MOODY'S

SECTOR IN-DEPTH

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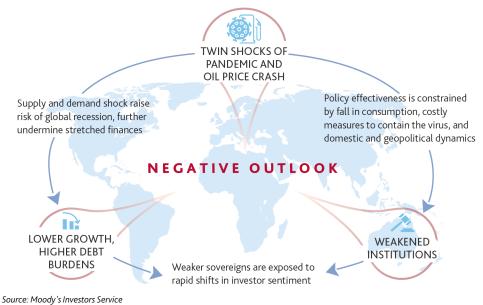
Sovereigns – Global

Coronavirus and oil price shock magnify weaknesses highlighted in negative 2020 outlook

The negative outlook on global sovereigns detailed in our 2020 Global Sovereign Outlook reflected sovereign credits' rising vulnerability to shocks. Sure enough, the shocks of the Coronavirus outbreak and the sharp fall in oil prices are exposing sovereigns' vulnerability along each of the credit channels we identified then as weaknesses. They will lower GDP growth and fiscal strength, deepen weaker sovereigns' vulnerability to shifts in investor sentiment, and expose wider weaknesses in domestic and international institutions.

We currently assume that the crisis, however severe, remains relatively short-lived and that growth resumes in the second half of the year. In that scenario, and given the unique strengths and tools available to sovereigns, the immediate credit and rating implications for sovereigns would be relatively limited. However, our assumptions about the economic impact of the crisis are dynamic and could change. If damage to growth were to be more severe and protracted, with debt rising further and affordable financing less readily available than expected, the credit implications for sovereigns would be more profound.

Exhibit 1
Twin shocks will further depress global growth and expose weak institutional strength



Twin shocks have damaged the global credit environment – and their duration will determine trajectory of global sovereign ratings

The rapid spread of the coronavirus outbreak and sharply lower oil and asset prices have significantly weakened the global economic outlook and are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effect of these developments is unprecedented. We expect that credit quality around the world will continue to deteriorate, especially for those issuers in sectors most affected by reduced revenues and disrupted supply chains, or by investors' heightened risk aversion.¹

Moody's has already taken a number of rating actions in the most affected sectors and expects to announce more in the coming weeks. This report discusses the implications of the crisis for sovereigns. It explains why rating actions in the sovereign space are likely to be relatively limited provided the crisis, however severe, remains relatively short-lived and growth resumes in the second half of the year without more long-lasting damage having been done to economies and financial systems.

Sovereigns can weather storms others cannot. Generally speaking, they have deep pockets, wide sources of revenues and funding, often including supportive banking systems, and the unique ability to determine which expenditure obligations they meet, generally without sanction. As a result, we generally look through shocks that we expect to be temporary, the impact of which will either be corrected over time (e.g., non-permanent losses in productive capacity) or limited (e.g., marginally higher levels of debt).

So at the moment we expect any material credit and rating consequences to be focused on weaker sovereigns or on those facing idiosyncratic challenges, probably relating to weak institutions or ineffective policymaking. We will adjust ratings to reflect changes in credit risks profiles that we consider to be unlikely to fully recover within the next few years, and those with higher default risk.

However, our assumptions as to the economic impact of the crisis are dynamic and have already worsened, as seen in recent revisions to our global growth forecasts. More pessimistic scenarios could emerge in which (whether as a direct consequence of the crisis or because of the public and policy response to it) growth is damaged more profoundly and – importantly – over a longer period, debt rises far more widely and rapidly, and access to financing at affordable rates becomes even more selective than we currently expect. Investors should expect broader sovereign rating actions if those adverse scenarios were to begin to emerge.

In that event, the greatest pressures would likely manifest through four broad channels, as illustrated in Exhibit 2 and summarised below. Pressures would clearly be greatest in scenarios in which these channels intersect, most likely affecting weaker commodity-dependent frontier states:

Exhibit 2

If adverse scenarios became more likely, four channels would drive sovereign rating actions



Source: Moody's Investors Service

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.

» A scenario of even lower global growth prospects further weighing on government finances, increasing already-high debt burdens. Pressures through this channel would be widely felt, but would be particularly acute in slow-growing, often highly indebted advanced economies including Italy (Baa3 stable), Italy (Baa3 stable),

- » A scenario of a specific shock to a highly concentrated economy inflicting severe damage on growth, with significant consequences for all aspects of the sovereign credit profile. Tourism-dependent economies such as <u>Jamaica</u> (B2 stable), the <u>Dominican Republic</u> (Ba3 stable) and <u>Maldives</u> (B2 negative) are particularly exposed in this respect.
- » A scenario of additional shocks to oil, gas or commodity prices further undermining growth and public finances in commodity-dependent nations, including GCC states such as <u>Saudi Arabia</u> (A1 stable) or <u>Kuwait</u> (Aa2 stable), and weaker emerging and frontier markets such as <u>Oman</u> (Ba2 stable), <u>Costa Rica</u> (B2 stable) or <u>Suriname</u> (B2 stable).
- » A scenario in which shifts in risk appetite cause capital outflows, denying exposed sovereigns access to financing at affordable rates. Weaker credits that are highly dependent on external and foreign-currency borrowing would be most at risk, such as <u>Turkey</u> (B1 negative), <u>Sri Lanka</u> (B2 stable), <u>Tunisia</u> (B2 stable) or <u>Mongolia</u> (B3 stable), although advanced economies such as Italy could also come under pressure.

Credit quality of sub-sovereign issuers linked to that of their respective sovereign

In line with the negative outlook on global sovereigns, the overall outlook on the sub-sovereign sector, comprising **regional and local governments (RLGs)** and **government-related issuers (GRIs)**, is now also negative. Given the close financial linkages and oversight between the sovereign and its respective sub-sovereign sector, RLGs and GRIs will face the same credit risks from macroeconomic factors and government policy decisions – and therefore also the same deterioration in credit quality as their respective sovereigns. That said, idiosyncratic factors can differentiate the creditworthiness of individual sub-sovereign issuers under the same sovereign.

RLGs will face a range of revenue-generation constraints in 2020. While some RLGs rely on own-source direct or indirect taxation revenue, and others on transfers from a higher-tier government, the primary source of revenue is typically sourced from economic activity, which will decline in 2020 as a result of the twin shocks outlined above. Although we expect sovereigns to bear the brunt of additional social spending pressures, RLGs will nonetheless face upward spending pressure, the extent of which will vary between jurisdictions depending on the level of program responsibilities faced by each RLG. Lastly, RLGs' access to capital markets also tends to be viewed within the context of investors' risk appetite for sovereign credit. As the latter shifts, so too does the former. That is why emerging market RLGs that rely on cross-border financing are particularly exposed to a drastic credit deterioration in the current environment. However, this risk is partially offset by the fact that the majority of rated sub-sovereigns tend to rely on local markets to meet their financing needs.

GRIs will also be negatively affected by broad sovereign credit pressures stemming from the coronavirus outbreak. However, these pressures are likely to vary between sectors: they will be very limited for the social housing sector given their strategic role and likely government support, but more pronounced for the higher education and health care sectors.

The credit risk facing the *higher education* sector will stem from lower revenue and higher costs as institutions implement alternative course offerings to comply with mobility restrictions. Credit risk will also be higher for those universities that rely on high concentrations of international enrollment to support revenue given that these students will be most affected by travel restrictions.

Publicly funded healthcare issuers in Europe and Canada are experiencing a steep rise in demand for their services and thus a rise in corresponding costs, but their respective governments will address the resulting funding needs. However, in France, the uncertainty surrounding the timeliness of the provision of additional public funding will be important credit considerations for individual healthcare entities. This risk is absent among Canadian health care providers based on our assumption of increased access by each institution to provincial liquidity, should it be required.

The global economy is in or close to recession

Late last year, our negative outlook for global sovereigns in 2020 highlighted the cyclical and structural drivers of lower global growth as a broad threat to sovereign credit. The unexpected emergence of coronavirus constitutes a significant supply and demand shock to the global economy. It has led, and will continue to lead, to travel restrictions and quarantines, as well as to closures of schools, factories and businesses in some of the world's largest economies. Private consumption has fallen sharply as a result of the limitations on movement and weak confidence. Significant uncertainty around economic conditions and the spread of the virus have also caused investment spending to slow dramatically in many countries.

We currently assume that the number of global coronavirus cases will increase at least through the second quarter of 2020, and quite possibly beyond. These shocks will bring about a very material slowdown in economic activity in 2020 (see Exhibit 3). Exports will make little or no contribution to growth given the substantial decline in trade volumes. Government consumption is likely to be the only material contributor to economic growth. Growth will then recover, steadily if not necessarily rapidly, as the spread and impact of the virus diminishes.

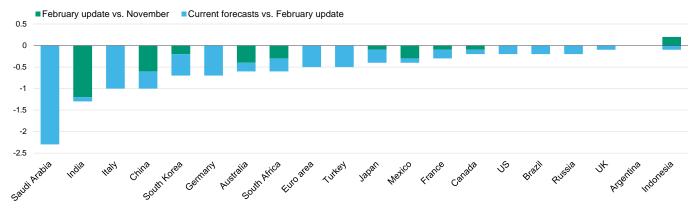
Meanwhile, a combination of lower demand and, following the breakdown of OPEC+ talks, a glut of supply has caused the oil price to fall very substantially. While we expect it to average at around \$40-45 in 2020 and to return to the \$50-70 range over the medium term, it is currently languishing at far lower levels, with downside risks to our assumptions. While the shock will, on the margins, support growth for oil importers, it will have a materially negative effect on economic growth and fiscal strength among oil exporters.

As things stand, we expect a recovery in growth in the second half of the year and through 2021. If so, the impact on sovereigns' economic strength will be contained. However, Exhibit 3 also illustrates the dynamic nature of our forecasts, with still more recent revision to February projections, and by implication the significant downside risks to our current forecasts.

- » Among advanced markets, the rapid spread of the virus outbreak heightens this downside risk for an increasing number of economies.
- » All emerging markets will grow at rates that are well below potential. Oil exporters such as Saudi Arabia and Mexico (A3 negative) are at risk of outright contractions in growth.

The deeper the crisis, the longer it persists and the greater the negative impact on the corporate sectors, on investment and on employment, the more profound the medium-term impact on sovereigns' economic resilience will be.

Exhibit 3
Prospects for global growth have declined as the impact of coronavirus spreads globally
Change in real GDP growth forecasts for 2020, percentage points. Moody's forecasts as of 6 March.



Source: National authorities, Moody's Investors Service

Policy responses are unlikely to do more than cushion the negative impact

The range of monetary and fiscal responses announced so far has illustrated the constraints facing policymakers. While the policy response has been significant and continues to grow, at this point we do not expect it to do more than cushion somewhat the negative economic impact of the shock, or in some cases allow for a faster recovery once the shock recedes.

Policymakers have responded to the crisis at different paces. The central bank community has responded quickly and in a reasonably coordinated fashion. Governments' response has been more varied and far less coordinated. In part that reflects the inevitable challenge of dealing with the unknown, together with the diverse constituencies facing policymakers in different countries. But particularly among larger western economies, it also reflects broader concerns flagged in our 2020 Global Sovereign Outlook linked to the impact on policymaking of fractious domestic political environments, weakening domestic institutions and the deteriorating international consensus.

The need for effective coordination in managing the health crisis and limiting the impact on growth is gaining traction, at least in some regions. While the <u>European Union</u> (Aaa stable) has been slow to devise a coordinated response, one is emerging that may start to employ some of the crisis-management tools that were devised during the euro area sovereign debt crisis. However, on the whole, global responses have thus far been disjointed, favouring more nationally focused approaches that are likely to be suboptimal in combating a global and strongly interconnected problem. While by no means unique, the slow and halting policy response in the <u>US</u> (Aaa stable) exemplifies the concern, both with regard to the country's response, particularly in recognising and addressing the depth of the health crisis, and in the lack of coordination with other countries when implementing key initiatives, particularly entry bans.

Exhibit 4
List of measures adopted by G20 sovereigns to mitigate the impact of coronavirus, as of 20 March 2020

	Income subsidies for workers	Increased social protection for workers with coronavirus, or self- isolating due to potential exposure	State loans or credit guarantees for companies	Tax deferrals	Social security deferrals or subsidies	Debt repayment holidays	Direct cash transfers for citizens
Advanced							
US	√	٧	V	√	٧		٧
Japan			√			√	√
Germany	√	٧	٧	√	√		
UK	V	٧	٧	V	√	V	
France	√		٧	V	√		
Italy	√		٧	√	√	√	
Canada	٧	٧	٧				V
Australia	V	٧		V			V
South Korea	√	٧	٧	√			√
Spain	٧		٧	٧	٧	٧	
Emerging							
China			٧	٧	٧	٧	
India							
Brazil	V			٧	٧	V	√
Russia		٧	٧	٧		٧	
Mexico							
Indonesia	√			V			
Turkey							
Saudi Arabia			٧	٧			
Argentina	V	٧	V		٧		٧
South Africa		√			√		

V: Adopted / high probability of adoption; V: Under discussion

Source: Moody's Investors Service

Looking globally, beside virus containment measures, policy responses fall into three broad categories:

1.) Mitigation of economic damage to vulnerable businesses and individuals

Sovereigns across the G20 are taking measures to try to mitigate the immediate economic harm to businesses and individuals from the coronavirus outbreak. The measures enacted or contemplated have taken different forms in different countries, but they share many common elements – in particular increased social protection for workers suffering from coronavirus or needing time off work to deal with its consequences; financial support for companies in the form of tax deferrals or subsidies, as well as loans, guarantees and supported lending schemes to promote continued access to working capital; and income subsidies for workers and even direct cash transfers for citizens. Exhibit 4 summarises the measures adopted to date in a range of countries.

They also share common limitations. Principal among those are:

- » While financial support measures (including tax or social security deferrals, debt repayment holidays or, in some cases, subsidies) may provide financial support over the medium term, they tend to be of limited use in providing the funding that firms, and in particular small firms, need to survive the early impact of the shock and remain in business.
- » Measures to facilitate the flow of credit to the real economy, in particular to SMEs, are important. But while they can relieve some constraints in accessing credit, they are unlikely to encourage more spending in the current environment. Many such measures were also introduced in the aftermath of the financial crisis to enhance the supply of credit, particularly in Europe, with mixed success.
- » Income subsidies and social protection for workers are important measures that can support consumption. However, the greater challenge for policymakers will be to help firms remain viable to minimise any increase in unemployment, particularly given the economic destruction that layoffs and bankruptcies entail, and the negative impact of unemployment on potential growth.

Overall, many packages are equivalent to less than 1.0% of national GDP, which is generally smaller than the response to the Global Financial Crisis, although a number of countries have announced supplementary measures that are pushing up the overall level of support. This crisis is still in its early days, and so the size of the policy response is likely to rise further.

2.) Increase in current expenditure to deal with the health crisis

Most governments have announced packages to allocate more resources (sometimes significantly more) to health care, and in some cases have pledged to spend whatever is necessary to deal with the public health impact. While it is not always clear how much new money is being committed, the amounts are nevertheless substantial and, given the escalation of the health crisis, it is reasonable to expect that they will rise over time.

- » China (A1 stable) has so far spent RMB650 billion on medical treatments for and control of the coronavirus.
- » Korea (Aa2 stable) has increased health care spending and disease control efforts by 2.3 trillion won.
- » **Italy** has announced an additional €3.5 billion for its health care system and the civil protection agency that is in charge of organising the coronavirus response.
- » In its 11 March 2020 budget, the **UK** government announced a £5 billion funding increase for the National Health Service.
- » Spain (Baa1 stable) has announced €2.8 billion in transfers to regional governments to reinforce their health systems and €1 billion at the central government level for priority health interventions.
- » Brazil (Ba2 stable) has announced a \$1 billion increase in health expenditures intended to curtail the spread of coronavirus.
- » Canada (Aaa stable) has announced a CAD\$1 billion emergency fund for provincial healthcare systems.
- » The **US** has passed an \$8.3 billion emergency coronavirus spending package to support the development of a vaccine, testing as well as state and local health efforts. In the US, the decentralised health care system has slowed the process of giving clarity on access to coronavirus testing and treatment and the way in which the public health response to the pandemic will be financed. However, legislation has now started to pass the US Congress that is dealing with these issues.²

3.) Attempts to sustain confidence and ensure the flow of credit to the economy

Central banks have taken a range of actions to mitigate the volatility in the financial markets and to sustain growth and confidence. Tools deployed have included traditional and more recent monetary policy instruments, with interest rates cut and asset purchase schemes revitalised; credit support operations intended to support and incentivise financial institutions in the provision of credit to the real economy; and unilateral or multilateral liquidity support operations to stave off financial market dislocation (see Exhibit 5).

With many central banks operating close to or even below the zero bound, many policy responses have been constrained and conditioned by the already low level of interest rates. Traditional instruments have been supplemented by quantitative measures, the effectiveness of which is not well understood, along with macro-prudential and credit support measures which rely on incentives for financial institutions to operate as intended. Moreover, the broader impact of monetary policy actions is necessarily limited in an environment in which many types of expenditure are simply not possible due to external or self-imposed restrictions on movement.

As many monetary policymakers have themselves made clear, while monetary policy can play a supportive role, this is not a crisis it can resolve. That responsibility rests, inter alia, with the fiscal authorities. And in many parts of the world they are equally constrained.

Exhibit 5

Major central banks are trying to use various tools to halt the collapse in confidence
Summary of monetary policy announcements

	Interest rate cuts	Quantitative Easing expansion	Liquidity injections	Coordinated action to lower cost of \$ liquidity swap arrangement	Easing of capital requirements
US Federal Reserve	V	٧	√	٧	٧
European Central Bank		٧	√	√	V
Bank of England	√	٧	√	V	√
Bank of Canada	√			٧	
Reserve Bank of Australia	√		√		
Bank of Japan		٧	√	٧	
Swiss National Bank				٧	
People's Bank of China	√		√		٧

Source: Moody's Investors Service

Debt levels rising in an already highly leveraged global economy

For a number of years, we have pointed to high and sticky debt levels as a source of fragility for global sovereign creditworthiness in the event of a shock. Few advanced economies have made material progress in rebuilding the fiscal space that was lost in the early part of the decade. Where debt reductions were seen, they were largely a function of the cyclical upturn rather than structural improvements in sovereign balance sheets. In many countries, the private sector is also highly indebted, reducing the resilience of individuals and corporates to a prolonged period of economic stress, and increasing the risk that some of this debt could ultimately end up back on the government's balance sheet.

So sovereigns, particularly but not exclusively the major advanced economies, have limited fiscal space with which to deal with a downturn without a loss of credit strength. The crisis will shine a light on that weakness and indeed accentuate it by causing debt to rise still further, even if we assume that the economic shock will be fairly short-lived.

Adverse pressures will stem from weakening real growth, falling inflation, rising interest rates for those countries that are more exposed to risk-off periods (see Exhibit 6) and rising fiscal deficits due to fiscal stimulus, measures to increase funding for healthcare, the impact of automatic stabilisers, and reduced revenue intake. The announced fiscal stimulus measures or supplementary budgets detailed in the previous section are probably only the first of a series of policy announcements. Other factors that could raise debt burdens include the need to support systemically important companies or sectors, and adverse exchange-rate movements.

That said, while increases in debt are credit negative, other things being equal, a relatively moderate step change in indebtedness need not in isolation inflict material damage on a sovereign's credit profile. There is no threshold above which a rating change is inevitable. Other factors, including confidence that the increase will be contained, and the expected impact on investor confidence and therefore on the availability and cost of finance, are also important. The clarity and credibility of measures to contain and ultimately reverse the increase in debt are at least as important as the level.

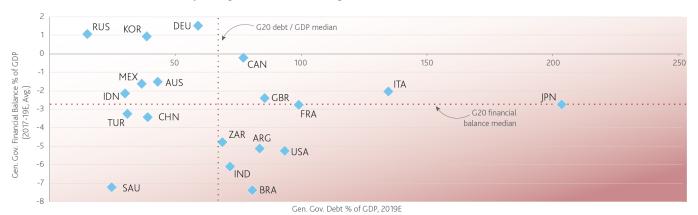
And while the cause and extent of increased indebtedness will vary from country to country, our current view is that, for the majority, the overall increase in debt is likely to be moderate – around 3 to 7 percentage points of GDP over the next couple of years. Particularly for countries with robust growth potential, lower starting debt positions and strong institutions, an increase of that order of magnitude could be absorbed without unduly damaging the credit profile or rating.

However, some countries are likely to experience a more significant rise in debt. Moreover, increases in debt could easily grow and become less controlled if the shock were to deepen, requiring a more aggressive policy response. And governments' ability to absorb additional debt in a credit-neutral way varies quite significantly.

Countries with low debt burdens such as Korea, Russia (Baa3 stable), or Germany (Aaa stable) have ample fiscal space to leverage the government's balance sheet to support the economy. In contrast, sovereigns – including many in Europe – that have significantly increased their indebtedness over the past decade may have little choice but to allow their creditworthiness to decline, possibly materially, if the pandemic forces them to take more drastic actions. Recent increases in yields on highly rated sovereign debt illustrate how the very benign financing conditions prevailing in recent years cannot be relied upon to persist.

One important area of uncertainty is whether large corporates will receive state support. In the US, airlines have asked the federal government for grants, loan guarantees and tax relief. Alitalia is already receiving support from the Italian government. Australia's (Aaa stable) government has also announced financial support to airlines. France (Aa2 stable) has stated that it will step in to support key national companies, and suggested that distressed corporates might be nationalised. In principle, the overall credit impact of such initiatives may be positive if it lends the corporate sector the sovereign's longer time horizon and allows large, otherwise healthy companies to survive, avoiding significant increases in unemployment. Again, however, the overall impact will depend on the extent of the impact and on the confidence we have that money will be well-spent and that the impact will be contained and reversed.

Exhibit 6
Room to absorb coronavirus-related spending varies across sovereigns



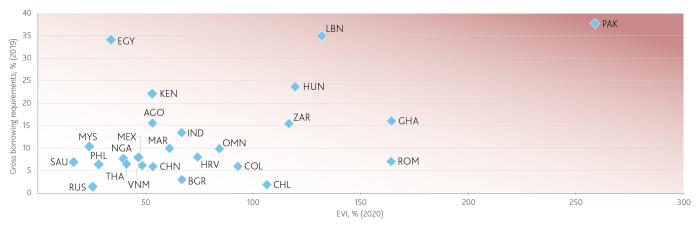
Source: National authorities, Moody's Investors Service

Some of the weakest sovereigns are experiencing a sudden stop in capital flows

Weaker global growth, the oil price shock and heightened risk aversion in financial markets are causing a very material outflow of capital from emerging markets (see Exhibit 9). For sovereigns that rely on external financing (see Exhibit 7) this very large shift in investor sentiment will, if prolonged, pose a key threat to their creditworthiness. While our assessment of sovereigns' liquidity risk takes into account their vulnerability to sudden changes in financing conditions, the shocks recorded in the past few weeks are quite unprecedented. Many of these countries are constrained by already high indebtedness and limited access to funding.

Lower oil prices will ease current account pressures for oil-importing countries that were already experiencing cyclically driven improvements in their balance-of-payments position. However, tighter funding conditions will nevertheless stress sovereigns such as Turkey or Argentina (Caa2 RUR-), which have high foreign-currency exposure, a heavy reliance on external market funding, and/or inadequate foreign-currency reserve coverage (see Exhibit 7). Our stress tests indicate that sovereigns including Pakistan (B3 stable), Zambia (Caa2 negative), Sri Lanka, Argentina and Egypt (B2 stable) are particularly vulnerable to a lasting and sharp tightening in financing conditions. Moreover, commodity-reliant sovereigns with large external funding needs, such as Chile (A1 stable), Oman and Colombia (Baa2 stable), are also increasingly vulnerable.

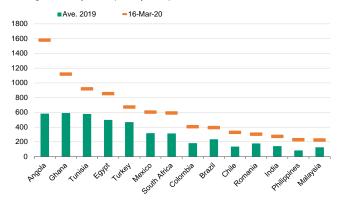
Exhibit 7
EMs with higher repayment requirements are most exposed



Note: EVI stands for External Vulnerability Indicator, and is defined as short-term external debt + currently maturing long-term external debt + total nonresident deposits over one year, divided by official foreign exchange reserves.

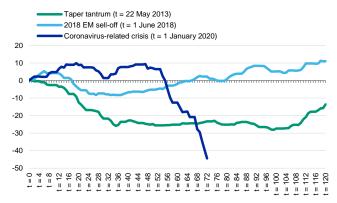
Source: National authorities, Moody's Investors Service

Exhibit 8
Rising spreads highlight EMs' exposure to tightening in financing conditions
Monthly EMBIG spreads (basis points)



Source: Haver Analystics, Moody's Investors Service

Exhibit 9
Capital flows to EMs have fallen abruptly
Cumulative portfolio flows to EMs since July 2018, \$ billion



Source: IIF, Moody's Investors Service

Moody's related publications

- » Macroeconomics Global: Global economy continues to slide as coronavirus outbreak worsens, 20 March 2020
- » Government of United States: US response to coronavirus will mitigate economic damage but will weigh on the government's debt, 18 March 2020
- » Sovereigns Asia Pacific: Intensifying coronavirus outbreak heightens growth risks, raises fiscal pressures for some, a credit negative, 18 March 2020
- » Credit Conditions Global: Coronavirus and oil price shocks: managing ratings in turbulent times, 17 March 2020
- » Coronavirus Germany's comprehensive support package will soften the coronavirus' negative effect on the economy, 16 March 2020
- » Sovereigns Asia Pacific: Regional credit outlook update on evolving coronavirus impact (Slides), 16 March 2020
- » Government of United Kingdom: Budget supportive of growth to cope with coronavirus shock, but at the cost of rising debt, 13 March 2020
- » Global Macro Outlook 2020-21 (March 2020 Update): Coronavirus will hurt economic growth in many countries through first half of 2020, 6 March 2020
- » Coronavirus Korea: Rapid spread of virus adds pressure to corporate earnings and economic growth, 27 February 2020
- » Coronavirus Italy: Coronavirus outbreak weighs on economic growth, but unlikely to affect sovereign and sub-sovereign credit profiles, 26 February 2020
- » Regional & Local Governments China: Economic impact of coronavirus outbreak will lower RLG revenue growth, 20 February 2020
- » Sovereigns Global: Governments most exposed to economic repercussions of coronavirus tend to have strong fiscal and external buffers, 11 February 2020
- » Sovereigns Global: 2020 outlook is negative as unpredictable, disruptive political environment exacerbates credit challenges, 11 November 2019

Endnotes

- 1 See Coronavirus and oil price shocks: managing ratings in turbulent times for a broader discussion of Moody's rating approach
- 2 US response to coronavirus will mitigate economic damange but will weigh on the government's debt

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