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SECTOR IN-DEPTH
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Sovereigns – Global

Governments that bank commodity windfalls best placed to manage downturns

Summary

Commodity prices may have come off their peaks but the robust revenue from commodity sales still has potential to expand the government financial assets (GFAs)[1] of commodity-exporting sovereigns. Governments that proactively bank these windfalls or use the added fiscal capacity to diversify their economies will be in a stronger position to withstand future shocks and manage longer-term challenges – particularly hydrocarbon exporters, who are likely to reap the largest gains but face elevated carbon-transition risks.

» **Financial buffers will likely grow for commodity-producing sovereigns with established GFA accumulation strategies over the next two years.** Gains will be largest for hydrocarbon exporters that have low production costs, derive a large share of fiscal revenue from the oil and gas sector, and allocate a significant proportion of such revenue to their sovereign wealth funds (SWFs). While the nominal value of assets is likely to grow in our baseline scenario, we expect SWF assets to remain below pre-2015 peaks as a share of GDP, in part because of some asset drawdown since 2015 and lower commodity prices and production volumes compared to the record highs before 2015. Moreover, as interest rates remain high while global economic growth slows, commodity prices may come under further downward pressure and the financial performance of some SWFs may also suffer from unrealised losses.

» **Buffers support fiscal strength and increase government resilience to shocks**. Less than one-fifth of rated sovereigns have GFA buffers exceeding 10% of GDP and receive an uplift in our assessment of their fiscal strength under our sovereign methodology. This is because governments can draw on them to finance spending while avoiding debt accumulation, as their responses during previous shocks show. GFAs can also help vary the revenue streams of commodity-reliant sovereigns and give governments the financial capacity to manage longer-term environmental risks like the carbon transition by financing diversification projects for example.

» **GFAs boost creditworthiness by reducing government liquidity and external vulnerability risk, even amid global risk aversion.** GFAs invested in liquid assets provide a liquidity buffer that sovereigns can access if needed. For hydrocarbon-reliant sovereigns such assets provide a liquidity buffer against an accelerated carbon transition scenario in which investors increasingly shun hydrocarbon-related assets. GFAs invested in foreign-currency instruments reduce external vulnerability risk and lend credibility to currency pegs even in the event of sudden capital outflows from emerging markets (EMs).

Financial buffers will likely grow for commodity-producing sovereigns with established GFA accumulation strategies over the next two years

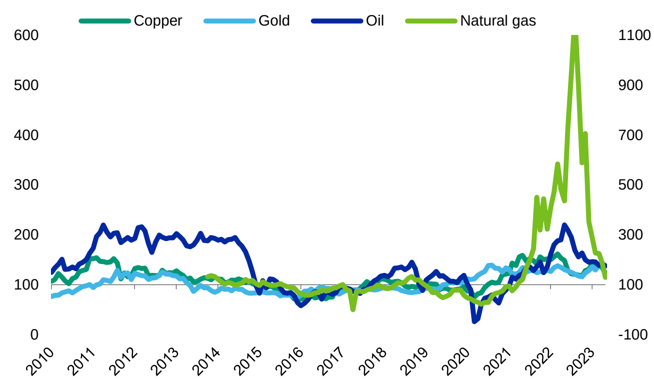
In 2022, hydrocarbon-exporting sovereigns recorded their largest fiscal surpluses since 2013, as the prices of a number of commodities soared following Russia's invasion of Ukraine (Ca stable), and as economies continued to recover from the coronavirus pandemic (see Exhibit 1). Although commodity prices have erased most of their 2022 gains, a number of sovereigns with large GFAs will continue to run fiscal surpluses over the next two years based on our oil price assumptions (see Exhibit 2).

In this report, we examine the varying channels via which different sovereigns' credit profiles stand to benefit from their accumulated GFAs.

Exhibit 1

Prices of most key commodities remain significantly higher than their levels over 2015-21

Commodity price index, average 2015-21=100, natural gas on right axis



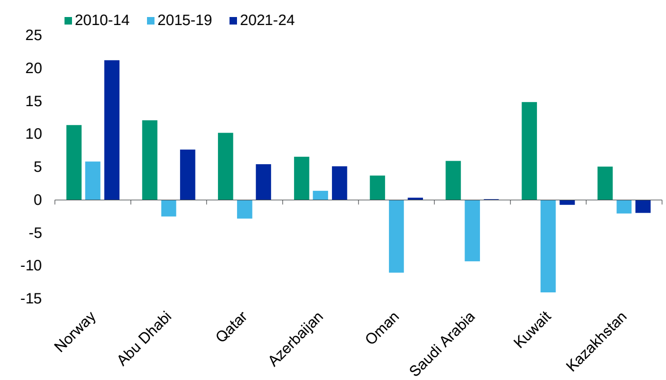
Natural gas refers to Dutch TTF

Sources: FactSet and Moody's Investors Service

Exhibit 2

Many large oil and gas exporters will continue to run modest fiscal surpluses following the 2020 oil price shock

Fiscal balance, % of GDP



We use the consolidated fiscal balances (which include SWFs) for Azerbaijan, Kazakhstan and Norway for comparative purposes since most, if not all, oil and gas revenue is directly collected by the funds.

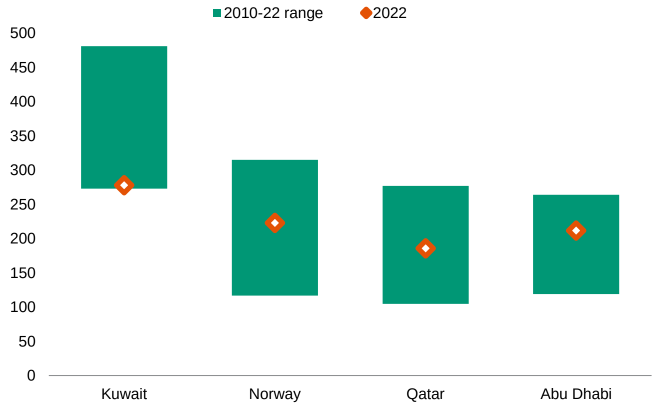
Source: Moody's Investors Service

We expect the governments of a number of commodity producers to bank the windfall from still robust prices, increasing their GFAs in nominal terms. These include Abu Dhabi (Aa2 stable), Azerbaijan (Ba1 stable), Kazakhstan (Baa2 stable), Norway (Aaa stable) and Qatar (Aa3 positive).

Saudi Arabia (A1 positive) has taken a different approach, taking advantage of higher revenue to raise spending that aims to reduce its exposure to carbon transition over time. Increased expenditure that is allocated toward development, particularly for infrastructure and diversification projects, can confer longer-term benefits by reducing the country's reliance on hydrocarbons. Increased development spending may also be more easily reduced when oil prices decline than social and recurrent spending such as on wages and subsidies.

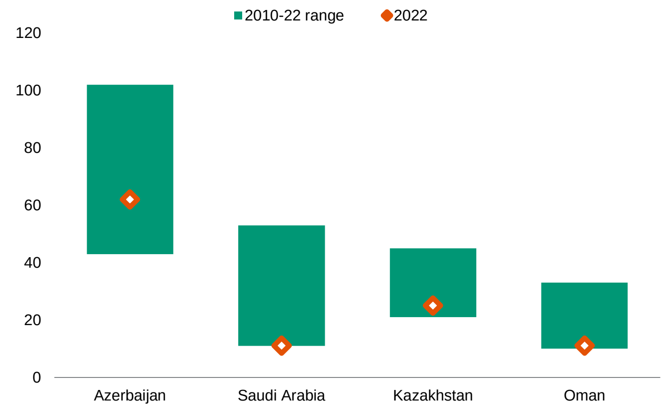
Despite the likely gains in GFAs, SWF assets for most commodity-producing sovereigns will remain below pre-2015 levels as a percentage of GDP over the next two years (see Exhibits 3 and 4). This reflects a combination of some drawdown of assets since 2015, and lower commodity prices and production volumes compared to their pre-2015 peaks. For oil exporters, production cuts agreed and implemented by members of the Organization of Petroleum Exporting Countries and its allies (together OPEC+) remain in place.

Exhibit 3
SWF assets are sizeable as a proportion of GDP, but stand below pre-2015 peaks for most sovereigns ...
SWF assets, % of GDP



Source: Moody's Investors Service

Exhibit 4
... and magnitudes vary between sovereigns
SWF assets, % of GDP



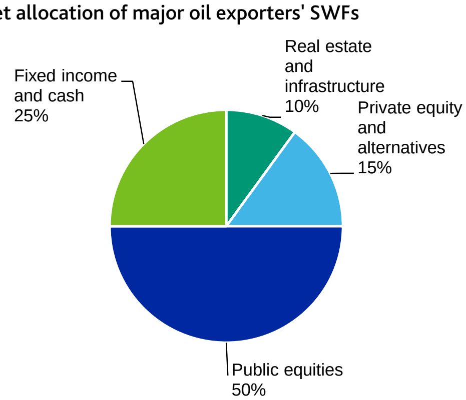
Source: Moody's Investors Service

For all sovereigns with SWFs, tighter monetary conditions globally – with the policy rates of most major developed market central banks significantly above their levels of the past decade, coupled with continued central bank balance sheet reduction – have the potential to dampen returns on their funds and the size of GFAs. Based on our analysis of the investment strategies of some of the largest SWFs that have made their allocations public,[2] we find that most predominantly allocate investments toward global equities and fixed income (see Exhibit 5). Both of these asset classes suffered losses in 2022 as the US (Aaa stable) Federal Reserve led major central banks in tightening monetary policy.

Total investment returns are a significant contributor to the size of SWF assets given the large investment portfolio, as the financial results of Norway's (Aaa stable) Government Pension Fund Global (GPFG) illustrate. For GPFG, cumulative returns have accounted for more than half of its balance sheet since 2019, having picked up as the total investment portfolio grew (see Exhibit 6); the bulk of the remainder came from net inflows or transfers from the government's budget.

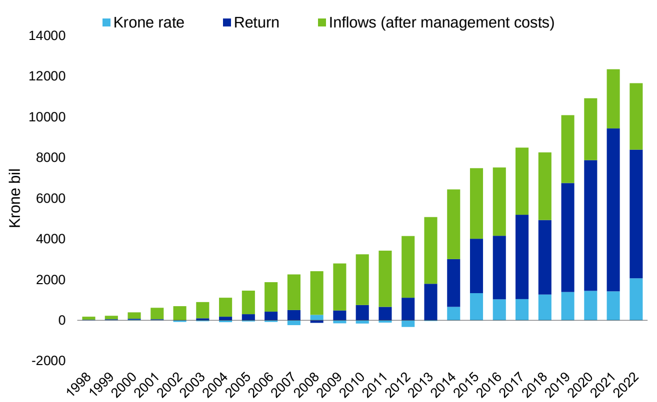
While SWFs are exposed to tighter monetary policy conditions and higher interest rates through their investment portfolio, we expect SWFs to ride out periods of negative returns and market volatility because their mandates and liability profiles allow them to be very long-term investors. Moreover, many SWFs have very large balance sheets as a share of GDP, which buffer losses; even sizeable realised investment losses may not be material for a SWF.

Exhibit 5
SWFs largely allocate investments to equities and fixed income
Stylised asset allocation of major oil exporters' SWFs



Stylised allocation based on publicly available information from some of the largest SWFs
Source: Moody's Investors Service

Exhibit 6
Cumulative returns drive balance sheet growth of Norway's SWF
Contribution to total assets, NOK billions



Sources: NorgesBank and Moody's Investors Service

Buffers support fiscal strength and increase governments' resilience to future shocks

The availability of sizeable GFAs can provide uplift to a sovereign's fiscal strength score in our scorecard. The assets point to a stronger government balance sheet than gross debt metrics alone indicate, reducing debt sustainability concerns. They can also be used to reduce outstanding government debt or limit future debt accumulation.

Twenty-seven rated sovereigns have GFAs equivalent to at least 10% of GDP and receive an uplift in our assessment of fiscal strength (see Exhibit 7).[3]

Exhibit 7

Some governments receive upward adjustments to their fiscal strength scores because of the size of their financial assets

Uplift	GFAs/GDP range (%)	Governments
+4	≥100	Abu Dhabi; Hong Kong SAR, China; Kuwait; Norway; Qatar; Singapore
+3	50-100	Azerbaijan
+2	25-50	Isle of Man; Kazakhstan; Macao SAR, China; New Zealand; Saudi Arabia; Trinidad & Tobago; Uzbekistan
+1	10-25	Australia; Botswana; Brazil; Cambodia; Finland; Greece; Iceland; Korea; Mauritius; Oman; Peru; Slovenia; South Africa

Source: Moody's Investors Service

Impact of GFAs on fiscal strength

We apply notching adjustments to a sovereign's fiscal strength score in the presence of substantial GFAs as they constitute a partial mitigant to the government debt burden. The possibility of transforming at least some GFAs into cash at relatively short notice and a generally predictable value means that sovereigns with sizeable GFAs have a valuable buffer against shocks.

We employ a forward-looking assessment when evaluating the impact of GFAs by considering both current GFA metrics and a quantitatively informed forecast of future metrics for a given sovereign. The use of forecasts is necessary because an accumulation of GFAs may result in larger surpluses over time when compared to amortising current debt since GFAs often have higher returns than the interest rate on currently held debt. Accumulated GFAs can then be used to reduce debt now – by drawing on liquid GFAs and paying down current obligations – as well as to avoid more borrowing in the future. Both of these operations entail a current or future decrease in a sovereign's debt burden.

In the latest update to our rating methodology for sovereigns, we have switched our quantitative metric to assess the size of fiscal buffers as a percentage of GDP instead of their coverage of debt, to better distinguish between the impact of debt and assets on fiscal strength. If a sovereign's debt burden rises, its core fiscal metrics – including debt affordability – will weaken. Higher debt may also reduce the uplift to fiscal strength conferred by GFAs when expressed as a percentage of debt, compounding the impact of the debt increase relative to a sovereign that does not have GFAs. By contrast, using GFAs as a percentage of GDP captures an intrinsic strength that is independent of a government's debt management strategy.

GFAs can only provide positive uplift to a sovereign's fiscal strength score, limited to a maximum of four notches. The uplift is assigned based on both quantitative metrics, such as the ratio of GFAs to GDP, and on qualitative factors, such as the liquidity of these assets.

Although GFAs do not eliminate the credit risks associated with accumulated gross government debt, effective use of the buffers can protect sovereigns' credit strength against shocks. For example, when oil prices fell in 2020, we estimate that Abu Dhabi received higher dividends from Abu Dhabi Investment Authority (ADIA) than it would have received under normal operating conditions. This supported government spending and contained the fiscal deficit despite weaker direct hydrocarbon revenue and lower dividends from Abu Dhabi National Oil Company (ADNOC Murban, Aa2 stable), keeping a lid on the rise in Abu Dhabi's debt burden while supporting economic activity. Similarly, Azerbaijan and Kazakhstan tapped the State Oil Fund of Azerbaijan (SOFAZ) and the National Fund of the Republic of Kazakhstan to increase government spending by 17% and 7% of GDP respectively without a significant rise in outstanding debt to counter the economic effects of the pandemic.

Furthermore, investment income generated by GFAs – including interest and dividend income, which is often either part of government revenue or transferred to government budgets – buttresses governments' capacity to spend, including on debt servicing payments.

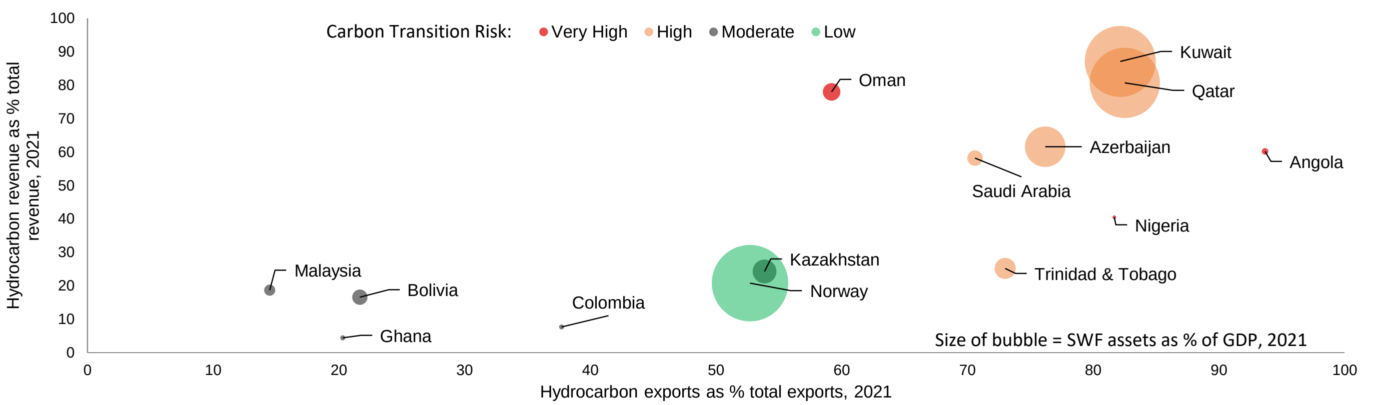
The preference for accumulating GFAs or paying down debt when a government is running a fiscal surplus depends on policy priorities. For example, Abu Dhabi has borrowed in excess of its funding needs and used the proceeds to accumulate financial assets as a contingency buffer against shocks, particularly when the government expected the return on assets to exceed borrowing costs. In Qatar, the government used its contingency reserve fund in 2020 to reduce its stock of debt by 3.2 percentage points of GDP in a year when it was running a sizeable fiscal deficit of 2% of GDP and nominal GDP was contracting, which boosted its debt metrics.

Expanding buffers allows more time to diversify away from reliance on hydrocarbons

Besides supporting debt sustainability and affordability, GFAs provide balance sheet capacity for governments to pursue longer-term adjustments and reforms. This is particularly pertinent for the hydrocarbon-exporting sovereigns with GFAs, as carbon transition risks remain one of their biggest long-term credit challenges and their key channel of exposure to environmental risk (see Exhibit 8). It is also relevant to economies like Hong Kong SAR, China (Aa3 stable) that face a potentially significant drag from population ageing. In what follows we focus on carbon transition.

Exhibit 8

Reliance on hydrocarbons drives our assessment of carbon transition risk for oil and gas exporters, but large fiscal buffers mitigate exposure



Source: Moody's Investors Service

While there were no significant new or accelerated net zero pledges at the United Nations Climate Change Conference (COP27) in November 2022, momentum behind carbon transition remains. The EU (Aaa stable), for example, has announced a new Green Deal to make the bloc carbon neutral by 2050 by overhauling current energy systems and consumption patterns to reduce the demand for fossil fuels. The Green Deal, along with other net-zero commitments by major countries over the coming decades, will inevitably result in lower demand for oil and gas in the long term, with hydrocarbon exports producing less revenue across oil price cycles, even under our core expectation of gradual global carbon transition.

Despite the current environment of relatively supportive oil prices, many hydrocarbon exporting sovereigns with GFAs are pursuing economic and fiscal diversification, spurred by the oil price shocks of 2015-17 and 2020. SWFs often play a significant role in contributing to economic and income diversification in hydrocarbon-producing economies.

For example, Saudi Arabia's Public Investment Fund (PIF, A1 positive) was mandated to lead the kingdom's diversification by establishing companies in strategic sectors and cofunding and overseeing a growing number of high-profile large-scale diversification projects, focusing on the underdeveloped tourism and entertainment sectors. These projects include the Jeddah Downtown development project, the King Salman Park in Riyadh, Jeddah Metro (to be completed by 2025) and the futuristic city of NEOM, which will be developed as a special economic zone in the northwest of the country and powered by renewable energy.

In Abu Dhabi, diversification efforts are led by the government's holding companies Mubadala Investment Company (Mamoura Diversified Global Holding PJSC, Aa2 stable) and Abu Dhabi Developmental Holding Company PJSC (ADQ, Aa2 stable).[4] The government-owned Abu Dhabi Future Energy Company PJSC (Masdar, A2 stable) and Abu Dhabi National Energy Company (TAQA, Aa3 stable) are also two of the largest investors in renewable assets in the Middle East.

In addition, large GFAs invested in nonhydrocarbon assets, particularly foreign-based assets, provide some revenue diversification for hydrocarbon exporters, although in a limited way so far; explicit transfers to government budgets in the form of dividends remain small compared to hydrocarbon revenue or government expenditure.[5]

SWFs of hydrocarbon exporters do not generally invest in the hydrocarbon sector as part of their mandate and with few exceptions such as Oman (Ba2 positive) and Saudi Arabia, the allocation to domestic assets is relatively small or prohibited. As such, SWF investment returns have limited correlation with developments in oil and gas prices. This provides some degree of diversification in government revenue.

That said, we expect the hydrocarbon sector will continue to be the primary driver of incomes and wealth for the foreseeable future for all hydrocarbon exporters we rate with large GFAs. We reflect this exposure in our environmental risk issuer profile scores for these governments except for Norway because its significantly more diversified and competitive economy mitigates the implications of carbon transition.

In general, accumulating GFAs during periods of buoyant oil prices increases the resilience of governments when oil prices are low. Large GFAs also in principle buy time for governments to implement reforms that would reduce exposure to longer-term carbon transition risks, particularly the introduction of nonhydrocarbon revenue, or for future streams of nonhydrocarbon revenue to develop through diversification projects.

GFAs boost creditworthiness by reducing government liquidity and external vulnerability risks, even amid global risk aversion

GFAs can reduce susceptibility to event risk by lowering the financing and rollover risk of a government, which enhances our assessment of the sovereign's government liquidity risk (GLR) and/or external vulnerability risk (EVR) scores and its resilience to shocks.

In particular, GFAs that are liquid, sizeable, and (where relevant) denominated in foreign currencies can serve as liquidity buffers during periods of market stress, when borrowing costs are high or rising (as experienced over 2022 and in the first half of 2023). This would also apply if investors began to anticipate an accelerating path of carbon transition, reducing their exposure and appetite for hydrocarbon-related assets, including debt issued by hydrocarbon-reliant sovereigns.

The liquid portion of GFAs can be converted into cash to lower a government's gross borrowing requirement, which consists of the fiscal deficit and maturing debt. This is especially useful in times when funding markets become frozen, or when risk premia are high because of investor risk aversion.

Impact of GFAs on government liquidity and external vulnerability risk

While our sovereign methodology does not specify thresholds or the size of the upward adjustments conferred by liquid GFAs, we cite the presence of and access to these assets as justification for our GLR and EVR assessments. GFAs can reduce a sovereign's susceptibility to event risk factor by reducing GLR or EVR. A large volume of GFAs reduces GLR and/or EVR (where the assets are foreign currency denominated) since it allows a distressed sovereign to cover debt and/or external payment needs by draining liquid GFA assets.

For GLR, we consider in our assessment the size of GFAs relative to the stock of debt, the coverage these provide to the government's gross financing needs, their liquidity and the sovereign's ease of access to these reserves. We also assess the longevity of these reserves and the risk that they may be depleted over a relatively short time frame.

For EVR, we consider the size of the foreign currency-denominated assets and the possibility that these assets are sufficiently liquid and can be tapped to supplement official foreign-exchange reserves and/or mitigate balance of payments risks.

Fourteen rated sovereigns with GFAs have liquid assets that are large enough to support our assessment of their GLR, which in many cases could be higher (worse) without these assets (see Exhibit 9).

Exhibit 9

Presence of sizeable liquid government financial assets supports our assessment of government liquidity and external vulnerability risk for some governments

Governments for which we take into account GFAs in our assessment of GLR or EVR

Government Liquidity Risk

- Abu Dhabi
- Azerbaijan
- Hong Kong SAR, China
- Iceland
- Kazakhstan
- Kuwait
- Macao SAR, China
- Norway
- Oman
- Peru
- Qatar
- Saudi Arabia
- Singapore
- Slovenia

External Vulnerability Risk

- Abu Dhabi
- Azerbaijan
- Iceland
- Kazakhstan
- Kuwait
- Oman
- Qatar
- Saudi Arabia
- Sharjah
- United Arab Emirates

Abu Dhabi, Sharjah (Ba1 stable) and the United Arab Emirates (Aa2 stable) share the same EVR score because the individual emirates operate under a monetary union and foreign exchange reserves are pooled at the Central Bank of the United Arab Emirates. Their scores benefit from Abu Dhabi's GFAs.
Source: Moody's Investors Service

For some of these governments, such as Abu Dhabi, Azerbaijan, Kuwait (A1 stable), Norway, Saudi Arabia, Singapore and Qatar, our estimates of their liquid GFAs dwarf the size of their financing needs – by more than three times when comparing with the respective average gross financing requirement over the past five years. For Norway, Saudi Arabia and Singapore (Aaa stable), the ability to access domestic and international markets is already consistent with a strong GLR score, regardless of the support from GFAs.

Although some governments cannot technically access most of their GFAs because of restrictions on drawing down on SWFs – such as in Kuwait in relation to its Future Generations Fund and Qatar in relation to Qatar Investment Authority – we assume that emergency transactions can occur to provide financing in a severe stress episode.

In Norway, the government's non-oil budget deficit is covered by transfers from GPFG based on its fiscal rule. As such, the government does not borrow to fund fiscal deficits and can tap on GPFG to finance increased spending, such as net withdrawals made over 2020-21 to support its response to the pandemic. Saudi Arabia and Oman also financed some of their fiscal deficits from SWF assets during 2015-20, without which market borrowing needs and debt burdens would be significantly higher.

While unrelated to market volatility, Kuwait was able to rely on its General Reserve Fund (the government's treasury account) to finance its large deficits averaging 14.5% of GDP from the fiscal year ending March 2019 (fiscal 2018) to fiscal 2021 to make repayments on both local and foreign currency debt after the country's public debt law expired in 2017. Without a sizeable financial buffer, default would have been a concern because the government was unable to issue new debt. Kuwait also tapped its Future Generations Fund after the Gulf War to finance reconstruction spending, through a loan that has since been fully repaid.

Besides lowering GLR, tensovereigns have sufficiently large foreign currency liquid assets to support our assessment of lower EVR than is implied by their external accounts or coverage by foreign exchange reserves (excluding gold and Special Drawing Rights at the International Monetary Fund) of imports and external repayments due over the coming year.

Where GFAs are liquid and foreign currency-denominated, they support a country's external position by reducing external borrowing needs for the government, or by meeting demand for foreign currencies. This buffer and the policy option of converting foreign currency GFAs into local currency can foster domestic monetary, financial and currency stability, and where relevant, support the central bank's currency peg or currency management. During episodes of risk aversion, this policy option is particularly useful for countries that depend on foreign capital and investment. Although most hydrocarbon-reliant sovereigns are net exporters of capital given their robust current account surpluses even at lower oil and gas prices, having foreign assets that can be repatriated can prove valuable as the experience of Qatar during the blockade by other members of the Gulf Cooperation Council showed. In particular, the Qatari government was able to stabilise its balance of payments and its banking system with large external liabilities despite the blockade by bringing SWF assets onshore.

The presence of large and liquid foreign currency-denominated GFAs also informs our views on the adequacy of a sovereign's foreign exchange buffers. For example, at the height of the coronavirus pandemic in the first half of 2020, Azerbaijan accelerated the transfer of assets from SOFAZ to the government's state budget, providing extra foreign currency liquidity to markets and keeping the manat stable against the dollar. SOFAZ also transferred some assets to the Central Bank of Azerbaijan to boost its foreign-currency reserves in 2017, which bolstered market confidence in the central bank's ability to maintain exchange rate stability.

Endnotes

1 In our methodology, we define GFAs to include sovereign wealth funds (SWFs) and certain other assets held by the government through its ministry of finance or treasury. For most sovereigns with sizeable GFAs, SWFs comprise the bulk. We also include government-owned domestic cash and foreign currency funds, and assets that we consider to be liquid enough to be converted into cash typically in a year's time and at a generally predictable value.

2 These include including Norway's Government Pension Fund Global, Singapore's Government Investment Corporation, Abu Dhabi's Abu Dhabi Investment Authority and Saudi Arabia's Public Investment Fund.

3 We set the minimum threshold at 10% of GDP as we regard this as a sufficient amount to provide a buffer against shocks. The final fiscal strength score may not reflect the uplift given the presence of other adjustments or if the score is already at the highest possible level. For more detail, please see our methodology.

4 We do not include these holding companies' assets in our calculation of Abu Dhabi's GFA as they tend to be large, nontraded equity stakes.

5 For funds that make regular contributions to the budget, including dividends (which constitute outflows for SWFs), as in Abu Dhabi, Norway, Oman, the contributions are relatively minor and do not exceed 5% of total assets in a given year across this group of sovereigns. Transfers from SWFs to government budgets in Azerbaijan and Kazakhstan tend to exceed 5% of assets because they (and Norway) receive regular inflows across economic and commodity price cycles from oil and gas related revenue.

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