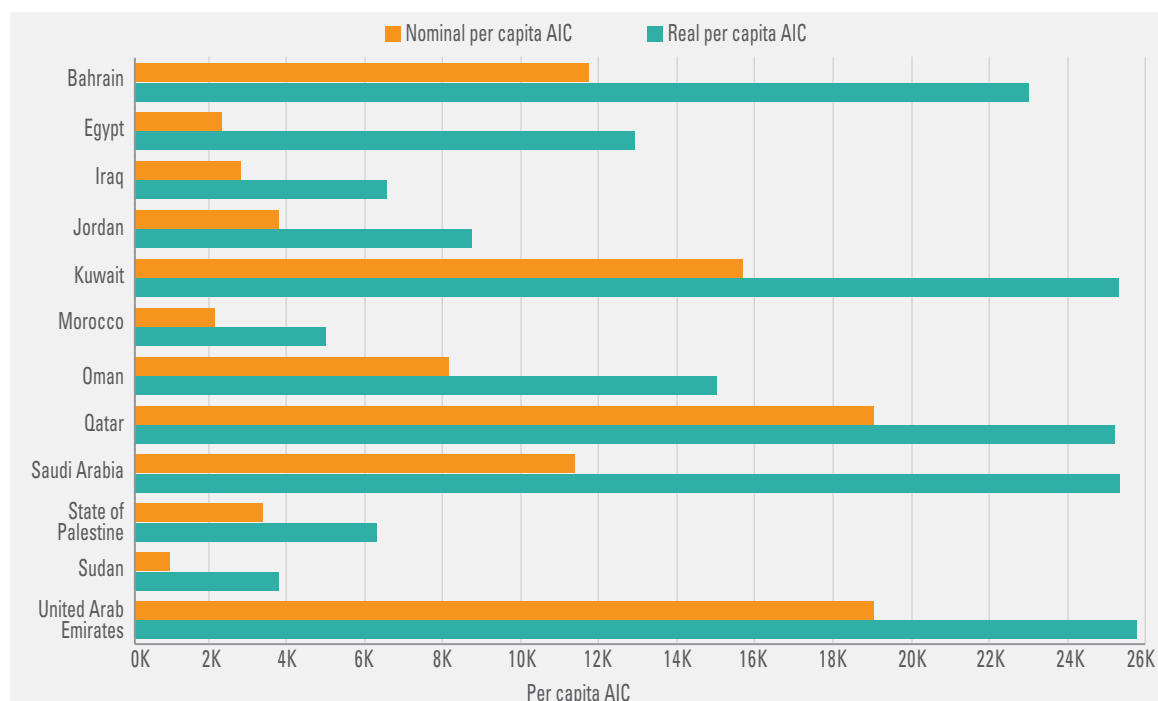


When conducting cross-country comparisons of material well-being, results differ when comparing real versus nominal per capita AIC (figure 4.10). For instance, when considering exchange rate-based per capita AIC, Saudi Arabia appears lower than Bahrain, Kuwait and

Qatar in terms of well-being, whereas the PPP-based comparison reflects a different situation. In nominal terms, Saudi Arabia's per capita AIC is 40 per cent lower than that of Qatar. However, in real terms, per capita AIC is almost equal in Saudi Arabia and Qatar. Moreover,



**Figure 4.10. Real versus nominal per capita AIC expenditures, 2017**



comparisons of nominal per capita AIC show that in 2017 material well-being was lower in Egypt than in Iraq, Jordan and the State of Palestine. However, real per capita AIC shows a higher level of material well-being in Egypt than in Iraq, Jordan and the State of Palestine. For example, nominal per capita AIC in Egypt was 18 per cent lower than in Iraq in 2017, but real per capita AIC in Egypt was almost twice the real per capita AIC in Iraq.

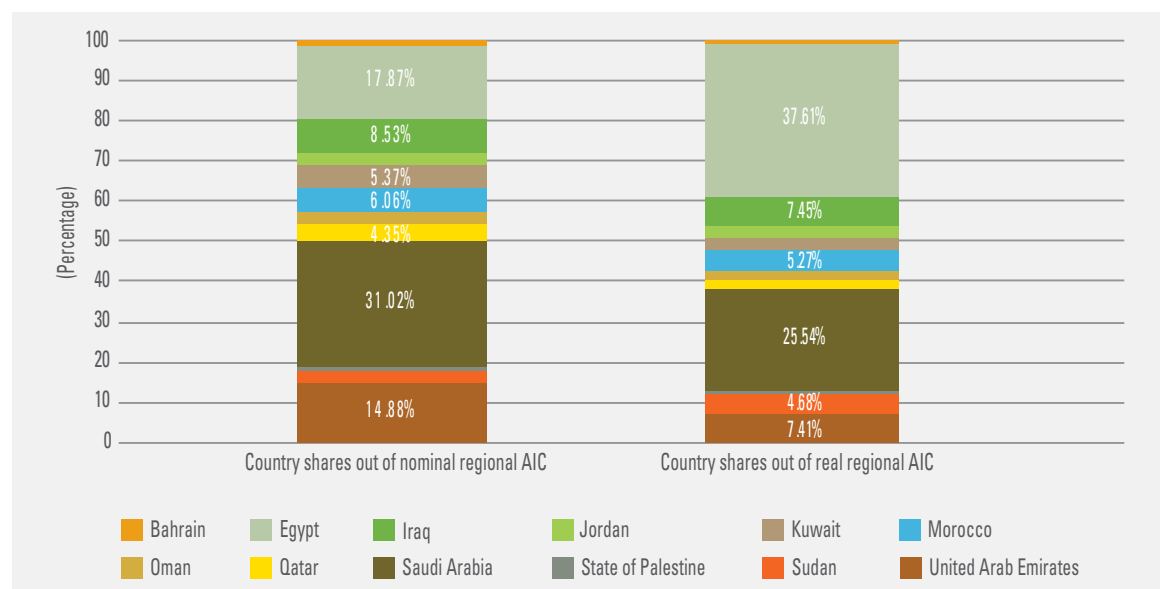
- **Individual consumption expenditures**

Overall, real expenditures on AIC in the Arab region totalled \$3,239 billion in 2017, representing 4 per cent of total real global expenditures on AIC; whereas nominal expenditures on AIC equalled \$1,190 billion, representing only 2 per cent of nominal global expenditures on AIC. Therefore, when using PPPs instead of exchange rates, the contribution of the Arab region to world expenditures on AIC almost doubles. The largest real AIC contribution to the regional total in 2017 was in Egypt at \$1,218 billion, which made up 38 per cent of total regional AIC expenditures,

followed by Saudi Arabia which contributed \$827 billion, or 26 per cent of real regional AIC expenditures. Together, Egypt and Saudi Arabia contributed over half of real regional expenditures on AIC. In nominal terms, Egypt and Saudi Arabia remained the largest contributors to regional expenditures on AIC, but with the largest share attributed to Saudi Arabia at 31 per cent instead of Egypt which contributed only 18 per cent in nominal terms. Country shares of the Arab region's real and nominal AIC expenditures are presented in figure 4.11.

As for real household consumption (HHC) expenditure, which includes consumption expenditure by households and non-profit institutions serving households (NPISHs) but excludes individual consumption expenditure by Government, the Arab region also made up 4 per cent of the world's total, with Egypt as the biggest contributor at \$1,063 billion, equivalent to 40 per cent of the regional total. However, if household consumption expenditure is compared in nominal terms, the Arab region would be contributing only 2 per cent of the world total,

**Figure 4.11.** Country shares out of the Arab region's real and nominal AIC, 2017

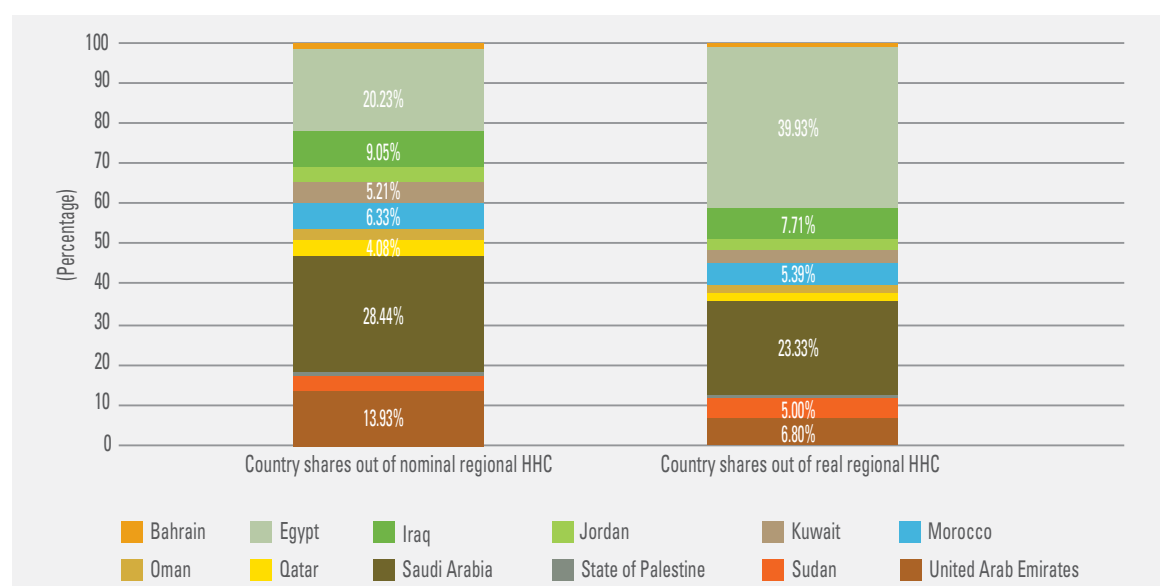


with Egypt as the second biggest contributor in the region with a contribution of 20 per cent, and Saudi Arabia coming first at 28 per cent. Figure 4.12 provides a comparison of country shares of the Arab region's real and nominal household consumption expenditures.

Regarding per capita household consumption expenditure, in real terms, the Arab region's

average was \$9,618 in 2017, only 7 per cent higher than the global average of \$8,983. In nominal terms, the regional average per capita household consumption expenditure was 42 per cent lower than the world's nominal average. The highest value in the Arab region in 2017 was marked in Kuwait, with a per capita expenditure on household consumption equal to \$20,714, equivalent to a per capita index of 218 compared

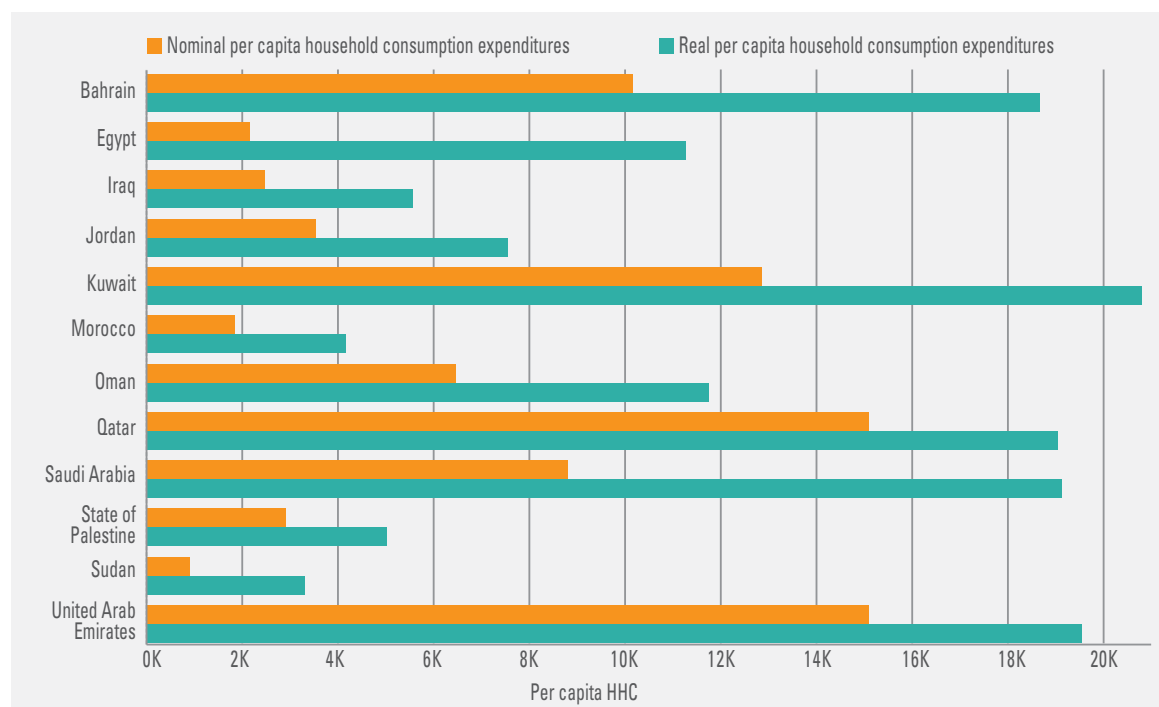
**Figure 4.12.** Country shares out of the Arab region's real and nominal HHC, 2017



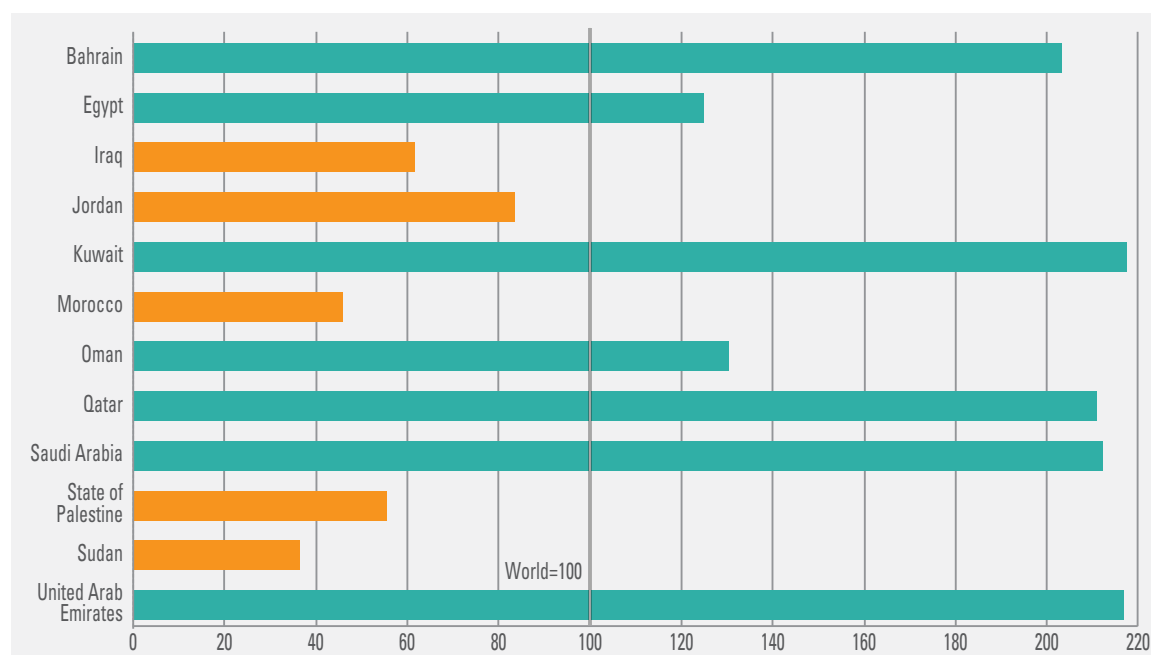
with the world's average of 100, followed by the United Arab Emirates and Saudi Arabia with per capita expenditures of \$19,464 and \$19,049, respectively. However, in nominal terms, the

highest per capita expenditure on household consumption would be recorded by the United Arab Emirates at \$15,025, followed by Qatar and Kuwait with per capita expenditures of \$15,019

**Figure 4.13. Real versus nominal per capita household consumption expenditures, 2017**



**Figure 4.14. Index of real per capita household consumption expenditures, 2017 (world = 100)**



and \$12,799, respectively. Figure 4.13 shows the real versus nominal values of per capita household consumption expenditures in the Arab region for 2017. Figure 4.14 presents the index of real per capita household consumption expenditure for Arab countries with the world as base with an index value of 100. Figure 4.14 shows that Egypt is the only non-GCC country with a real per capita HHC expenditure index above the world's average.

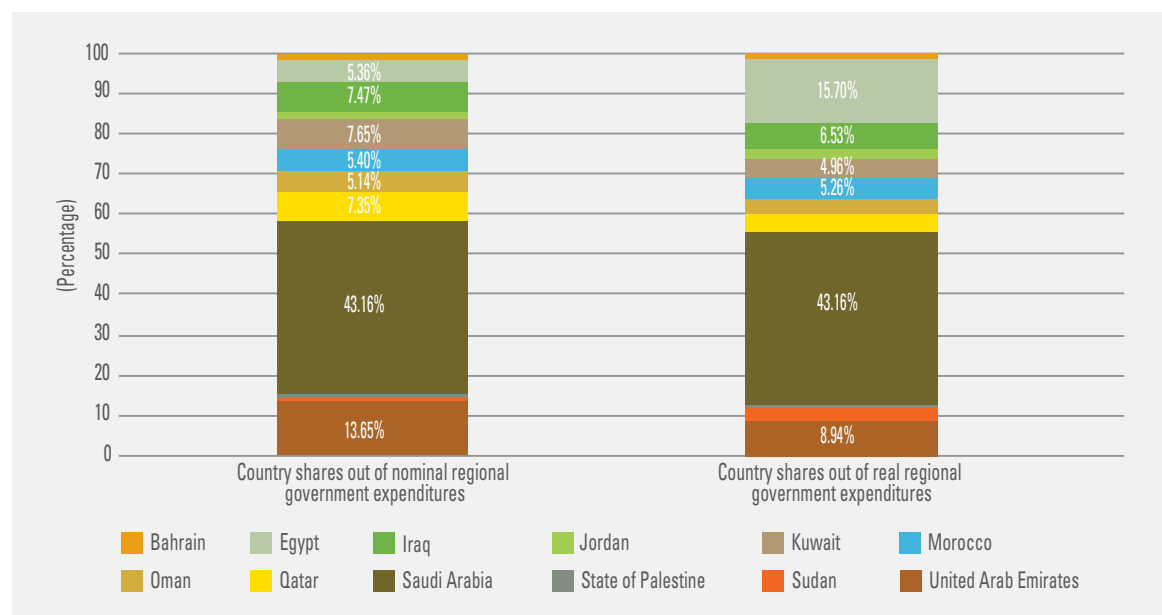
#### • Government expenditures

In 2017, the Arab region spent \$1,161 billion on government expenditures, or the equivalent of 5 per cent of the world's total expenditures, on government consumption in real terms, as opposed to \$385 billion, or the equivalent of 3 per cent of the world's total expenditures on government consumption, in nominal terms. The highest real government spending in the region in 2017 was recorded in Saudi Arabia at \$501 billion, while the lowest was recorded in the State of Palestine at \$10 billion. If examined in nominal terms, however, Saudi Arabia would retain the highest government consumption expenditure

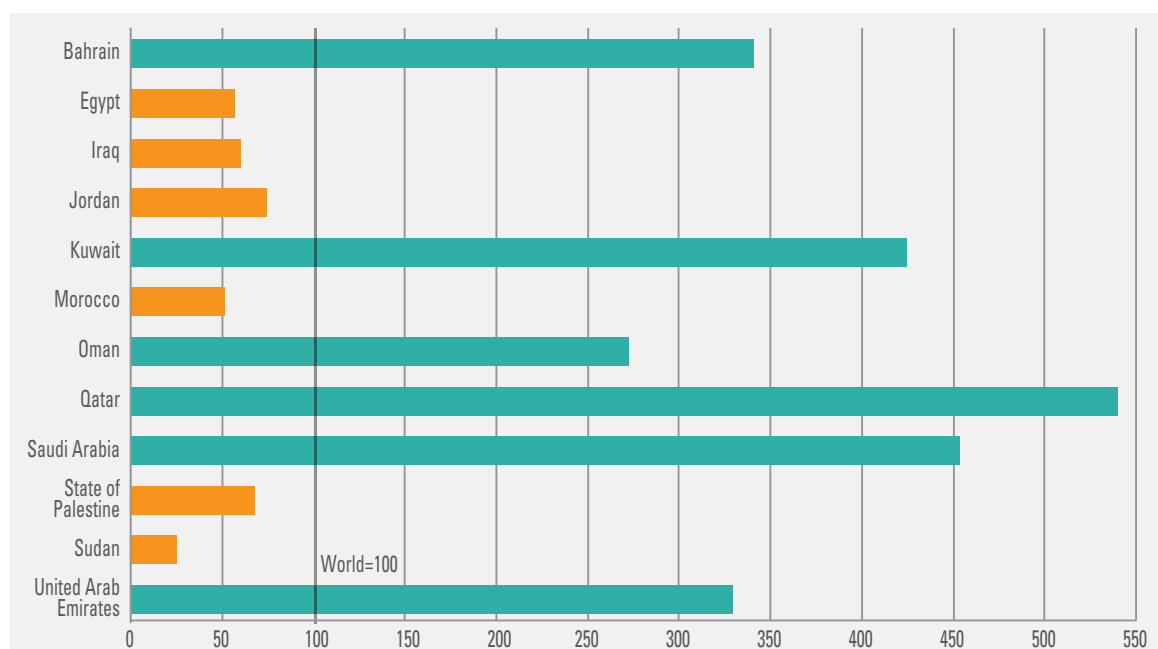
but the lowest regional contribution would correspond to the Sudan instead of the State of Palestine. Figure 4.15 shows Arab countries' shares of regional government consumption expenditures in both real and nominal terms.

In terms of per capita expenditure on government consumption, the Arab region's PPP-based average of \$4,190 stood higher than the world's average of \$3,384 by around 24 per cent, whereas its exchange rate-based average of \$1,392 was around 24 per cent lower than the world's average. With a real per capita value of \$18,286, Qatar ranked the highest in the region in terms of per capita expenditure on government consumption, while the Sudan ranked the lowest with real per capita government consumption of \$846. The State of Palestine, whose real total expenditure on government consumption was the lowest in the region, ranked higher than Iraq, Egypt, Morocco and the Sudan in terms of real per capita expenditure on government consumption. Looking at the index of real per capita government consumption expenditure with the world as base, variations in the region ranged from 25 to 540 compared with the world's index of 100 (figure 4.16).

**Figure 4.15.** Country shares out of the Arab region's real and nominal government consumption expenditures, 2017



**Figure 4.16.** Index of real per capita government consumption expenditures, 2017 (world = 100)

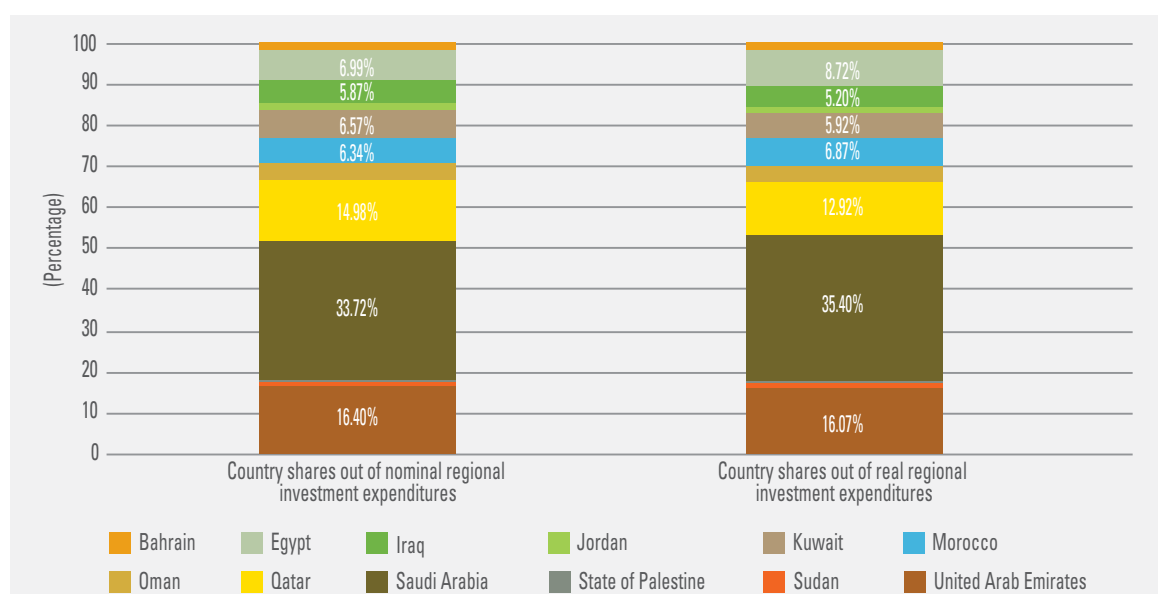


- Investment expenditures**

In real terms, the Arab region spent \$1,117 billion on investment in 2017, which represents 4 per cent of the world's real investment expenditures. The value of investment expenditures - or expenditures on gross fixed capital formation (GFCF) - in PPP

terms in the Arab region in 2017 was more than double its value in exchange rate terms, and the Arab region's share out of the world's real expenditures on GFCF was greater than implied by the exchange rate. The highest spender on investment in the region was Saudi Arabia, contributing 35 per cent of the region's real

**Figure 4.17.** Country shares out of the Arab region's real and nominal investment expenditures, 2017



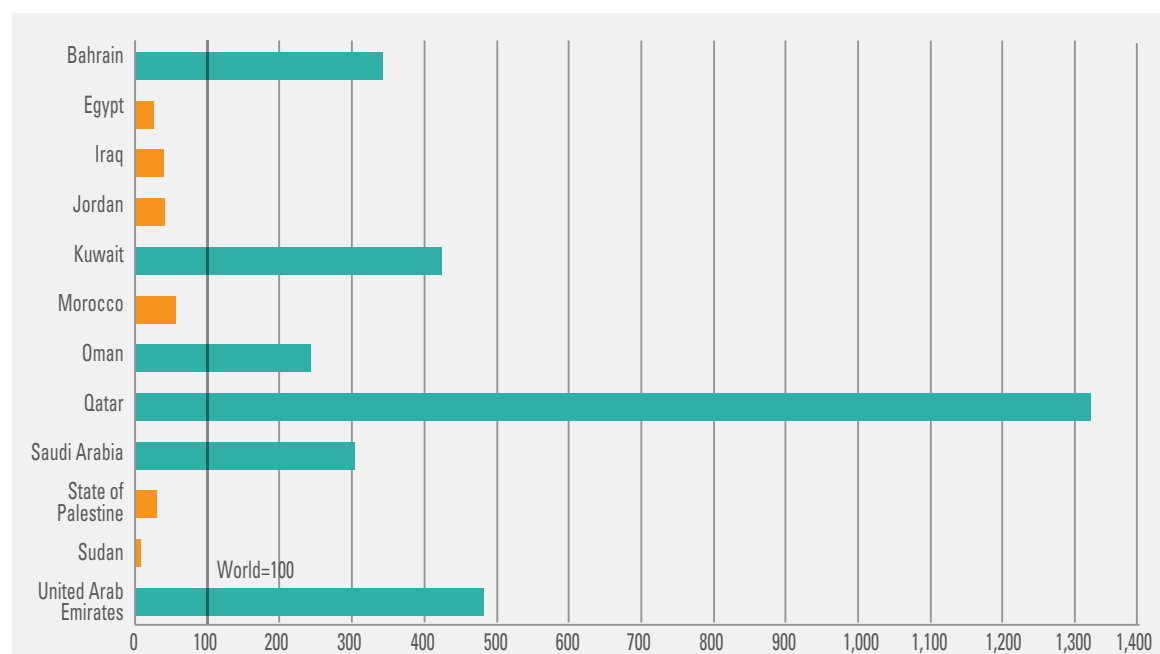
investment expenditures, followed by the United Arab Emirates and Qatar, whose investment expenditures represented 16 per cent and 13 per cent of the regional investment expenditures, respectively. All other Arab countries combined contributed less than 50 per cent of the regional total. The country expenditure shares on investment out of the regional total in both real and nominal terms are illustrated in figure 4.17.

On the basis of real per capita expenditure on investment, the region's average of \$4,034 was slightly above the world average of \$4,003 in 2017, with a 1 per cent difference between them, while the regional average was 36 per cent lower than the global average in nominal terms. Qatar ranked the highest in the region with \$52,960 in terms of real per capita expenditure on investment, followed by the United Arab Emirates at \$19,288. Looking at the index of real per capita expenditure on investment with the world as base, variations ranged from 8 in the Sudan to 1,323 in Qatar (figure 4.18).

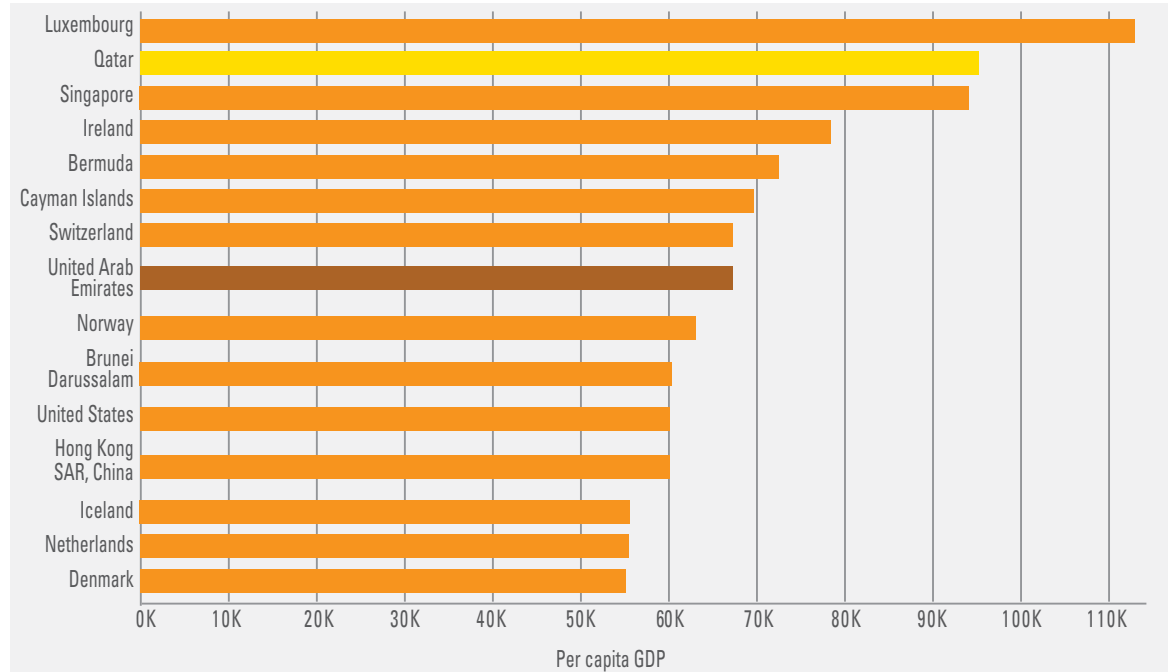
- **Arab countries' per capita expenditures relative to the rest of the world**

Looking at real (PPP-based) per capita expenditures for all ICP participating countries in the world in 2017, some Arab countries were among the top 15 with the highest real per capita expenditures on GDP and some major aggregates. For instance, figure 4.19 lists the 15 countries with the highest real per capita income in 2017, where Qatar scored the second worldwide and the United Arab Emirates came in eighth place among all ICP participating countries globally. Moreover, three Arab countries were among the 15 with the largest real per capita government consumption expenditures in 2017, namely Kuwait, Qatar and Saudi Arabia (figure 4.20). Furthermore, figure 4.21 shows the 15 countries with the highest per capita real expenditures on GFCF in 2017, with four from the Arab region, namely Bahrain, Kuwait, Qatar and the United Arab Emirates. As for real expenditures on AIC and HHC, no Arab country was in the top 15.

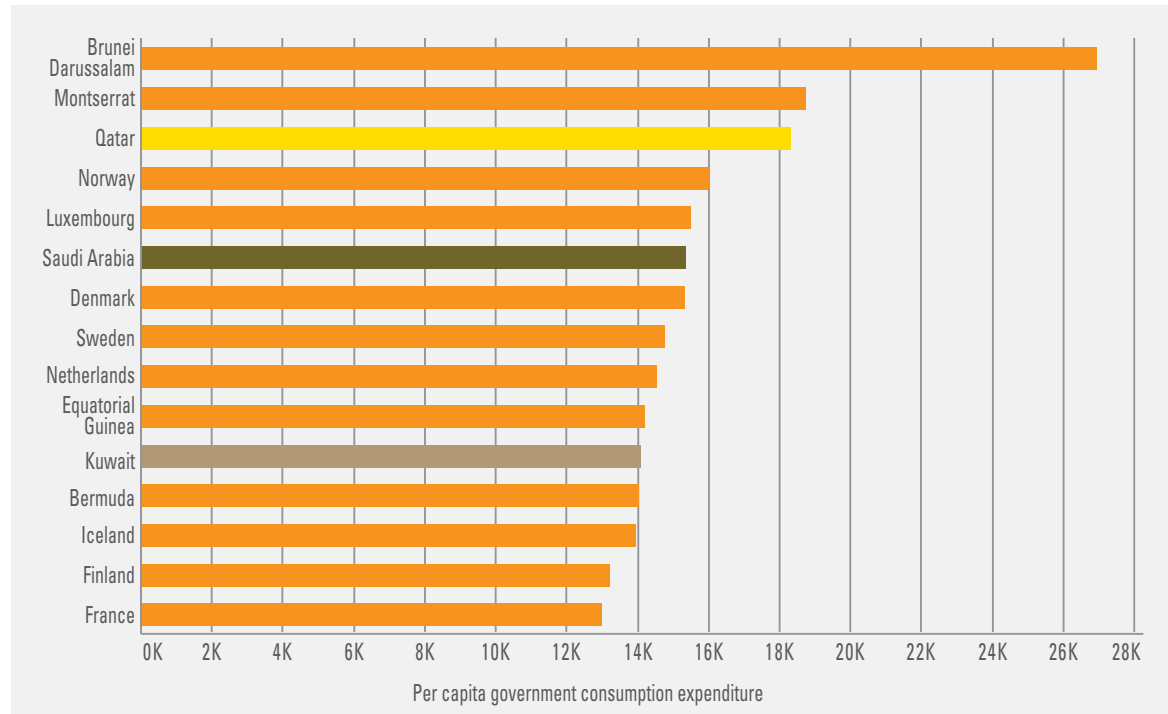
**Figure 4.18.** Index of real per capita investment expenditures, 2017 (world = 100)



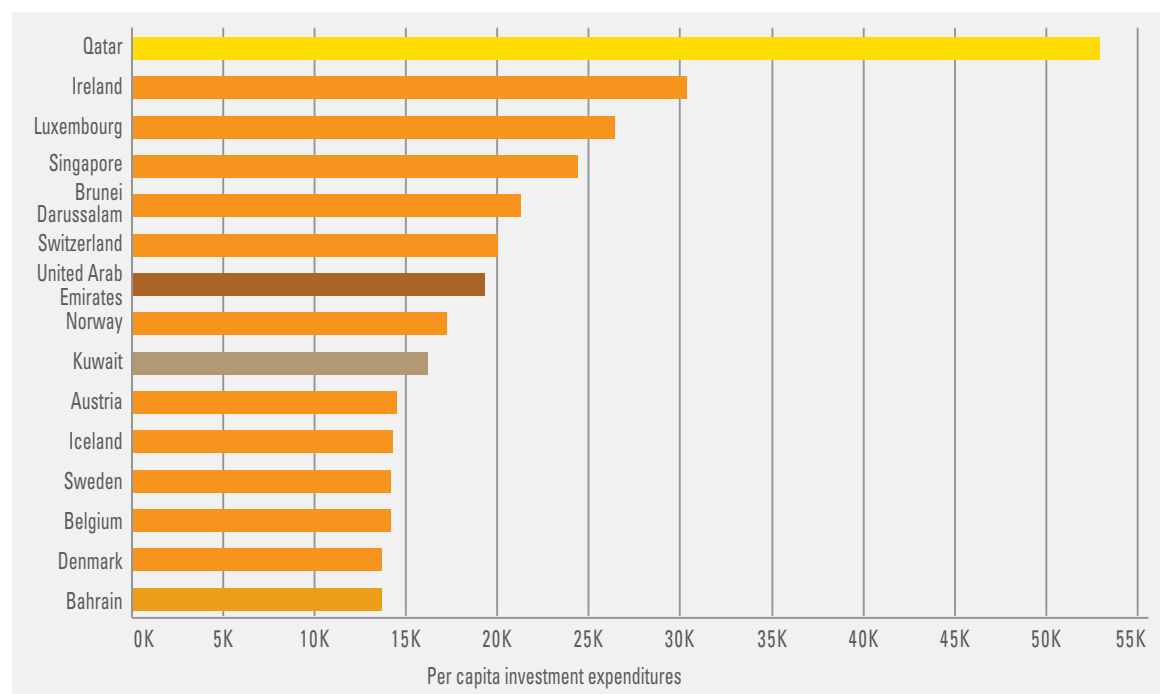
**Figure 4.19.** Top 15 countries with the highest per capita GDP, 2017



**Figure 4.20.** Top 15 countries with the highest per capita government consumption expenditures, 2017



**Figure 4.21.** Top 15 countries with the highest per capita investment expenditures, 2017



## Comparison of major cross-country findings

The present section will provide a bird's-eye view comparison of cross-country findings. The comparison will highlight the most noticeable spatial changes, such as major changes in country rankings or changes in country contributions to the regional economy over the period 2011-2017, in addition to price level comparisons.

### • GDP and its aggregates

The global contribution of the Arab region's real GDP fell from 5 per cent in 2011 to 4 per cent in 2017, even though the region's country composition increased from 11 countries in 2011 to 12 countries in 2017. The ranking of country contributions to the regional economy remained mostly consistent across the years, with Saudi Arabia, Egypt and the United Arab Emirates contributing the largest expenditure shares of real GDP to the regional economy, respectively. Bahrain and the State of

Palestine constituted the smallest economies in the region. Figure 4.22 depicts the country shares of the regional real GDP, and shows the change in country contributions over the period 2011-2017. As shown in figure 4.22, the biggest economy in the region was Saudi Arabia over that period, while Egypt remained the second biggest economy in the region but with a rising regional real GDP contribution. In nominal terms, the United Arab Emirates was the second highest share contributor to the regional economy followed by Egypt.

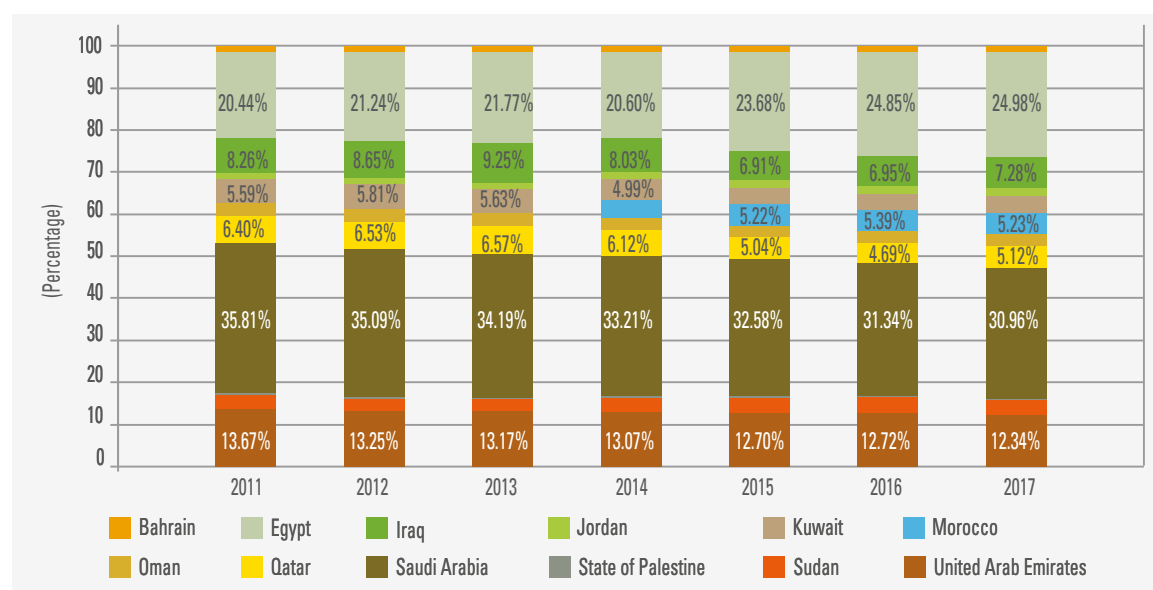
Figure 4.23 shows the evolution of country shares of regional real AIC expenditures over the period 2011-2017. In 2011, similarly to 2017, the Arab region's real total expenditures on AIC represented 4 per cent of total global expenditures on AIC, with the largest regional spending recorded in Egypt. At the regional level, rankings of country shares of regional expenditures on AIC remained constant over the period 2011-2017, with the second highest share of real expenditures on AIC recorded in Saudi Arabia. Conversely,



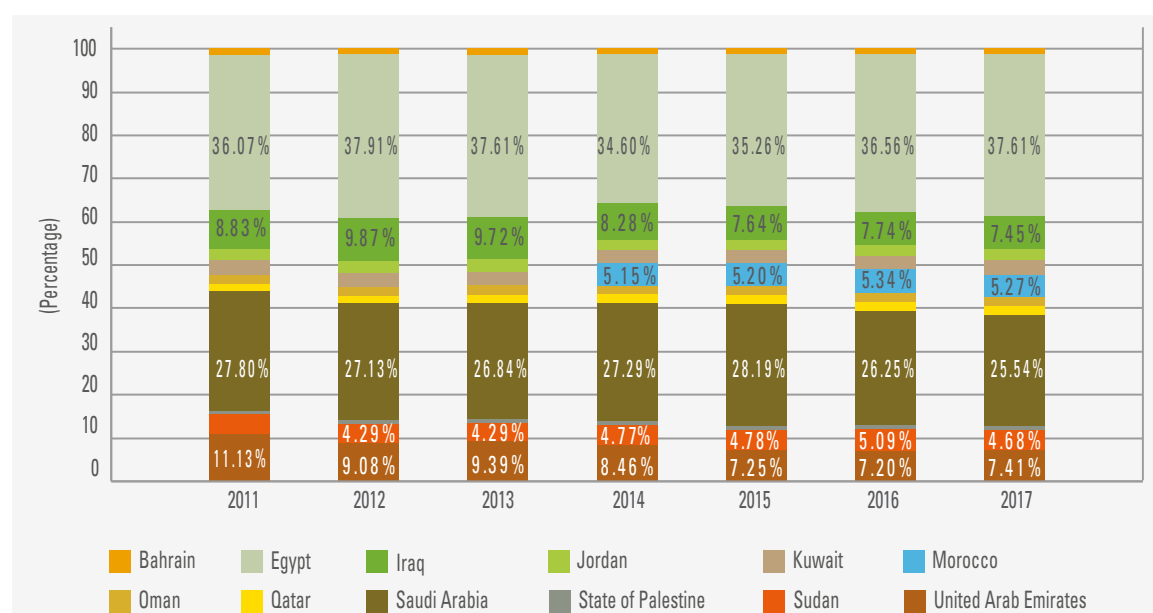
when looking at country contributions to regional expenditures on AIC in nominal terms, Saudi Arabia appears to have the highest share of expenditures on AIC, followed by Egypt. Similarly, in real terms, the Sudan ranked higher than in nominal terms. In contrast, Qatar had a lower share of real regional expenditures on AIC than was implied by the exchange rate.

As for real total household consumption expenditures, the highest household consumption expenditure in the region over the period 2011-2017 was recorded in Egypt in real terms, while both Egypt and Saudi Arabia had somewhat equal shares in nominal terms, with the Saudi share of real regional household consumption expenditures exceeding that of Egypt in 2016 and 2017. Together, Egypt and Saudi Arabia

**Figure 4.22. Country shares out of real regional GDP, 2011-2017**



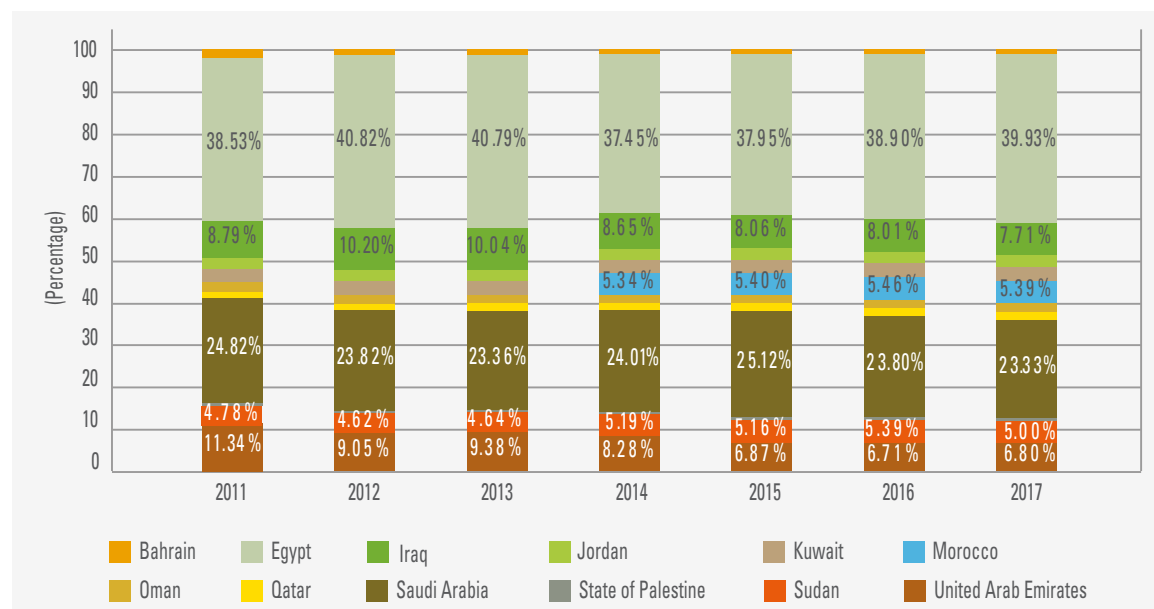
**Figure 4.23. Country shares out of real regional AIC, 2011-2017**



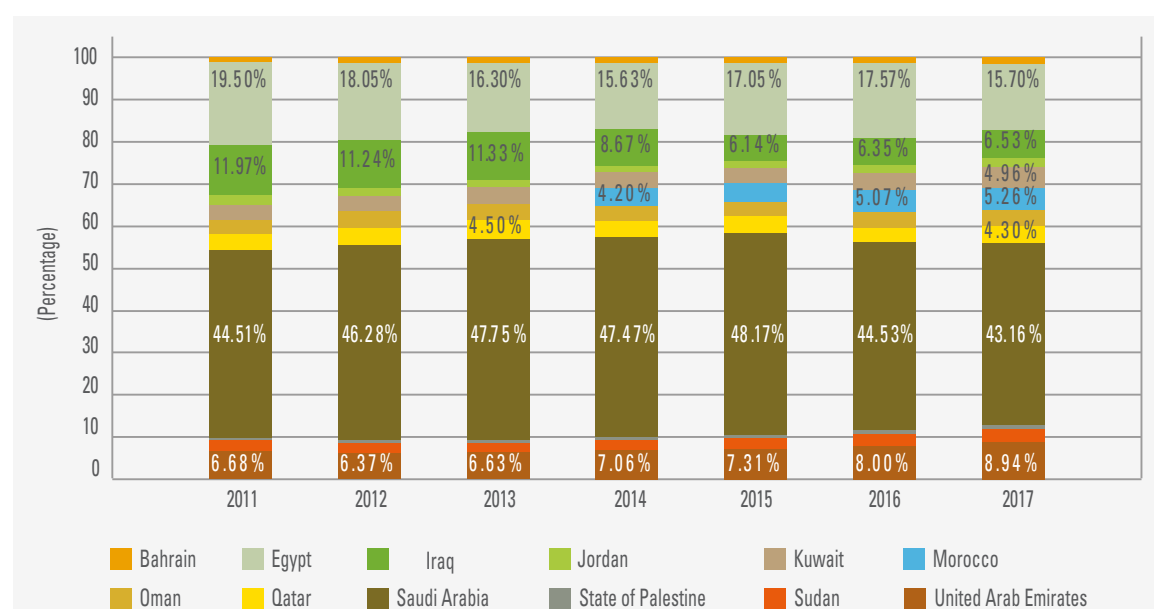
contributed over 60 per cent of regional household consumption expenditures in real terms, while their combined contribution made up only around half of regional household consumption expenditures in nominal terms. The annual country shares of regional real household consumption expenditures for the period 2011-2017 are presented in figure 4.24. When comparing country contributions to

regional household consumption expenditures in real and nominal terms over the same period, the Sudan had a higher share of household consumption expenditures than Kuwait in real terms, but it is the other way around in nominal terms. Moreover, the Qatari share of regional household consumption expenditures appeared to be lower in real terms than in nominal terms.

**Figure 4.24. Country shares out of real regional household consumption expenditures, 2011-2017**



**Figure 4.25. Country shares out of real regional government consumption expenditures, 2011-2017**



Looking at government consumption expenditure, the contribution of the Arab region to real government consumption expenditure remained stable at 5 per cent between 2011 and 2017. However, in nominal terms, the Arab region's contribution increased from 2 per cent in 2011 to only 3 per cent in 2017. Within the Arab region, Saudi Arabia reported the highest value of real government consumption expenditure for the period 2011-2017 in both real and nominal terms, as it contributed over 40 per cent of regional expenditures on government consumption in real terms. In nominal terms, the United Arab Emirates had the second highest consumption expenditure by government in the region, except in 2011 when Iraq was in second place. When the comparison is conducted in real terms, Egypt takes second place and has a higher government consumption expenditure than the United Arab Emirates. Figure 4.25 presents country shares of regional real government consumption expenditures for the period 2011-2017.

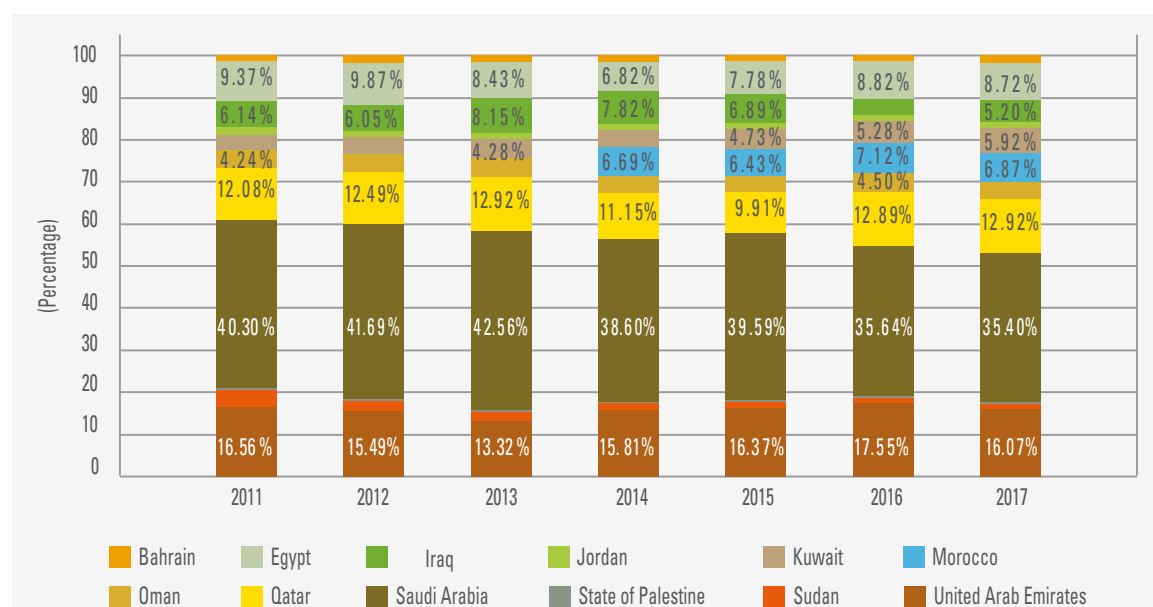
Lastly, regarding spending on investment, the three Arab countries with the largest spending on GFCF are Saudi Arabia, the United Arab Emirates and Qatar, respectively, over the period

2011-2017 in both real and nominal terms. Figure 4.26 shows that these three countries together contributed over 60 per cent of regional spending on investment, whether in real or nominal terms. The other Arab countries combined contributed less than 40 per cent of regional investment expenditures.

#### • Income, well-being and other per capita measures

In the Arab region, the regional average real per capita income decreased over the period 2011-2017 by approximately 16 per cent, from \$21,631 in 2011 to \$18,266 in 2017. When comparing the Arab regional average of per capita income with the world's average for the two benchmark years 2011 and 2017, the average per capita income of the Arab region is higher than the world's average in real terms. In nominal terms, however, the regional average is lower than the world average. Qatar had the highest real per capita income in the Arab region over the same period, which was substantially higher than all other Arab countries, reaching its peak value in 2012 at \$169,699, almost double the real per capita income of Kuwait at \$85,284. Kuwait was in second place

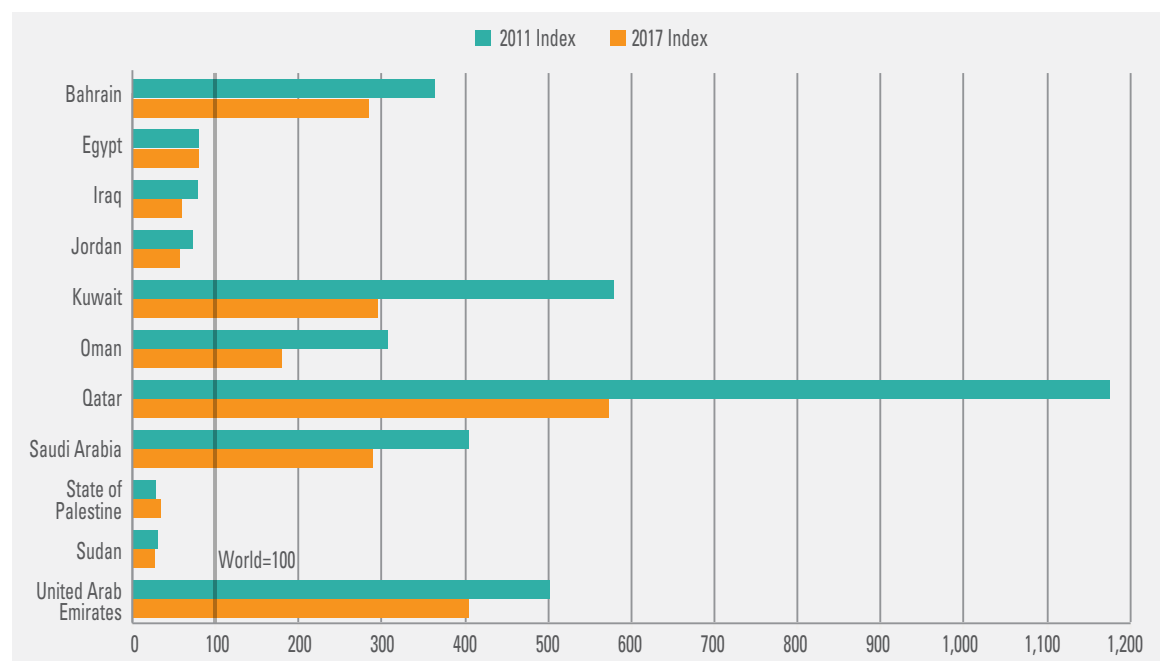
**Figure 4.26. Country shares out of real regional investment expenditures, 2011-2017**



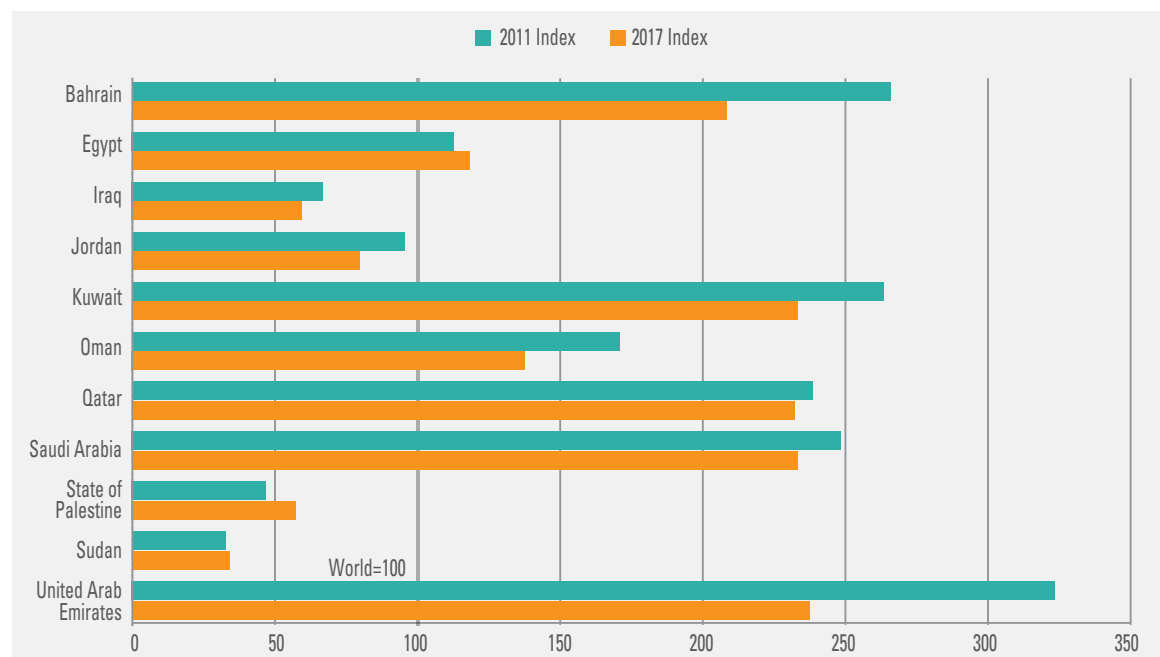
in 2012, with the second highest per capita income in the region. At the global level, Qatar came in first place in 2011, with the highest real per capita income globally at \$163,740. In 2017, however, it came in second place after Luxembourg, with a real per capita income of \$95,063. Rankings of real per

capita income in the Arab region from the highest to the lowest remained mostly consistent across the period, with few changes in the order between countries with close rankings. Figure 4.27 shows the 2011 versus the 2017 indices of real per capita income for the Arab region with the world as base.

**Figure 4.27.** Indices of real per capita income, 2011 and 2017 (world = 100)



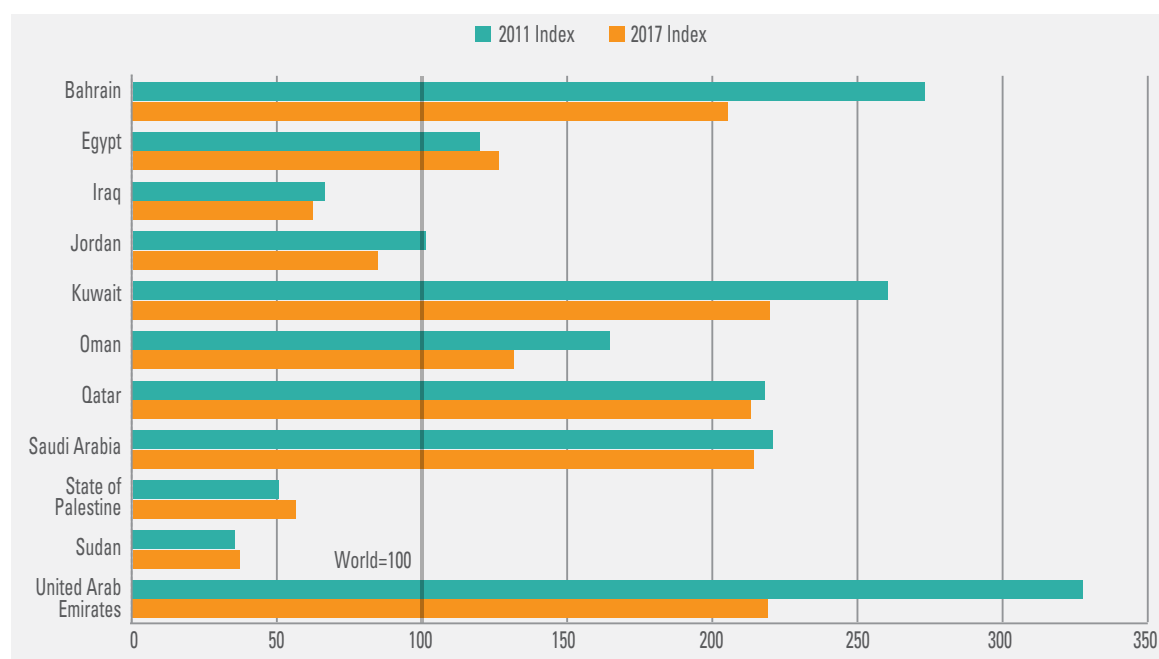
**Figure 4.28.** Indices of real per capita AIC expenditures, 2011 and 2017 (world = 100)



As for material well-being, the United Arab Emirates ranked first in the region with the highest real per capita AIC in both 2011 and 2017, recording a PPP-based per capita AIC of \$28,728 in 2011 and \$25,794 in 2017. However, even though the United Arab Emirates did not have the highest

per capita AIC across the period, rankings of material well-being in the Arab region in general remained mostly consistent over the seven years, with per capita AIC being the highest in Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates (whose per capita AIC expenditures

**Figure 4.29.** Indices of real per capita household consumption expenditures, 2011 and 2017 (world = 100)



**Figure 4.30.** Indices of real per capita government consumption expenditures, 2011 and 2017 (world = 100)



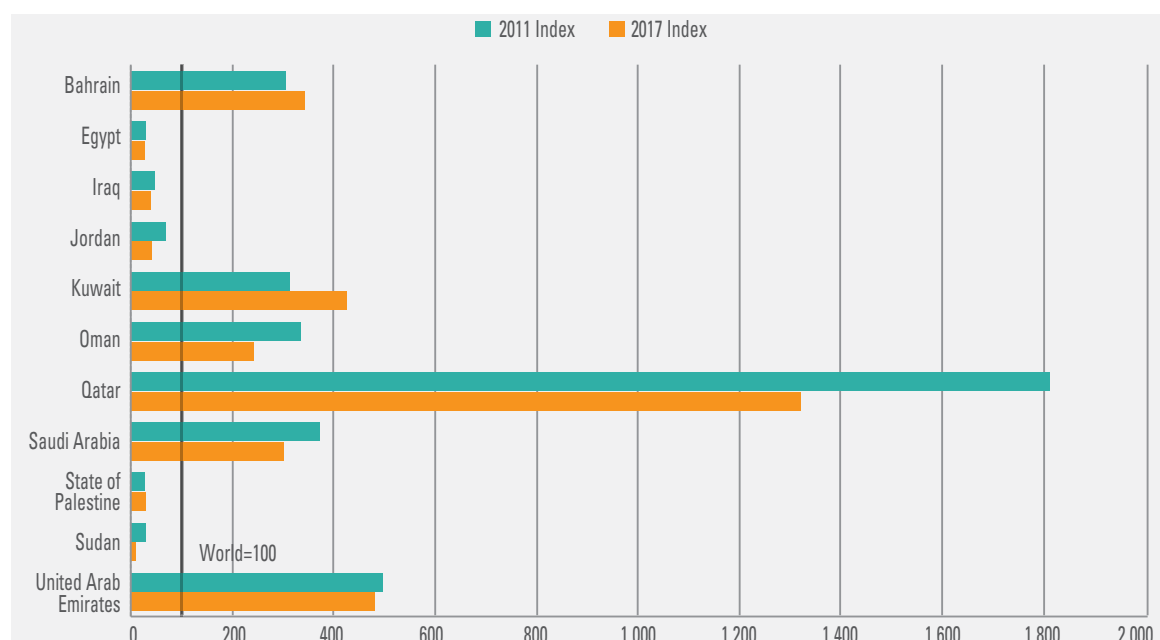
exceeded \$20,000 each), followed by Oman with per capita AIC expenditures close to \$15,000, then Egypt with per capita AIC expenditures ranging from \$10,023 in 2011 to \$12,850 in 2017. Material well-being in GCC countries was higher than in non-GCC countries across the 2011-2017 period. Among GCC countries, Oman had the lowest real per capita AIC expenditures whereas Egypt had the highest among non-GCC countries. Contrary to nominal terms, Jordan appeared to have a lower per capita AIC expenditure than Egypt when measured in real terms. Figure 4.28 presents the 2011 versus 2017 indices of real per capita AIC expenditure compared with the world's index of 100.

Moving to household consumption expenditures, the Arab country with the highest per capita household consumption expenditure in 2011 was the United Arab Emirates, as opposed to Kuwait in 2017. In nominal terms, the ranking of Qatar varies between first and second place in the region across the seven years, while it goes down in real terms, moving between fourth and fifth place. Furthermore, in nominal terms, Jordan had a higher per capita household consumption expenditure than Egypt, and the State of Palestine

had a higher per capita household consumption expenditure than Iraq. In real terms, however, per capita household consumption expenditure was higher in Egypt than in Jordan, and higher in Iraq than in the State of Palestine. Figure 4.29 compares the 2011 and 2017 indices of real per capita household consumption expenditure for the Arab region relative to the world's index of 100.

Per capita government consumption expenditures are higher in GCC countries than in non-GCC countries, both in nominal and real terms. Over the period 2011-2017, the highest real per capita government consumption expenditures in the Arab region were marked in Qatar and Saudi Arabia, which alternate in ranking between first and second place, while the lowest levels were consistently recorded in the Sudan. In nominal terms, Qatar maintained its position as the Arab country with the highest government consumption expenditures, while Kuwait recorded higher government consumption expenditures than Saudi Arabia based on exchange rate conversions. Figure 4.30 displays the 2011 versus 2017 indices of real per capita government consumption expenditure in the Arab countries relative to the world as base.

**Figure 4.31.** Indices of real per capita investment expenditures, 2011 and 2017 (world = 100)



Lastly, the highest per capita spending on investment in the Arab region across the seven years was recorded in Qatar, whose spending in real terms ranged from over \$45,000 to just under \$60,000, amounts considerably larger than per capita investment expenditures in the United Arab Emirates, which comes second in the region. In general, per capita expenditures on investment are higher in GCC countries than in non-GCC countries. Figure 4.31 compares the 2011 and 2017 indices of real per capita investment expenditure in Arab countries relative to the world's index of 100. The indices of real per capita investment expenditure are above the world's average of 100 in all GCC countries and below it in all non-GCC countries in both 2011 and 2017.

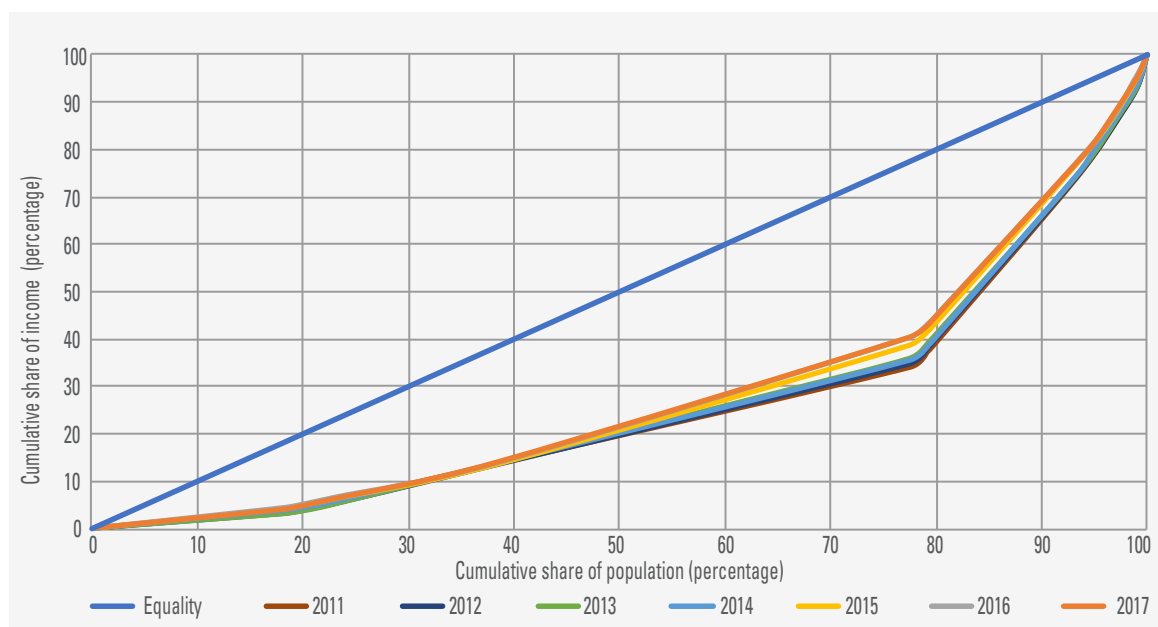
- **Income distribution and the Gini coefficient in the Arab region**

Figure 4.32 presents the Lorenz curve for the Arab region from the period 2011-2017, where the datasets for the seven years are plotted as seven different Lorenz curves showing cumulative expenditure percentage shares against cumulative population percentage

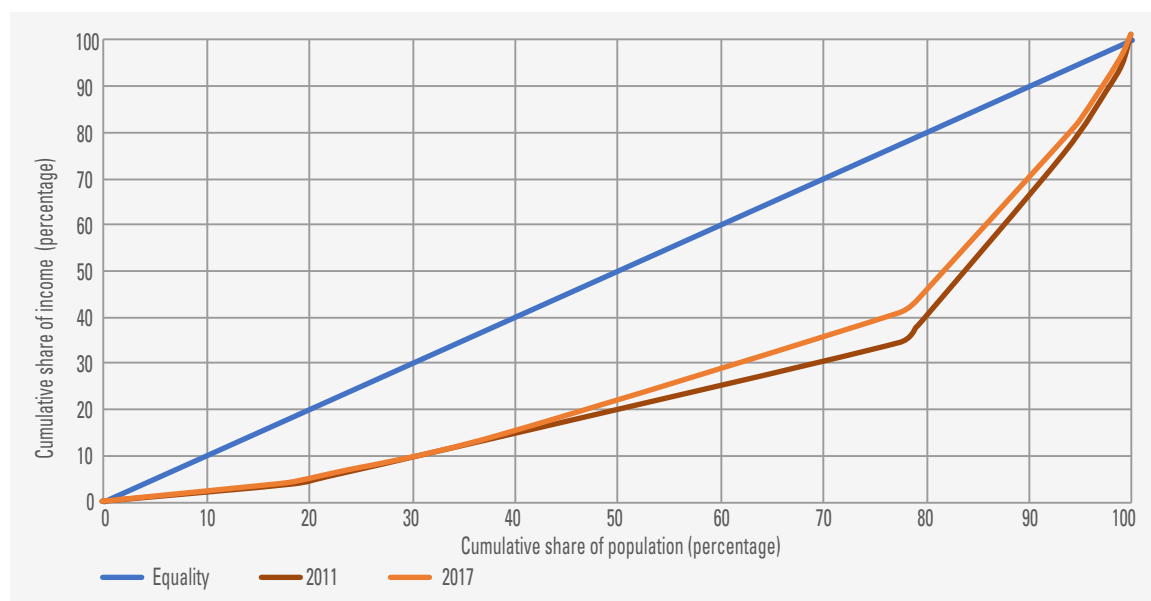
shares. The 45-degree line represents perfect equality in the Arab region, which is achieved if Arab countries have the same share of GDP out of total regional GDP as their share of population out of total regional population. Therefore, the area between the perfect equality line and the Lorenz curve represents income inequality in the Arab region, reflecting the Gini coefficient indicating the extent of income inequality, where a Gini coefficient value of 0 reflects perfect income equality and a value of 1 represents perfect income inequality. Figure 4.32 shows that over the period 2011-2017, the Arab region moved closer to the equality line, meaning that income equality improved over time.

Figures 4.33 and 4.34 provide an overview of the movement of the Lorenz curves between 2011 and 2017, comparing the change in income equality in the Arab region when GDP is measured in real terms as opposed to nominal terms. As shown in the two figures, when comparison is made in real terms, the region appears closer to equality than when measured in nominal terms. Moreover, figure 4.33 shows an improvement in income equality from 2011 to 2017 when income is measured in real terms.

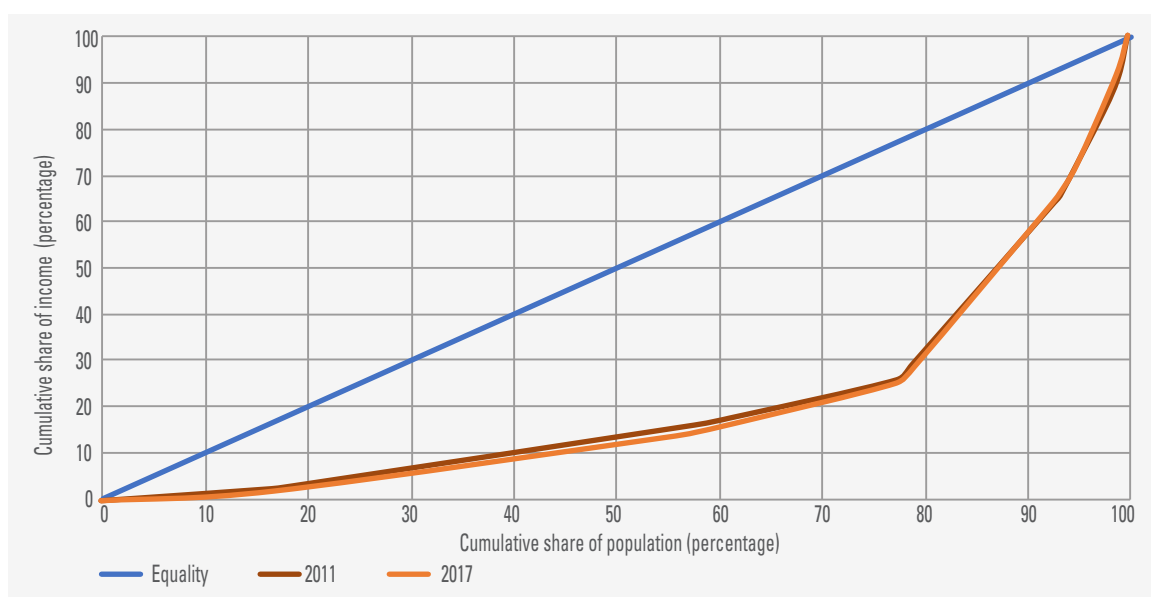
**Figure 4.32. Regional Lorenz curves, 2011-2017 (real income)**



**Figure 4.33. Regional Lorenz curves, 2011 versus 2017 (real income)**



**Figure 4.34. Regional Lorenz curves, 2011 versus 2017 (nominal income)**



- **Price levels**

At the total economy level, the Arab region became more expensive over time compared with the rest of the world, as its price-level index went up from 57 in 2011 to 61 in 2017 compared with the world average price-level set as 100. The ranking of Arab countries from the most expensive to the least expensive was somewhat

consistent across the years, with some changes. For example, in 2011, the two most expensive countries in the region were Kuwait and the State of Palestine, as opposed to 2017 when Qatar and the United Arab Emirates were the two most expensive Arab countries. Among non-GCC countries, the Arab country with the highest price level was the State of Palestine, which is one of the four most expensive countries in the



Arab region. The other three most expensive Arab countries were GCC countries, namely Kuwait, Qatar and the United Arab Emirates, with a changing price level order across the seven years. On the other hand, the two Arab countries with the lowest price levels over the same period were Egypt and the Sudan.

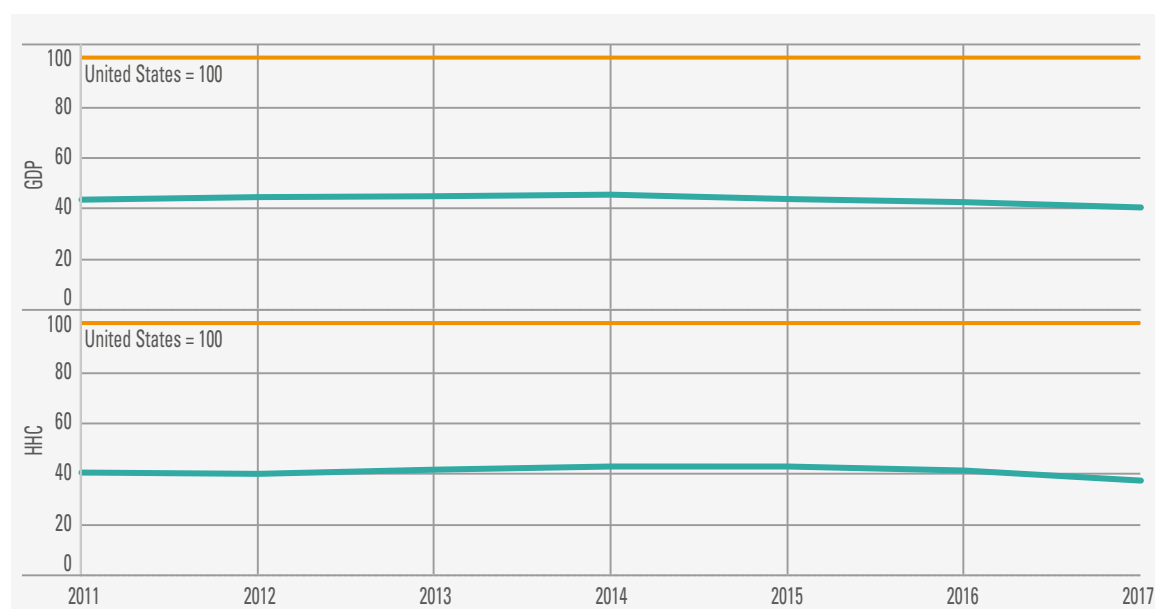
At the level of household consumption, the average price-level index in the Arab region increased from 49 in 2011 to 54 in 2017 relative to the world average of 100. Qatar was consistently the most expensive country among the Arab countries included in the comparisons. Kuwait, the State of Palestine and the United Arab Emirates were also among the four most expensive Arab countries in household consumption, while Egypt was the least expensive.

In a price comparison of the Arab region with the United States of America for the period 2011-2017, all Arab countries appeared less expensive than the United States at all the GDP levels. Figure 4.35 tracks the average price level in the Arab region at the levels of the GDP and household consumption from 2011 to 2017 with the United States as base country.

Machinery and equipment were generally the most expensive item group over the period 2011-2017 in the Arab region, with a few exceptions at the country level. In the United Arab Emirates, food and non-alcoholic beverages recorded the highest price level across the years, except for 2011 and 2012 where restaurants and hotels recorded the highest. Other exceptions were Kuwait and Qatar for the years 2011-2013. Furthermore, transport was one of the most expensive item groups in the State of Palestine; it was the most expensive item group in 2017 with a price-level index higher than that of machinery and equipment. On average, when the United States is set as the base country with a PLI of 100, the Arab region scores a PLI of over 50 for the following item groups: machinery and equipment, even surpassing the United States in 2014; food and non-alcoholic beverages; furnishings, household equipment and maintenance; transport; restaurants and hotels; and recreation and culture. Figure 4.36 shows the PLI in the Arab region versus that of the United States for the most expensive groups.

On the other hand, some of the least expensive item groups in the region when compared to

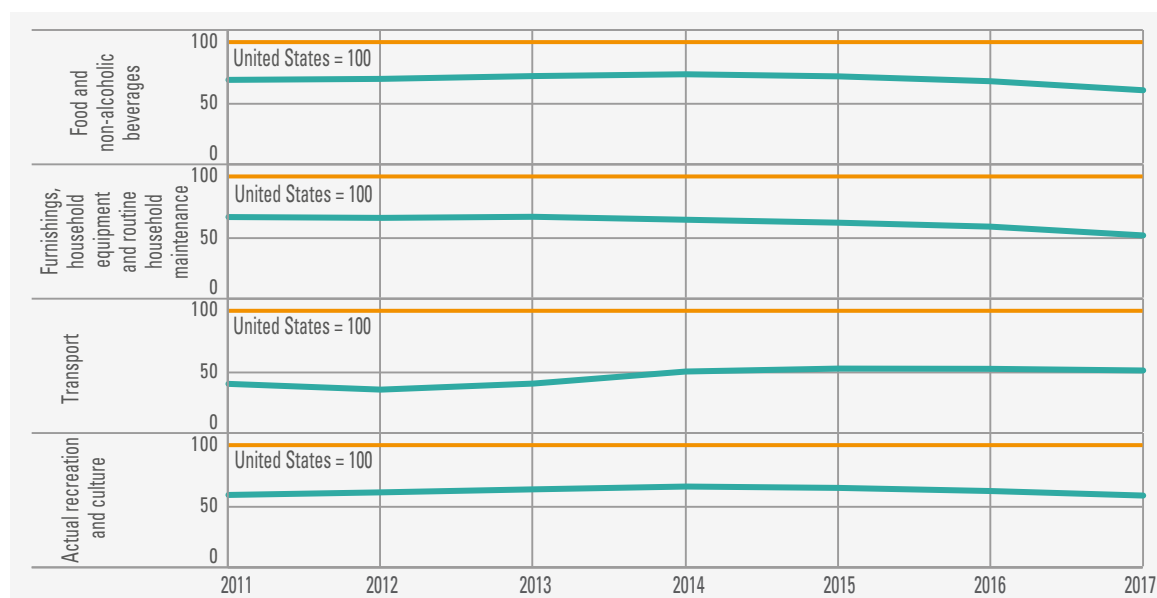
**Figure 4.35.** Arab region's PLIs as the levels of GDP and household consumption (United States=100)



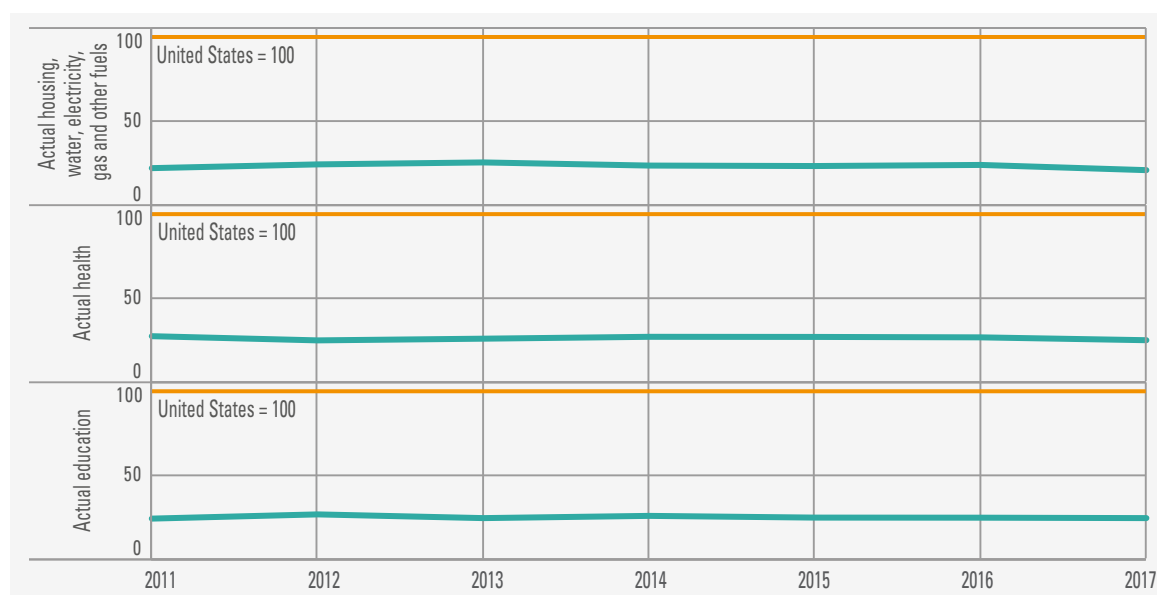
the United States are construction; education; housing, water, electricity, gas and other fuels; and health. Figure 4.37 shows the Arab region's PLIs at the least expensive item groups. Going into more details at the country level, construction in all GCC countries and in Morocco was one of the least expensive item groups, albeit with a few exceptions in some years where housing,

water, electricity, gas and other fuels appeared to be less expensive compared with the United States in Bahrain, Kuwait and Saudi Arabia, while communication was less expensive in the United Arab Emirates in 2012 and 2013. In Jordan, the State of Palestine and the Sudan, education was the least expensive item group each year over the period 2011-2017. In contrast, in Egypt and

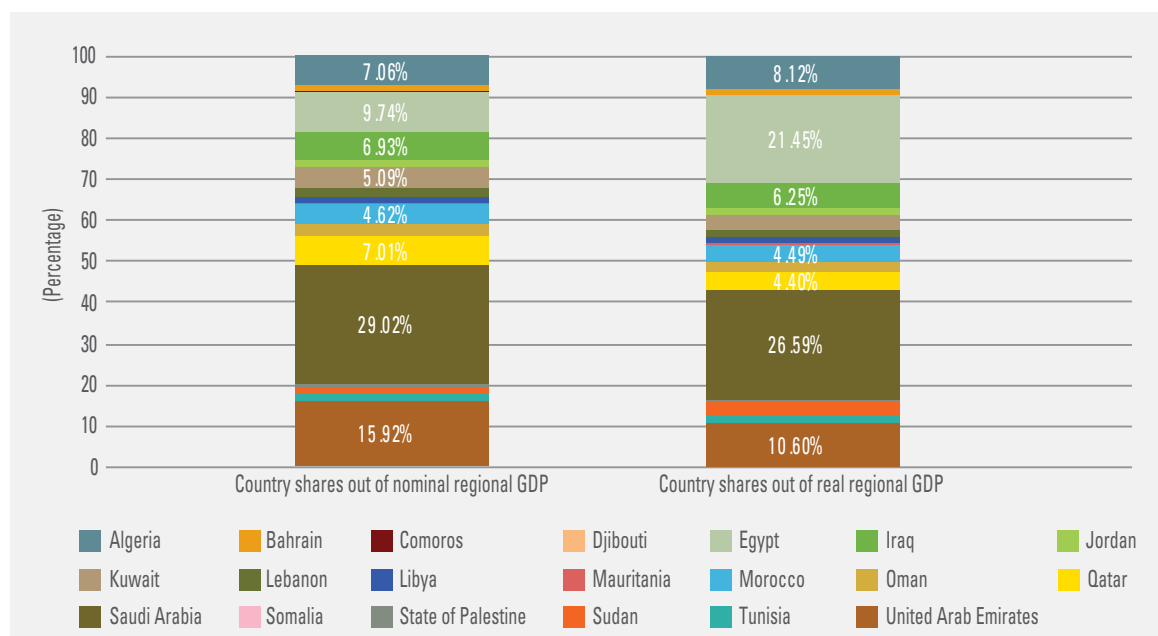
**Figure 4.36.** Arab region's PLIs for the most expensive item groups (United States=100)



**Figure 4.37.** Arab region's PLIs for the least expensive item groups (United States=100)



**Figure 4.38. Country shares out of real and nominal GDP of the entire Arab region, 2017**



Iraq, housing, water, electricity, gas and other fuels was the least expensive item group relative to the United States across the years, with the exception of 2013 in Iraq where education was the least expensive item group.

The greatest variation in PLIs between the most expensive country and the least expensive country in the region were found in education and in housing, water, electricity, gas and other fuels. For example, in 2017, Arab countries' PLIs for housing, water, electricity, gas and other fuels ranged from 6 in Egypt to 82 in Qatar relative to the PLI of 100 in the United States. Similarly, the PLIs for education in 2017 varied between 4 in the Sudan and 69 in Qatar relative to the PLI of 100 in the United States. Egypt and the Sudan exhibited the greatest variation in PLIs between the least expensive and most expensive item groups.

## Overview of the Arab region, including non-participating countries

The present section highlights the main findings of the 2017 ICP cycle on a larger scale, by adding

other participating and non-participating Arab countries. Consequently, in the present section, the Arab region includes 20 countries: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, the State of Palestine, the Sudan, Tunisia and the United Arab Emirates. As previously stated, 12 of these countries participated in the ICP cycle within the Arab region under the guidance of the regional implementing office at ESCWA. Some countries, specifically Algeria, the Comoros, Djibouti, Mauritania and Tunisia, participated in the ICP in the African region. The remaining countries, namely Lebanon, Libya and Somalia, were non-participating economies for which PPPs at the levels of the GDP and household consumption expenditure were estimated by the ICP global office at the World Bank. As for the Syrian Arab Republic and Yemen, no PPP estimates were available for the 2017 ICP cycle.

The real size of the Arab economy when considering the 20 countries was \$5,890 billion in 2017, which is equivalent to 5 per cent of the real global GDP. This means that the additional eight

countries contributed an additional 0.7 per cent to the 12 countries' global contribution of 4 per cent. The biggest economies in the region remained unchanged: Egypt, Saudi Arabia and the United Arab Emirates. However, when looking at the Arab region with the additional eight countries, the smallest economies become the Comoros, Djibouti and Somalia, representing 0.04 per cent, 0.08 per cent and 0.21 per cent of the Arab economy in 2017, respectively. Country shares of real and nominal regional GDP for the entire Arab region comprising the 20 countries are presented in figure 4.38.

When looking at the 20 Arab countries, the average regional real per capita income was

\$16,197 in 2017, about 2 per cent lower than the global average. It was higher than the world average when only the 12 participating countries within the Arab region were examined. The disparity in real per capita income within the Arab region was extremely high, as the lowest per capita income was recorded in Somalia at \$858 as opposed to the highest per capita income in Qatar at \$95,063.

As for the price-level index, when the 8 Arab countries are added to the 12 ICP participating countries, the PLI of the Arab region at the total economy level in 2017 remained almost the same, dropping only from 61 to 60 when compared with the world PLI of 100.