

SECTOR IN-DEPTH

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Sovereigns – Gulf Cooperation Council

Reliance on hydrocarbons will remain the key credit constraint despite ongoing diversification efforts

The 2020 pandemic-induced shock to oil demand and prices highlighted Gulf Cooperation Council (GCC)¹ sovereigns' very high exposure to oil market fluctuations and their limited progress since 2014 in economic and fiscal diversification away from hydrocarbons. Economic diversification remains the most frequently stated policy objective in the region and offers several credit benefits, but will likely take many years to achieve. Fiscal diversification, meanwhile, will likely follow with an additional lag.

- » **Trends and cycles in hydrocarbon demand and prices will continue to dominate GCC government revenue and exports in the medium term.** For most, oil and gas still accounts for at least 20% of GDP, more than 65% of total exports and at least 50% of government revenue. The announced plans to boost hydrocarbon production capacity and government commitments to zero or very low taxes make it unlikely that this reliance will diminish significantly in the coming years, even with some progress in economic diversification, which we expect. Hydrocarbons will continue to drive GCC sovereigns' fiscal strength, liquidity position and external vulnerability for many years.
- » **Despite ambitious plans, diversification efforts have so far yielded only limited results and will be held back by lower oil prices.** The importance of hydrocarbons in GDP and government revenue has not changed materially since 2014, having declined mainly due to lower oil prices. While we expect the diversification momentum to pick up, it will be dampened by reduced availability of resources to fund diversification projects in a lower oil price environment and by intra-GCC competition in a relatively narrow range of targeted sectors.
- » **Unless GCC sovereigns accelerate the adjustment, downward credit pressures from carbon transition will combine with oil price shocks.** Given commodity markets' inherent volatility, government revenue and national income volatility in the GCC will remain higher than in most other regions. Moreover, the implicit social contract between the region's governments and their citizens will limit the scope for spending cuts – rather, future oil revenue shocks will likely be absorbed through further erosions in government balance sheets. The ongoing global transition to lower carbon emissions will accelerate this trend, although the more highly rated sovereigns in the GCC, which also have some of the lowest oil and gas production costs globally, have in principle some time to adjust.

Trends and cycles in hydrocarbon demand and prices will continue to dominate GCC sovereigns' government revenue and exports in the medium term

By most measures, economic and fiscal diversification levels in the GCC are low. The hydrocarbon sector, including crude oil and natural gas extraction, is the most important sector for these economies, generating the single largest portion of gross value added (measured by nominal GDP), accounting for most domestically sourced exports, and constituting the dominant source of government revenue.

GCC sovereigns stand out globally for their exceptionally high economic reliance on hydrocarbons

In 2019, before the pandemic lowered oil prices and output, most GCC sovereigns generated more than a quarter of their national incomes from the extraction of oil and natural gas, with hydrocarbon production amounting to as much as 45% of GDP in [Kuwait](#) (A1 stable), around 35% in [Qatar](#) (Aa3 stable) and [Oman](#) (Ba3 negative), and close to 25% in [Saudi Arabia](#) (A1 negative) and the [United Arab Emirates](#) (UAE, Aa2 stable). [Bahrain](#) (B2 negative) is the only GCC country where oil and gas accounted for less than 15% of GDP in 2019, reflecting the country's relatively well-developed manufacturing and services sectors but also its relatively low level of per-capita hydrocarbon resources and production compared to the rest of the region.

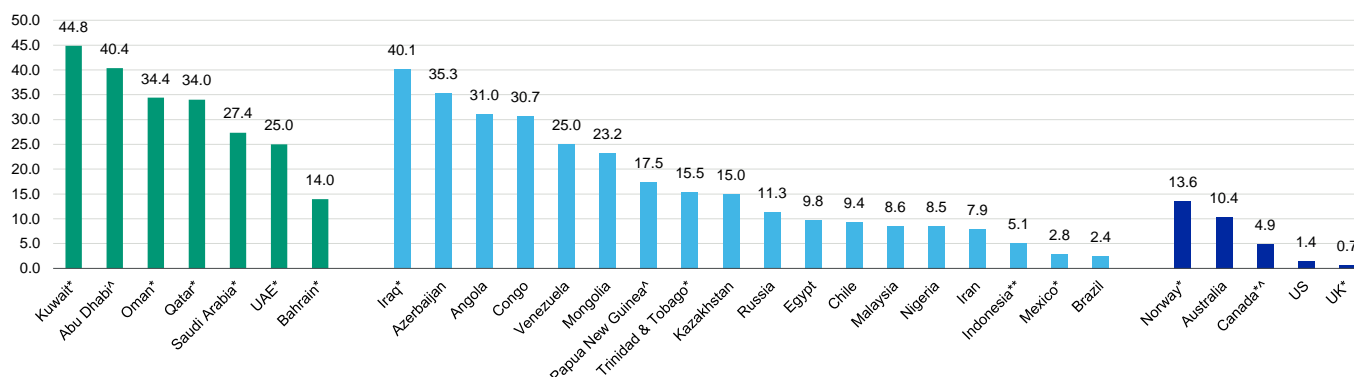
In the UAE, the level of economic diversification varies significantly among the six individual emirates. Economic reliance on oil and gas is highest in [Abu Dhabi](#) (Aa2 stable), which controls most of the UAE's hydrocarbon resources and derived 41% of its GDP from the extractive sector in 2019. By contrast, the other five emirates, including Dubai and [Sharjah](#) (Baa3 negative), have very limited proved hydrocarbon reserves. Among them, Dubai has achieved the highest level of economic and fiscal diversification, with the extractive sector's GDP contribution at less than 2% and government oil-related revenue accounting for less than 7% of total revenue in 2019.

Despite the variation among GCC sovereigns, the region as a whole stands out globally for its heavy economic reliance on the extractive sector, comparable only to [Iraq](#) (Caa1 stable), [Azerbaijan](#) (Ba2 positive), [Angola](#) (Caa1 stable), the [Republic of Congo](#) (Caa2 stable) and [Venezuela](#) (C stable) of the commodity exporters that we rate (see Exhibit 1).

Exhibit 1

GCC reliance on extractives is exceptionally high compared to other major commodity producers

Mining and quarrying sector (including oil and gas extraction), % of GDP (2019)



* Petroleum and gas ** Petroleum, gas and coal ^ 2018

Sources: Haver Analytics, national sources and Moody's Investors Service

Export reliance on oil and gas is even higher

The lack of diversification among GCC sovereigns is even more pronounced in the structure of their exports, which are dominated by oil and gas (see Exhibit 2). Low levels of non-oil exports indicate that most GCC economies produce few goods and services that are both internationally competitive and can be produced and exported on a large scale. Meanwhile, large import bills across the

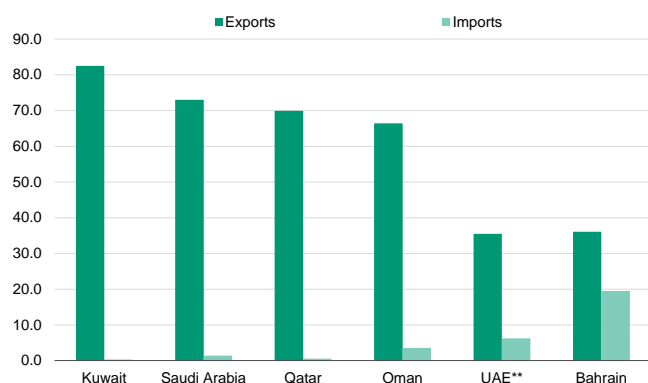
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

GCC (particularly when measured relative to GDP) highlight heavy dependence on imported goods and indicate a low level of import substitution, even in essential categories such as food and agriculture.

Trade data for the UAE and Bahrain point to a greater degree of export diversification than the rest of the region, partly due to their large tourism, transportation and financial sectors. In the case of Bahrain, reliance on hydrocarbon exports is also partly offset by the fact that a large portion of its hydrocarbon exports consists of refined products produced in Bahrain from imported crude oil from Saudi Arabia, which reduces the net impact of oil price fluctuations on the country's trade balance. In contrast, UAE goods exports appear to be at least partly inflated by a large share of minimally processed goods originally produced abroad, which understates the relative importance of hydrocarbon exports when looking at the reported figures (see Exhibit 3).²

Exhibit 2

Hydrocarbon exports dominate GCC countries' foreign trade... Oil and gas exports and imports, % of total exports of goods and services (2019)*

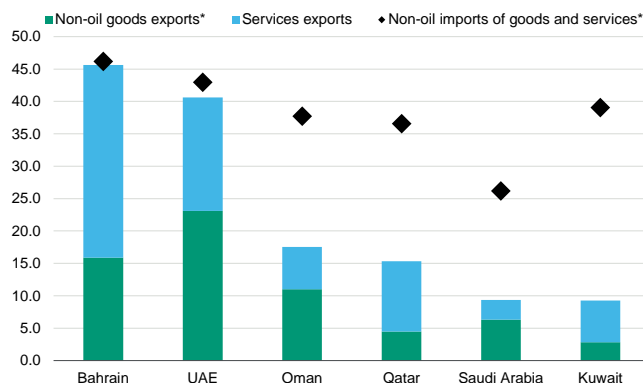


* Excludes reexports (i.e., foreign goods exported in the same state as previously imported without value-added processing) ** UAE's non-hydrocarbon goods exports are inflated by a large share of minimally processed foreign goods, which understates the relative importance of hydrocarbon exports.

Sources: Haver Analytics and Moody's Investors Service

Exhibit 3

... and non-oil imports exceed non-oil exports by a large margin (for most) % of GDP (2019)



* Excludes reexports

Sources: Haver Analytics and Moody's Investors Service

An alternative and commonly used gauge of export diversification – the normalized Herfindahl-Hirschmann Index (HHI) of product concentration for merchandise exports, which measures if a large share of a country's exports is accounted for by a small number of commodities – is above the median (0.68) of the sovereigns we rate for Qatar (0.79), Saudi Arabia and Kuwait (both 0.76) and close to the median for Bahrain (0.69) and Oman (0.68). Only the UAE (0.49) has an HHI below the median (partly due to the bias discussed above). These elevated readings compare to 0.3-0.4 for well-diversified advanced economies such as [Germany](#) (Aaa stable), the [UK](#) (Aa3 stable), [Japan](#) (A1 stable) and [Canada](#) (Aaa stable).³

More than half of government revenue is derived from the hydrocarbon sector, reflecting governments' commitment to minimal taxes

Hydrocarbon revenue, collected in the form of profit taxes, royalties and dividends (paid by the national oil companies), constitutes the largest share of government revenue across the GCC. Even sovereigns with relatively more diversified economies, such as Bahrain and the UAE, derive more than 50% of their government revenue from oil and gas, with Kuwait, Qatar and Oman showing the highest level of dependence on hydrocarbon revenues (see Exhibit 4). This is partly a consequence of GCC governments' long-standing commitment to a zero or very low tax environment, which is part of the implicit social contract between the rulers and the citizens but also reflects the desire to incentivize non-oil sector growth and development.

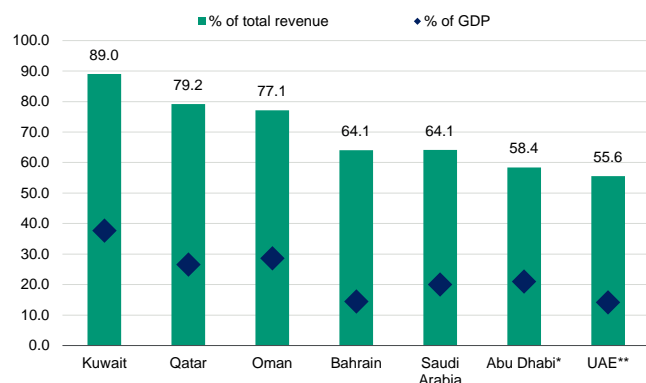
The key difference between the GCC and most other sovereigns is an effective absence of direct taxes. None of the GCC sovereigns currently levy property or personal income taxes. Although some GCC sovereigns collect corporate income taxes from non-GCC firms operating in their jurisdiction (which in the UAE is limited to foreign banks, and in Bahrain there is no corporate income tax at all), only Oman has a corporate income tax payable by firms that are owned by GCC nationals. Moreover, many foreign companies operating in

the GCC are headquartered in one of the free economic zones, which offer zero income tax regimes. Only four GCC sovereigns have so far introduced the value-added tax (VAT), with Oman's introduction only in April 2021.⁴

As a result, in 2019 GCC sovereigns collected non-hydrocarbon tax revenues equivalent on average to less than 4% of non-hydrocarbon GDP compared to an equivalent rate of more than 22% for major high-income economies⁵ (see Exhibit 5).

Exhibit 4

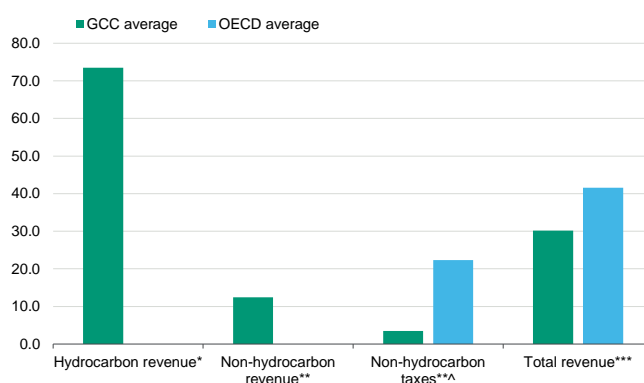
Fiscal dependence of hydrocarbons is high across the board Oil and gas government revenue, % of GDP (2019)



* Moody's estimate ** Includes Abu Dhabi, Dubai, Sharjah and the federal government, but excludes investment income from sovereign wealth fund assets
Sources: National sources and Moody's Investors Service

Exhibit 5

GCC non-hydrocarbon sector benefits from low taxation Fiscal revenue, % of estimated revenue base (2019)



^ Personal income tax, corporate income tax and goods & services taxes; * % of hydrocarbon GDP ** % of non-hydrocarbon GDP *** % of total GDP
Sources: National sources, Organization for Economic Cooperation and Development (OECD) and Moody's Investors Service

None of the GCC sovereigns have so far stated plans to significantly expand direct taxation. Only Oman announced that it was studying implementation of a personal income tax, but any such tax would only be applied to wealthy individuals and would unlikely significantly increase government revenue. Saudi Arabia's crown prince and de facto ruler Mohammed bin Salman stated categorically in a recent interview that there would not be any personal income taxes in the Kingdom and that the current 15% VAT – tripled in 2020 to help absorb the revenue shock stemming from the coronavirus pandemic – would be lowered to 5%-10% by 2025.

National oil and gas companies across the GCC are aiming to increase their production capacity, potentially reversing some of the expected diversification progress

National oil companies (NOCs) across the GCC have announced plans to expand – rather than shrink – their oil and gas production capacity over the next decade. In March 2020, [Saudi Aramco](#) (A1 negative) announced that it would launch an investment program to increase its crude oil production capacity to 13 million barrels per day (mbpd) from around 12.3 mbpd. At the same time, the UAE said it would accelerate its plans to boost its own capacity to 5 mbpd from the 4 mbpd that was expected to be reached at the end of 2020. If Saudi Arabia and the UAE raise their output to this target production capacity, their production would increase by 33% and 63%, respectively, relative to the average level in 2019. Saudi Arabia's exports may increase even more if the country delivers on its plans to replace some of the use of its crude oil in domestic power generation (close to 2 mbpd) by developing its large natural gas resources.

Elsewhere, Qatar reconfirmed in 2020 its pre-pandemic plans to increase its production capacity of liquefied natural gas (LNG, accounting for around 40% of the country's total hydrocarbon output in 2019) by more than 60% by 2027, with initial output from the new LNG trains coming on stream by the end of 2025. Meanwhile, Kuwait Petroleum Corporation (KPC) announced its plans to increase oil production capacity to 3.5 mbpd by 2025 from less than 3 mbpd currently and nearly double its natural gas production to 3.5 billion cubic feet per day (bcfd) by 2030 from around 1.9 bcfd at present, although it has shelved its long-held plans to increase oil production to 4 mbpd by 2040.⁶

The plans are more modest and tentative in Oman and Bahrain. Due to more limited proved oil reserves in its maturing fields, Oman faces a long-term slowdown in oil production and its ability to grow reserves and maintain the current production rate will rely heavily

on its ability to continue to successfully implement enhanced oil recovery techniques. However, during 2018-19, Oman was able to increase its natural gas output from the recently developed Khazzan gas field, which also allowed it to nearly double its production of condensate (sold as part of the Omani crude mix, but not subject to OPEC+ production quotas.⁷ The second phase of the Khazzan development was completed in late 2020 and will increase natural gas production capacity in 2021. Furthermore, the government has also engaged international oil companies to develop its new Mabrouk gas field discovered in 2018, although the gas-to-liquids project that was supposed to utilize feedstock from this field was abandoned in late 2020. Meanwhile, Bahrain is hoping to develop its new, very large offshore [oil and gas discovery](#), which was first announced in April 2018. Although there is still a high degree of uncertainty around how much of the discovered oil and gas in place could be commercially recovered, at what sustainable rate and over what period, Bahrain's oil minister indicated earlier this year that the drilling of the first production wells would start in late 2022 (see Exhibit 6).

Exhibit 6

National oil companies are making plans to expand production capacityOil and gas production, mbpd of oil equivalent[^]

	2000	2014	2019	Target production*	Target assumptions**	2000-19 % Chg.	Target % Chg.*
Qatar	1.3	4.7	4.8	5.8	LNG capacity increase to 126 Mtpa from 77.5 Mtpa	275.7	22.5
Kuwait	2.4	3.3	3.3	4.5	Crude oil capacity increase to 3.5 mbpd, natural gas capacity increase to 3.5 bcfd	37.7	36.2
UAE	3.2	4.5	5.0	6.8	Crude oil capacity increase to 5 mbpd	56.4	36.3
Saudi Arabia	9.9	13.1	13.7	16.9	Crude oil capacity increase to 13 mbpd	38.3	23.4
Oman	1.1	1.4	1.6	1.6	Natural gas capacity increase to 4.5 bcfd	38.9	5.4
Bahrain	0.3	0.5	0.5	n/a	n/a	48.5	n/a

[^] Includes crude oil, natural gas, natural gas liquids, and condensate, and excludes flared and recycled natural gas * At full target capacity ** Where stated targets are available

Sources: BP Statistical Review of World Energy, national sources and Moody's Investors Service

These plans partly reflect desires to develop related downstream industries – including petrochemicals and plastics – to increase the value added from each additional barrel of crude or cubic foot of natural gas. But they also reflect the anticipation by the NOCs of a likely decline in oil and gas production elsewhere in the world, especially where opex and capex needs to maintain even the current level of production are more onerous and where regulators or shareholders are likely to restrict new investments in fossil fuel extraction given their commitments to global net zero emission targets.

GCC NOCs expect their additional capacity to most likely be deployed in growth markets such as China and [India](#) (Baa3 negative), and potentially Africa, where the growing size of the middle-income classes over the next several decades will boost demand for energy, likely including fossil fuels, offsetting the decline we expect in some of the advanced economies. Along these lines, the NOCs in Saudi Arabia, the UAE and Qatar have recently stepped up investment plans in overseas refineries to capture the anticipated demand growth in Asia by securing long-term off-take contracts for their crude oil output. Furthermore, Saudi Aramco has also announced plans to increase its natural gas production, part of which will be used to produce and export blue hydrogen (or ammonia), which is produced the same way as grey hydrogen but uses carbon dioxide capture technologies. Some of the increased natural gas output will also be used to replace crude oil that currently fuels domestic power generation (42% of Saudi Arabia's electricity production in 2019), freeing it up for refining or exports.

Given these plans and the GCC governments' commitment to low taxes, if oil prices average \$55/barrel (which is around the middle of our medium-term forecast range of \$45-\$65/barrel) we expect hydrocarbon production to remain the single largest contributor to GCC sovereigns' GDP, the main source of government revenue and, therefore, the key driver of fiscal strength over at least the next decade. Only longer term, when GCC economies themselves have sufficiently diversified and non-oil sector growth does not need to be effectively subsidized (relative to international competitors) through zero or very low direct taxes, would we expect GCC governments to introduce more broad-based income taxes that would significantly and durably lower the reliance of government revenue on oil and gas.

Despite ambitious plans, diversification efforts have so far yielded only limited results and will be held back by lower oil prices

Economic diversification efforts increased after the 2014 oil price shock, with diversification aspirations emphasized in all newly launched (or refreshed) long-term national visions and the related national development programs and strategies. Significant fiscal deterioration across the GCC region since 2014 combined with rising social pressures, particularly in the wake of the political upheavals in the broader Middle East region in 2011, have pushed diversification to the top of government agendas, especially in Saudi Arabia, which launched its first national vision (Saudi Vision 2030) in 2016, and in Oman, which announced its Vision 2040 in 2019 as part of its tenth Five-Year Development Plan.⁸

Saudi Arabia has so far made the most progress in terms of outlining ambitious economic and social transformation plans, initiating large-scale diversification projects, and implementing some important structural reforms to boost its non-oil sector growth potential. Most of the diversification projects and initiatives announced so far are concentrated in the areas of tourism, domestic entertainment and real estate development, with other stated focus sectors including logistics, non-hydrocarbon mining, renewable energy and petrochemicals – most of which are (and have been for the past two decades) a common element of diversification plans across the GCC region and are bound to face intra-regional competition.

However, despite some initial advances in a handful of specific areas across the GCC – such as doubling real value added in agriculture and fishing in Oman, Qatar's further progress in its infrastructure and real estate development projects ahead of the 2022 FIFA World Cup, Bahrain's expansion of its oil refinery and the aluminum smelter, and (most recently) the revival of the entertainment sector in Saudi Arabia – measurable progress in diversifying the economy since 2014 has been relatively modest and was short-circuited in 2020 by the coronavirus pandemic.

Decline in the share of the oil and gas sector since 2014 mainly due to lower oil prices

The share of the hydrocarbon sector in total GDP – the most commonly employed metric to assess the level of diversification in oil-producing economies – has declined since 2014. However, for most GCC sovereigns, this was largely driven by the decline in oil prices, which lowered the nominal value of oil and gas production relative to the output in the rest of the economy, overstating the rate of the underlying structural improvement. In Kuwait and Qatar, improvements in this metric were also amplified by the decline in the volume of hydrocarbon production in 2015-19 (by 7.1% and 5.9%, respectively), in contrast with an oil and gas output increase in Bahrain (0.9%), Saudi Arabia (3.7%), Oman (7.7%) and the UAE (9.8%). Aside from being susceptible to a (partial) reversal when oil prices increase, this oil price driven improvement has also come at the cost of lower overall nominal GDP for three of the six GCC sovereigns, namely, Kuwait, Qatar and Oman (see Exhibit 7).

Although the share of the non-hydrocarbon sector is a useful metric to assess the extent of vulnerability to potential declines in oil prices and production, inherent oil price volatility means that this metric has limitations for assessing diversification progress over time. It understates the level of diversification for countries that have exceptionally large hydrocarbon endowments relative to the size of their population, as is the case with Norway, which has a relatively large and well-diversified non-oil economy, but its share of the oil and gas sector in total GDP is similar to Bahrain at 13.6% in 2019.

Non-hydrocarbon GDP per capita measured in US dollars and constant prices offers a complementary gauge as to whether the larger share of the non-hydrocarbon sector indeed reflects material progress on diversification that contributes to the growth of the potential tax base and employment and is independent of oil prices and the size of hydrocarbon endowments and output. It measures the income generated in the non-hydrocarbon economy, which is scaled by the population size and converted into a common currency to allow for cross-country comparisons. It also adjust for inflation and inflation differentials between countries.

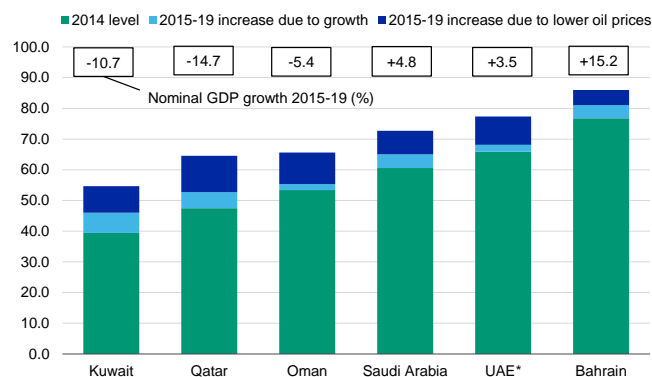
This measure, shown in Exhibit 8, is in principle correlated with labor productivity in the non-hydrocarbon sector and points to a much greater importance of the non-hydrocarbon sector in Qatar and the UAE compared to the rest of the region. It also highlights that, despite its large share in GDP, the per-capita contribution of Bahrain's non-hydrocarbon sector is similar to much less diversified Kuwait or Saudi Arabia. It also shows a considerably smaller role of the non-hydrocarbon sector in the GCC region compared to the advanced G-20 economies or oil-exporting Norway. Most importantly, in terms of progress on diversification, it indicates that real growth in the per-capita value added derived from the non-hydrocarbon sector has been either stagnant or negative over the past six years, unlike in

the advanced G-20 economies or in oil-exporting Norway. This contrasts with the previous decade and a half that saw the economic importance of the non-oil sector growing according to this metric, except in the UAE.² The pace of real non-oil sector expansion, even after adjusting for very strong population growth during this period, was especially robust in Qatar, supported by increased availability of domestic resources due to rising oil prices and, even more significantly, an exceptionally large expansion of hydrocarbon production, which nearly quadrupled during 2000-14.

Exhibit 7

Progress in diversifying GCC economies during 2015-19 was modest

Share of non-hydrocarbon sector in 2019, % of GDP



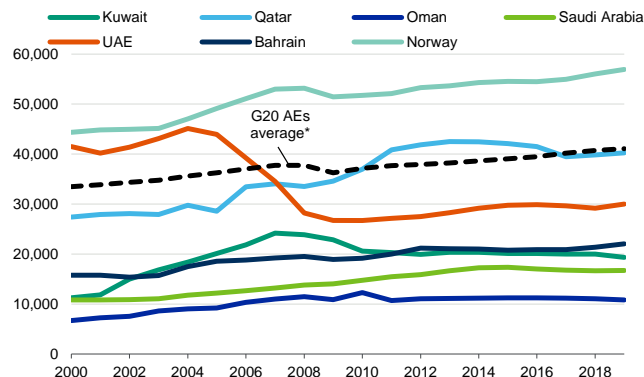
* Non-extractive sector

Sources: Haver Analytics and Moody's Investors Service

Exhibit 8

Diversification stalled during 2015-19 after progress during 2000-14

Gross value added per capita in the non-hydrocarbon sector, US\$ at constant 2019 prices and exchange rates



* Average for US, UK, Japan, Korea, Germany, France, Italy, Canada and Australia
Sources: Haver Analytics and Moody's Investors Service

Lower oil prices since 2014 have reduced domestic resources available to support growth in the non-hydrocarbon sector

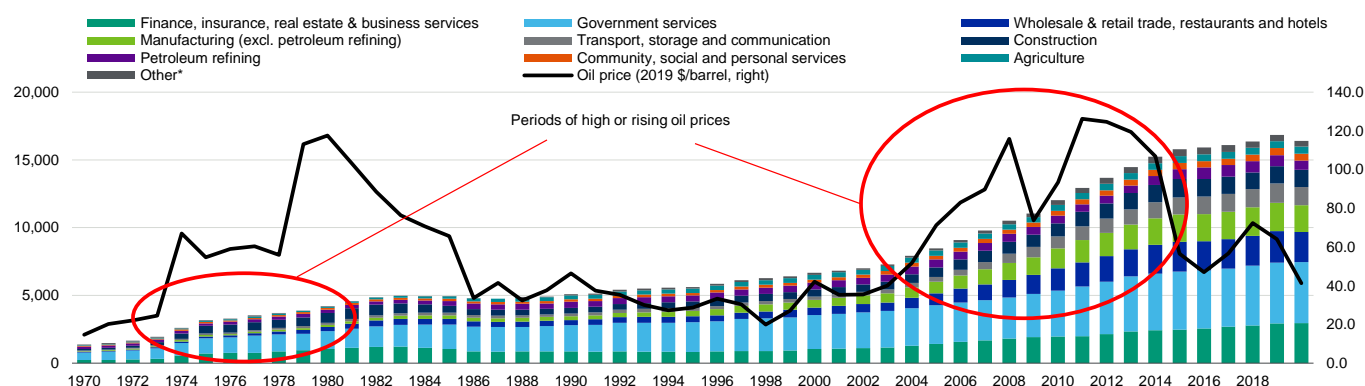
The relationship between the pace of growth in the non-oil sector and the level of oil prices is evident in longer-term data, such as the series available for Saudi Arabia covering the past five decades (see Exhibit 9). Real per-capita value added in the non-hydrocarbon sector has grown (often quite rapidly) during periods of high or rising oil prices such as during the 1970s and during the commodity price boom of 2004-14. In both periods, per-capita real value added in the non-hydrocarbon sector more than doubled. By contrast, during periods of low or falling oil prices, such as during the 1980s, 1990s and since 2014, real per-capita value added in the non-hydrocarbon sector either declined or stagnated. The main driver behind these differences was government spending as well as private sector investment in the services and the real estate sector, with imputed income from the ownership of dwellings alone being the main component of the expansion and subsequent contraction in the per-capita real value added in the "finance, insurance, real estate and business services" sector.

The key reason for this correlation was the availability of financial resources to drive the expansion in the non-hydrocarbon sector, which has been historically more constrained during periods of low oil revenue. Although the strong link is likely to have weakened with the development of Saudi Arabia's domestic capital markets and improved access, in recent years, to the international capital markets by various Saudi entities (private as well as public), lower oil prices are likely to remain a constraint on non-hydrocarbon growth. A case in point is the reduction of capital spending by most GCC governments since 2014, including Saudi Arabia and Oman, which cut investment project expenditures between 2014 and 2019 by 47% and 25%, respectively, contributing to a sharp slowdown in non-oil growth to an average of 2% in 2015-19 from 6.9% in 2010-14 for Saudi Arabia and to 2.9% from 6.8% for Oman.

Exhibit 9

Real per-capita output in the non-hydrocarbon sector doubled during the periods of high and rising oil prices, and stagnated when oil prices were lower

Gross value added per capita in the non-hydrocarbon sector, US\$ at constant 2019 prices and exchange rates



* Includes utilities, non-hydrocarbon mining, FISIM and taxes less subsidies

Sources: Saudi General Authority for Statistics (GASTAT) and Moody's Investors Service

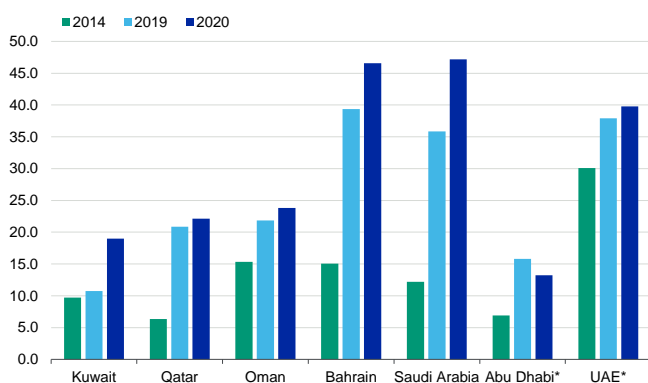
The share of oil and gas revenue has increased since 2014, but also largely due to lower oil prices, and from a very low base

The share of non-hydrocarbon revenue in total government revenue has increased for all GCC sovereigns in the past six years. In Saudi Arabia and Bahrain, this increase was very significant (see Exhibit 10). However, a large portion of the increase in the share has been due to the decline in oil revenue and a low initial contribution from non-oil sources. The increase in non-hydrocarbon revenue as a share of GDP has been significantly more modest (see Exhibit 11), whereas in some cases, namely in Kuwait, Oman and the UAE, there has been a decline.

The most significant increase in non-hydrocarbon revenue as a share of GDP was recorded in Saudi Arabia, reflecting the imposition of excise duties and expatriate levies in 2017 and the introduction of the 5% VAT in 2018, which was subsequently tripled to 15% in July 2020. For most GCC sovereigns, non-hydrocarbon revenue remains less than 8% of GDP and only a small portion of it is derived from non-oil taxes.

Exhibit 10

Non-hydrocarbon revenue increased since 2014 as % of total...
Non-hydrocarbon revenue, % of total government revenue**

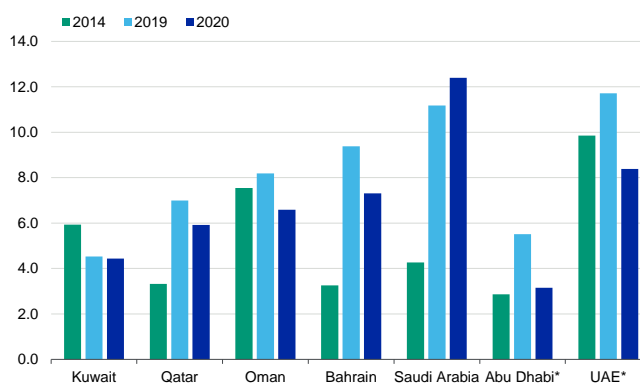


* Based on Moody's estimated dividends from the national oil company ** Government revenue in the UAE, Abu Dhabi, Qatar and Kuwait does not include investment income from SWF assets

Sources: National sources and Moody's Investors Service

Exhibit 11

...but remains very modest in relation to GDP
Non-hydrocarbon revenue, % of 2019 GDP**



* Based on Moody's estimated dividends from the national oil company ** Government revenue in the UAE, Abu Dhabi, Qatar and Kuwait does not include investment income from SWF assets

Sources: National sources and Moody's Investors Service

Unless GCC sovereigns accelerate the adjustment, downward credit pressures from carbon transition will combine with oil price shocks

Large hydrocarbon sectors supported GCC credit profiles during periods of high and rising oil prices, allowing the sovereigns to run large fiscal and current account surpluses (except in Bahrain) and accumulate significant savings. But heavy reliance on the sector has become the key credit challenge since 2014, as rising hydrocarbon revenues over time were matched with rising government spending. As a consequence, sharply lower oil prices since 2014 have reduced revenues by more than the governments were prepared to offset through spending cuts, in turn significantly eroding sovereign balance sheets and foreign currency buffers. Global carbon transition will over time accelerate the decline in demand and eventually prices for hydrocarbons, intensifying the downward credit pressure on the GCC sovereigns that are not able to adjust.

Reliance on hydrocarbons will continue to expose GCC sovereigns to declines in oil demand and prices

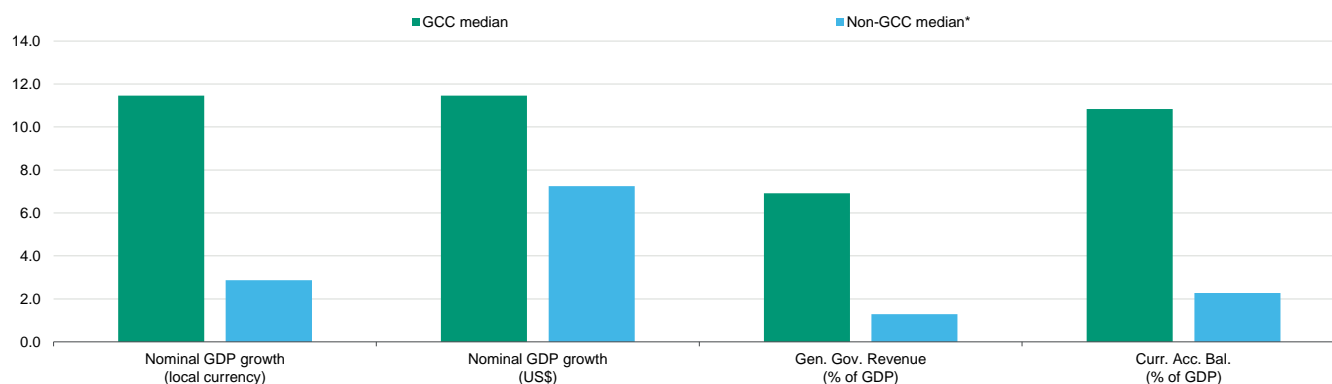
GCC countries' high fiscal and external sensitivity to fluctuations in oil demand and prices is due to the large size of their hydrocarbon exports and revenue relative to their GDP, which ranges from 14% of GDP in Bahrain to as high as 37% of GDP in Kuwait. This high exposure has meant that when oil prices declined by around 35% on average during 2020, government revenues and exports dropped by 5%-15% of GDP – a much larger decline than any government would have been able to offset through spending cuts without severely deepening an already very sharp economic downturn.

Limited adjustment capacity in the GCC is also underpinned by exchange rate pegs. These have served GCC sovereigns well in maintaining macroeconomic and financial stability over several decades, but reduce the economic and fiscal absorption capacity in the face of large external shocks, unlike for sovereigns with more flexible exchange rate regimes such as [Russia](#) (Baa3 stable), where currency depreciation partly offsets the impact of lower oil prices on revenue (when converted to local currency) and the current account (by reducing demand for imports).

Given GCC sovereigns' highly concentrated economic and fiscal structures, and the lack of adjustment capacity through flexible exchange rates, GCC national incomes, external balances and government revenue have been significantly more volatile in the past than those of most other sovereigns we rate (see Exhibit 12). Taking into account commodity markets' inherent volatility, as reflected in large oil price fluctuations over the past 15 years, we expect government revenue, external balance and national income volatility in the GCC to remain high. And given inflexible government spending bills, which along with low taxes underpin the implicit social contract between the GCC countries' rulers and their citizens, we do not expect spending cuts to be able to absorb future oil price shocks any better than in the past. In fact, government spending cuts over the past six years have reduced the scope for further reductions.

Exhibit 12

GCC sovereigns stand out in terms of national income, current account and fiscal revenue volatility 10-year standard deviation, percentage points or % of GDP (2010-19)



* Median volatility of sovereigns rated by Moody's outside the GCC region (excludes Venezuela)

Source: Moody's Investors Service

Ongoing global transition to a lower carbon economy risks accelerating fiscal erosion across the GCC region...

GCC sovereigns are among the most exposed sovereigns to global carbon transition, which is a vulnerability that is incorporated in our ratings and captured by the highly negative or very highly negative carbon transition risk and [Environment Issuer Impact Scores](#) under our [methodology](#) for assessing environmental, social and governance risks.

Our [baseline assumptions](#) about the pace of carbon transition align with the International Energy Agency's (IEA) stated policies scenario (STEPS), which incorporates both current policy intentions and emission reduction targets. In its latest report, the IEA projects that oil demand grows at a compounded annual rate (CAGR) of 0.4% through 2040 (flattening out in the 2030s) and natural gas demand grows at a 1.2% rate. This compares to CAGRs of 1.2% and 2.6%, respectively, in 2000-18. Under this baseline, GCC sovereigns have in principle significant time to adjust, including by diversifying their economies and fiscal revenue streams. However, if the transition were to accelerate to a faster pace, for instance in line with the large number of net zero targets announced recently or as envisaged in the IEA's sustainable development scenario (SDS), GCC sovereigns would be exposed to further large declines in hydrocarbon revenue and national income, leading to higher debt burdens and an erosion in fiscal and external liquidity buffers.

As discussed in [our research on global carbon transition risks](#), while prices are likely to be lower under the sustainable development demand scenario than under STEPS, they will not necessarily collapse. The IEA analysis shows oil prices in its scenarios rising towards \$100/bbl+ under STEPS and broadly flat around \$60/bbl under SDS. However, moving to SDS could exacerbate the inherent volatility of oil and gas prices as the market struggles to find equilibrium between supply and demand, especially if the world progresses on STEPS and then abrupt policy changes are implemented to more rapidly transition towards SDS. A more sudden demand reduction would drive down prices and it would take a prolonged period for the market to rebalance unless there is a large coordinated supply reduction from producers. A more abrupt demand reduction creates the risk that capital expenditure becomes misaligned with future demand, escalating the risk of stranded assets.

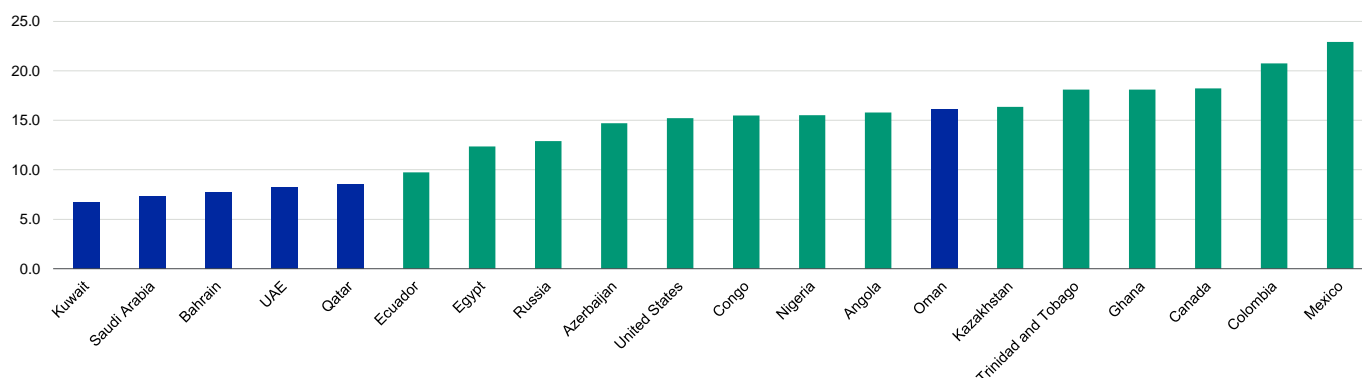
...although the more highly rated GCC sovereigns have in principle some time to adjust

That being said, the risk of stranded assets due to carbon transition is lower for the GCC than for other hydrocarbon-dependent sovereigns because, with the exception of Oman, they are among the lowest cost producers of crude oil and natural gas in the world (see Exhibit 13). This means that their national oil companies will be able to profitably produce even if oil prices weaken substantially. Most of them also require significantly lower incremental capex to maintain production at current levels. This is in sharp contrast to higher-cost oil and gas producers, including in the Americas.

Exhibit 13

GCC producers have some of the lowest crude oil production costs in the world

Cost per barrel (\$)*



* Opex and capex excluding royalties, taxes and in-kind transfers under production sharing agreements

Sources: Rystad Energy and Moody's Investors Service

Nevertheless, while lower oil prices may not impact the commercial feasibility of oil and gas production, they would further weaken GCC countries' external and fiscal balances and accelerate the pace of their sovereign balance sheet erosion. The governments may

also find that financing becomes tighter as global investors move away from hydrocarbon-related assets, such as the debt of oil exporting sovereigns.

The most affected GCC sovereigns would be those with the highest fiscal and external breakeven oil prices (which are the prices at which their budgets and current accounts would balance), namely Bahrain, Oman but also Saudi Arabia. Nevertheless, Saudi Arabia has a significantly lower external breakeven oil price than Oman and Bahrain and a significantly higher level of fiscal and foreign currency buffers, which (as in the case of the other higher rated GCC sovereigns) in principle give it some time to adjust, especially if the transition is more gradual.

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- » [Government of Oman: Rising share of Islamic banking assets deepens domestic sovereign sukuk market, supporting government liquidity](#), 21 April 2021
- » [Government of Kuwait: FAQ on financing deadlock and paths to resolution](#), 15 April 2021
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- » [Government of Qatar: Limited trade, financial integration curbs gains for Qatar from GCC diplomatic reconciliation](#), 7 January 2021

Rating methodology

- » [Sovereign ratings methodology](#), 25 November 2019

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- 1 The GCC comprises Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.
- 2 This point is highlighted by the fact that the total value of the UAE's non-hydrocarbon goods exports (excluding reexports) is more than 2.5 times the UAE's gross value added in the manufacturing sector.
- 3 A limitation of this measure is that (1) it does not take into account services exports and (2) it understates the level of diversification in a more closed economy with less exports. It also penalizes oil-exporting economies like [Norway](#) (Aaa stable), which has a high concentration reading of 0.66 but has a very well-diversified non-oil ("mainland") economy and export mix.
- 4 Saudi Arabia and the UAE introduced a 5% VAT in January 2018, with Saudi Arabia increasing its VAT rate to 15% in July 2020. Bahrain introduced the 5% VAT in January 2019 while Oman introduced it in April 2021.
- 5 An average of 37 Organization for Economic Co-operation and Development (OECD) member countries.
- 6 In contrast to other GCC producers like Abu Dhabi whose national oil company ADNOC has earmarked \$122 billion of investment to bring production volumes up to 5 mbpd by 2030, Kuwait has adopted a more cautious approach to expanding its production capacity, prioritizing margins over volume as a large portion of its existing oil fields enter the mature phase of their life cycle. The task of reversing the decline in Kuwait's maturing fields has been further complicated by parliament's opposition to the involvement of international oil companies in Kuwait's hydrocarbon sector
- 7 OPEC+ refers to an agreement between 13 members of the Organization of Petroleum Exporting Countries (OPEC) and 10 other oil-exporting economies, including Oman, Russia, [Kazakhstan](#) (Baa3 positive), Azerbaijan, and [Mexico](#) (Baa1 negative).
- 8 The pioneering Qatar National Vision 2030 and Bahrain Economic Vision 2030 were both launched in October 2008, followed by the announcement of the UAE Vision 2021 in 2010, which was then updated in 2014 with the launch of the UAE National Agenda. New Kuwait Vision 2035 was announced in 2017.
- 9 The UAE's sharp decline in this metric between 2004 and 2008 reflects an exceptionally large influx of expatriates, which nearly doubled the country's population during this four-year period.

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