

OUTLOOK

3 November 2021

 Rate this Research

Contacts

Alexander Perjessy +971.4.237.9548
VP-Senior Analyst
alexander.perjessy@moodys.com

Fernando Freijedo +1.212.553.1619
Associate Analyst
fernando.freijedo@moodys.com

Matt Robinson +44.20.7772.5635
Associate Managing Director
matt.robinson@moodys.com

Gene Fang +65.6398.8311
Associate Managing Director
gene.fang@moodys.com

Mauro Leos +1.212.553.1947
Associate Managing Director
mauro.leos@moodys.com

Dietmar Hornung +49.69.70730.790
Associate Managing Director
dietmar.hornung@moodys.com

Marie Diron +44.20.7772.1968
MD-Sovereign Risk
marie.diron@moodys.com

Alejandro Olivo +1.212.553.3837
Managing Director
alejandro.olivo@moodys.com

Anne Van Praagh +1.212.553.3744
MD-Gbl Sovereign Risk
anne.vanpraagh@moodys.com

Sovereigns – Global

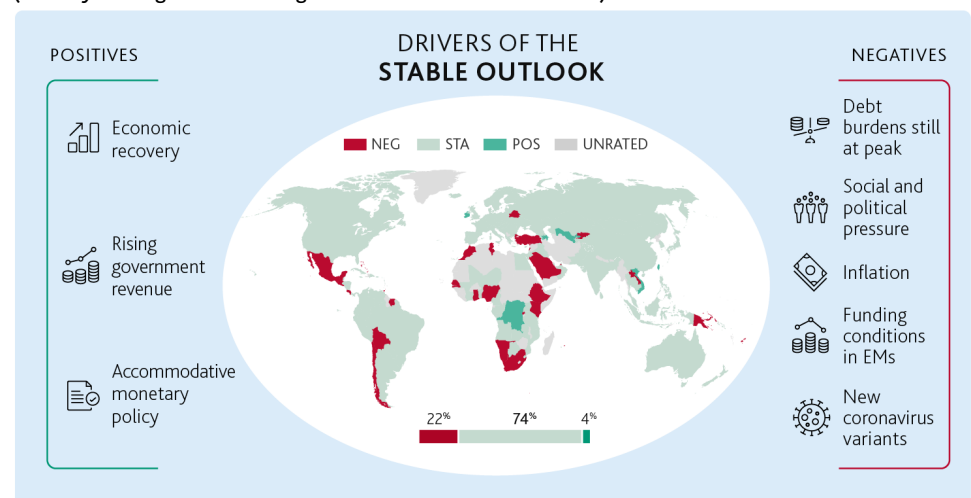
Stable 2022 outlook as economic recovery eases credit pressures, but long-term costs of the pandemic weigh on sovereigns

Our outlook for sovereign creditworthiness in 2022 is stable, reflecting our expectations for the fundamental conditions that will drive sovereign credit over the next 12-18 months, relative to 2021. The ongoing economic recovery will continue into 2022, improving fiscal revenues and allowing governments to start unwinding some of the extraordinary stimulus they have provided in response to the pandemic. Narrower fiscal deficits and solid growth will stabilise debt burdens for most sovereigns, albeit significantly above pre-pandemic levels. This will ease immediate credit pressures for governments in most regions.

However, sovereigns will continue to bear the brunt of the longer-term costs of the pandemic. The far-reaching economic support provided to households and many sectors has left sovereigns with weaker balance sheets. Once growth rates return to the pre-pandemic trend, most sovereigns will struggle to maintain sufficiently large primary fiscal surpluses to recover lost fiscal space before the next major shock. Sovereigns' policy flexibility and effectiveness will also be tested by social challenges exacerbated by the pandemic, and by demands for governments to address longer-term challenges like climate change.

Exhibit 1

The interplay of several drivers underpins our stable outlook on global sovereign credit (Country shading indicates rating outlooks as of 3 November 2021)¹



Source: Moody's Investors Service

The stable sector outlook reflects our view of credit fundamentals for global sovereigns over the next 12 to 18 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.

Ratings overview

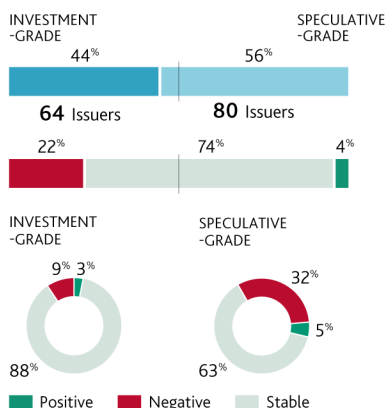
The pace of rating actions slowed significantly in 2021 relative to 2020, with mostly neutral or positive actions that reflect a reduction of credit risks linked to the lifting of lockdowns and resumption of economic activity in many countries. This contrasts sharply with 2020 when we announced more negative sovereign rating actions than usual, most of which were principally driven by the pandemic.

- » **As of 3 November, the majority of the 78 rating actions on sovereigns announced in 2021 was directionally stable or even positive,**² with just 16 downgrades of 14 sovereigns year-to-date compared with 36 downgrades of 29 sovereigns in 2020.
- » **Only around a fifth of rating actions were principally driven by the coronavirus pandemic.** Most of these (13) were directionally negative and affected sovereigns like tourism-reliant [Bahamas](#) (Ba3 negative) and [Fiji](#) (B1 negative), which both experienced significant declines in revenues linked to reduced global travel, and [Ethiopia](#) (Caa2 negative) and [Sri Lanka](#) (Caa2 stable), which face severe liquidity challenges. There were a few other negative rating actions that were not driven by the pandemic but rather by issuer-specific reasons, such as weakening governance in the case of [Tunisia](#) (Caa1 negative) and a deteriorating fiscal position in the case of [El Salvador](#) (Caa1 negative). Overall, most directionally negative rating actions affected sovereigns in the Middle East, Africa, Latin America and the Caribbean, whether driven by the pandemic or other reasons (see Exhibit 2).
- » **The easing of the pandemic's effects and issuers' resilience to the shock contributed to several positive rating actions, including eight upgrades.** As of 3 November, the upgrades included five on European sovereigns: [Lithuania](#) (A2 stable), [Serbia](#) (Ba2 stable), [Cyprus](#) (Ba1 stable), [Portugal](#) (Baa2 stable), [Hungary](#) (Baa2 stable). A further two upgrades were announced for African sovereigns [Benin](#) (B1 stable) and [Angola](#) (B3 stable), and one in Asia on [Kazakhstan](#) (Baa2 stable). During 2021, we also changed the rating outlooks of six sovereigns to positive: [Taiwan, China](#) (Aa3 positive), [Azerbaijan](#) (Ba2 positive), [Uzbekistan](#) (B1 positive), [Ireland](#) (A2 positive), [Vietnam](#) (Ba3 positive) and [Democratic Republic of the Congo](#) (Caa1 positive).

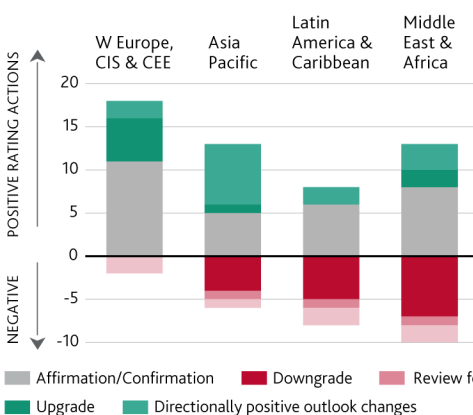
Exhibit 2

Most directionally negative rating actions on sovereigns affected those in the Middle East, Africa and Latin America³

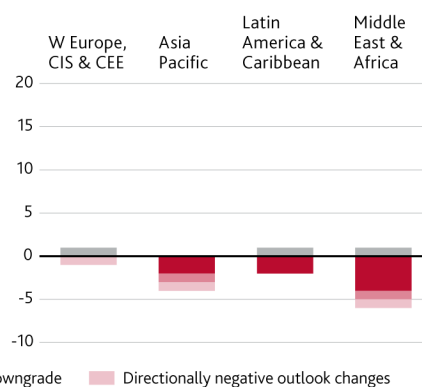
RATING & OUTLOOK DISTRIBUTION by issuer count



RATING ACTIONS 2021 by region



PANDEMIC-DRIVEN RATING ACTIONS by region



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.moody's.com for the most updated credit rating action information and rating history.

Global growth has rebounded, easing immediate credit pressures – but unprecedented levels of government debt will take years to unwind, if at all

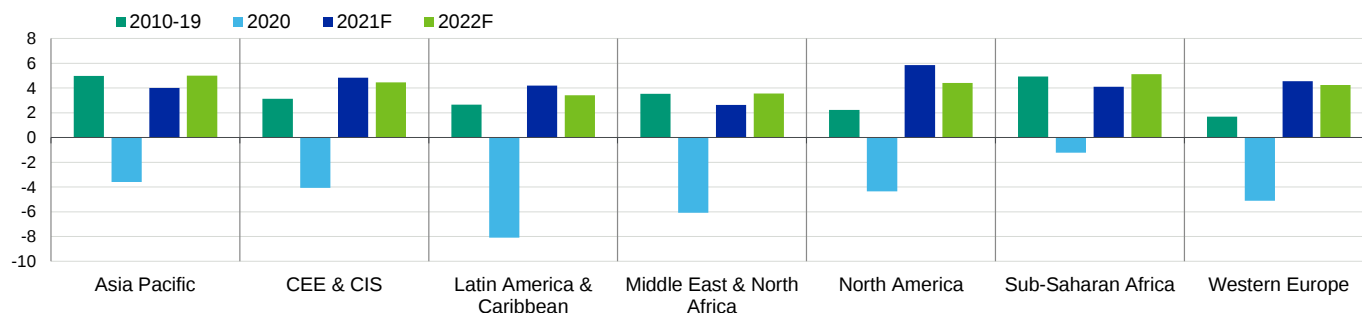
The global economic recovery began in late 2020, gained momentum during the course of 2021 and is set to continue in 2022, although supply constraints are slowing momentum in some regions. Stronger economies that are, for now, growing above the pre-pandemic trend will support higher government revenues. The recovery will also offer room to unwind the extraordinary stimulus measures that many governments, especially in advanced economies, have provided in response to the pandemic shock. A further narrowing of fiscal deficits will in turn help stabilise sovereign debt burdens, albeit at a high level. However, the economic recovery will remain uneven across regions and vulnerable to risks. For some sovereigns, long-lasting losses in economic output will continue to weigh on debt dynamics for many years to come. Most sovereigns will struggle to lower their debt burdens to pre-pandemic levels.

- » **With the recovery underway, economic and fiscal prospects are more upbeat for most sovereigns relative to 2021** and will support credit fundamentals during 2022. Across most regions, we expect growth to either accelerate or remain close to the robust 2021 rates, exceeding the longer-term averages recorded in the decade before the pandemic (Exhibit 3). The exceptions are the [United States](#) (Aaa stable) and [Canada](#) (Aaa stable), where growth in 2022 will be below the very strong rebound recorded in 2021 but well above pre-pandemic rates. We also expect a deceleration in [China](#) (A1 stable) given the Chinese government's efforts to engineer a more balanced medium-term growth profile and contain the current stresses facing the property sector.
- » **Robust growth in economic activity will support government revenue** as consumption levels and business profits continue to rebound from the near-shutdowns in 2020. Gradual fiscal consolidation, as governments begin to unwind some of their extraordinary stimulus measures, together with the economic recovery will help to further narrow fiscal deficits during 2022 across regions. In most cases, fiscal deficits will remain larger than they were before the pandemic (Exhibit 4), but our projections indicate that most sovereigns' debt burdens, measured as a share of GDP, will likely stabilise over the next two years.

Exhibit 3

Economic recovery will remain robust in 2022...

Real GDP growth, % (regional medians)

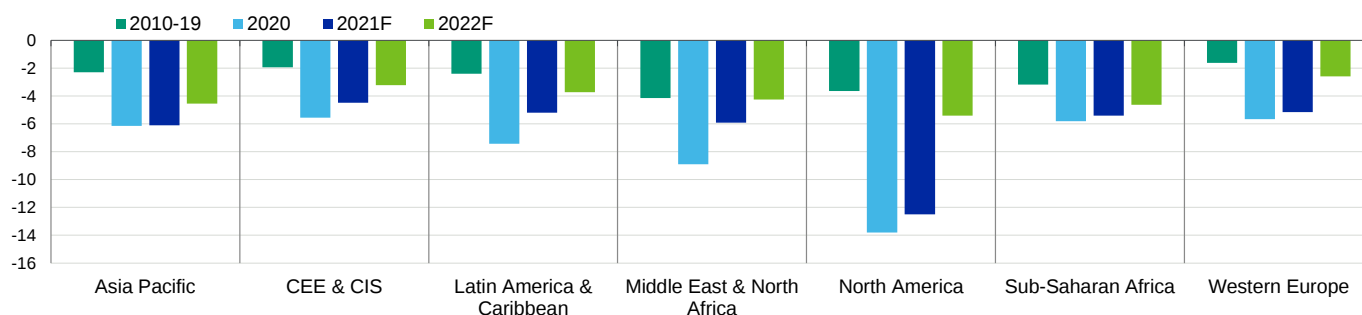


Source: Moody's Investors Service

Exhibit 4

...helping to narrow fiscal deficits, although not enough to return them to pre-pandemic levels

Fiscal balances, % of GDP (regional medians)



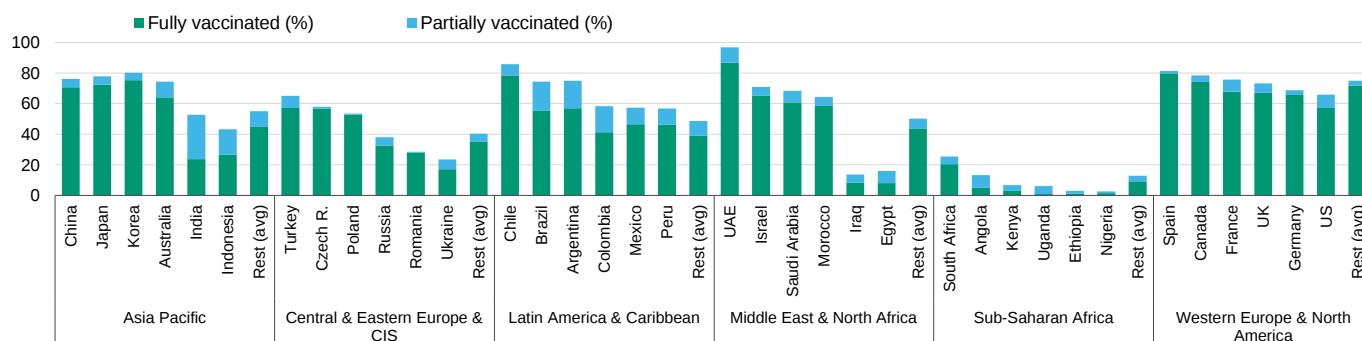
Source: Moody's Investors Service

- » **Vaccination rates will partly determine the speed and robustness of the recovery.** In advanced economies, the effectiveness of vaccination campaigns has reduced the likelihood of governments reintroducing strict restrictions to the same extent as they did in 2020 or early 2021. Isolated upside growth surprises are possible during 2022 – for example, in Europe where disbursements from the €750 billion Next Generation EU recovery plan will support investment spending, provided that individual governments implement a range of structural reforms. However, in the rest of the world, the growth outlook faces significant risks. Lower-income sovereigns with low vaccination rates will be most at risk of disruptions in economic activity if more contagious coronavirus variants were to gain momentum. Vaccination rates are particularly low in Sub-Saharan Africa, averaging at less than 10% for the region, but also in a number of countries in the Asia Pacific region, especially in [Indonesia](#) (Baa2 stable) and Vietnam,⁴ in parts of the Middle East, and in [Russia](#) (Baa3 stable) and other parts of the Commonwealth of Independent States (CIS) (Exhibit 5). Sovereigns that rely on international tourism as a key source of government revenue are most exposed to coronavirus-driven disruptions.
- » **Record government debt burdens will hamper the recuperation of fiscal space.** Beyond the tail winds of the post-pandemic recovery, most governments will continue to be significantly challenged to regain the fiscal flexibility needed to absorb future shocks. After sizeable increases in government liabilities during 2020, averaging more than 11 percentage points of GDP, sovereign debt burdens will remain close to historic highs for years to come (Exhibits 6 and 7). In many cases, a significant reduction of debt burdens to restore the degree of fiscal space to pre-pandemic levels would likely require implausibly effective structural reforms⁵ to materially lift the GDP growth trend and/or politically unrealistic (and therefore unlikely) fiscal consolidation measures. At this stage, most fiscal consolidation plans rely on the direct lift to revenue from the economic recovery and expiration of time-bound expenditure measures. More proactive fiscal consolidation measures do not contribute significantly to the narrowing of deficits.

Exhibit 5

Vaccination rates vary across regions, as of 1 November 2021

% of total population

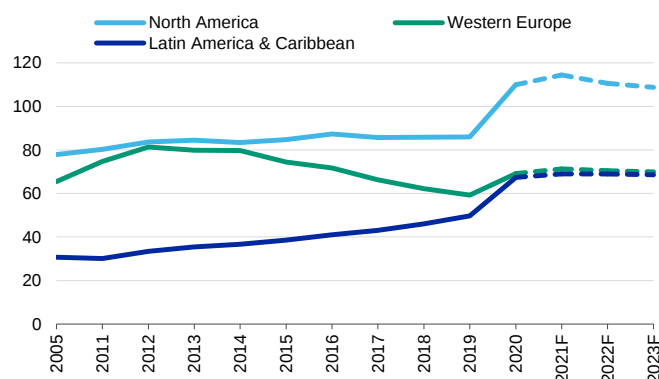


Sources: Our World in Data and Moody's Investors Service

Exhibit 6

We expect government debt levels to stabilise during 2022-23...

Government debt as % of GDP (regional medians)

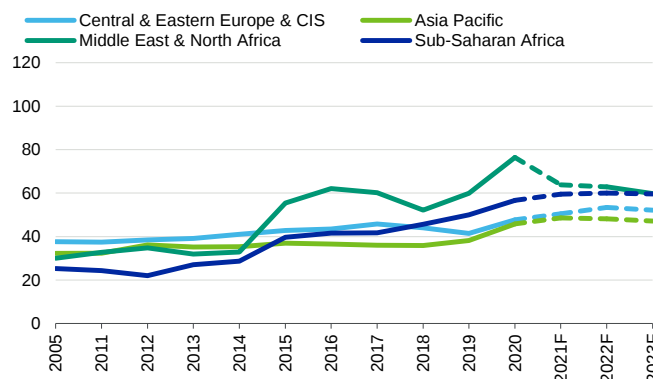


Source: Moody's Investors Service

Exhibit 7

...although above pre-pandemic levels for most

Government debt as % of GDP (regional medians)

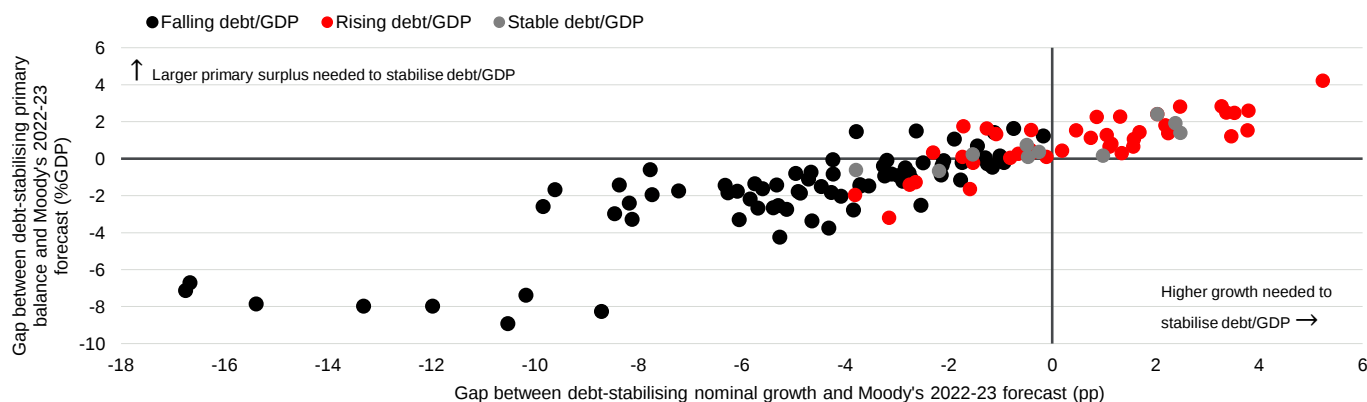


Source: Moody's Investors Service

- » **Only some advanced economies will be able to reduce their debt burdens to pre-pandemic levels.** Sovereigns like [France](#) (Aa2 stable), [Japan](#) (A1 stable), the [United Kingdom](#) (Aa3 stable) and the United States will continue to carry significantly higher debt burdens than they did pre-pandemic. By contrast, [Germany](#) (Aaa stable), [Ireland](#) (A2 positive) and Portugal are more likely to regain their pre-pandemic fiscal standing. In general, sovereigns with robust institutional frameworks, including effective fiscal rules that limit deficits and debt accumulation, are likely to see the strongest improvements in fiscal metrics.
- » **Emerging market sovereigns that entered the crisis with already high debt burdens will face credit pressures.** We expect debt burdens to continue to rise in [El Salvador](#) (Caa1 negative), [Costa Rica](#) (B2 negative), India, [Namibia](#) (Ba3 negative) and [South Africa](#) (Ba2 negative). Credit pressures could intensify for these sovereigns unless they achieve faster fiscal consolidation or more sustainable growth rates than we currently expect. By contrast, the debt burdens of most oil-producing sovereigns, including Oman and Angola, will decline in 2021-22, mainly as a result of the rebound in oil demand and prices, which has already boosted their fiscal revenue, while simultaneously increasing their nominal GDP in a mirror reversal of the 2020 shock.
- » **When growth slows to pre-pandemic trends, only a third of sovereigns will have sufficiently large primary surpluses to stabilise their debt burdens.** Two thirds of rated sovereigns will record strong enough nominal growth rates in 2022-23 to stabilise or even reduce debt-to-GDP ratios, while only a third of them will have large enough primary fiscal surpluses to achieve this (Exhibit 8). This means that, when real and nominal growth normalise towards longer-term averages, most sovereigns will be challenged to contain their debt levels without additional significant fiscal consolidation measures relative to what we already expect in the next couple of years. Moreover, this challenge will be compounded once global interest rates begin to normalise and push up the size of primary surpluses required to stabilise and eventually reverse government debt dynamics.
- » **Stabilising and reversing high debt levels will be especially challenging for economies with a high degree of pandemic-driven scarring.** Some sovereigns will experience a degree of "scarring", which we measure by comparing the loss in economic output by 2023 with pre-pandemic GDP trajectories. The exceptions are some mostly advanced economies like the US and most of western Europe, where effective vaccine roll-outs and ample policy support have cushioned the pandemic's impact on the labour market; and some Asian sovereigns where the initial response to the health crisis was highly effective. However, scarring will be deepest for economies that are narrowly focused on industries like tourism, such as [Barbados](#) (Caa1 stable), Bahamas and [Mauritius](#) (Baa2 negative). More than 40% of Asia's economies will incur deep scarring, such as tourism-exposed [Maldives](#) (Caa1 stable) and [Macao SAR China](#) (Aa3 stable), as well as [India](#) (Baa3 stable) given the constraints that high debt pose to the government's ability to provide support to the economy and population. Overall, the credit implications will be most significant for sovereigns characterised by already high government debt burdens and weak institutional capacity that hamper the implementation of structural economic reforms, such as in Sri Lanka, Tunisia and, at different rating levels, [Bahrain](#) (B2 negative) and [Peru](#) (Baa1 stable).

Exhibit 8

Most sovereigns will grow fast enough to stabilise debt/GDP ratios, but many will not have sufficiently large primary surpluses to do so
Gaps between debt-stabilising nominal growth rates and primary balances vs our projections*



* The colour of the dots reflects our expected change in the government debt/GDP ratio between 2021 and 2023. Debt-stabilising nominal growth and primary balances are calculated independently of each other. Calculations do not account for exchange rate fluctuations and assume that fiscal balances fully capture sovereigns' net borrowing requirements.

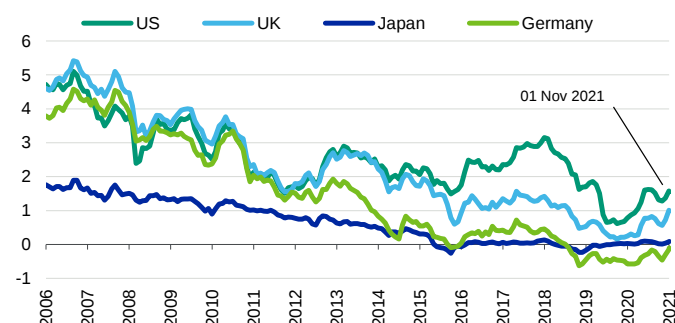
Source: Moody's Investors Service

A favourable monetary policy backdrop is likely to persist throughout most of 2022, but a sudden tightening in financing conditions remains a risk for emerging markets

The cost of the pandemic-driven surge in debt has so far been largely hidden and mitigated by historically very low global interest rates. As a result, higher debt burdens were more manageable across the rating spectrum, especially for those economies that already had large debt burdens pre-pandemic (Exhibit 9). For many emerging markets, especially those with higher credit risk, some of the benefit of the low global interest rate environment was offset by the sharp widening of their credit spreads during the early months of the pandemic. For many of these sovereigns, credit spreads are still above pre-pandemic levels (Exhibit 10).

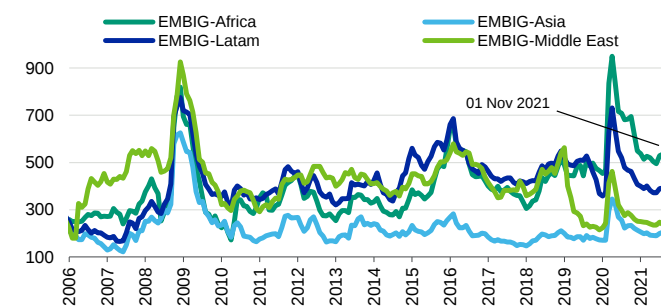
» **Advanced economies will continue to benefit from strong debt affordability**, offsetting the effect of higher debt burdens on fiscal strength for some time, with the interest-payments-to-GDP ratio remaining close to its 20-year low, at least for the next two years (Exhibit 11). In western Europe, this ratio will average 1.3% in 2022-23 compared to 1.5% in 2019 and 2.4% in the previous 10 years. In the US, the ratio will be broadly in line with the rate of 2.4% in 2019 and only slightly higher than 2.1% in the previous 10 years, despite a nearly 30 percentage-point rise in government debt due to the pandemic. As the recovery progresses, we expect most central banks in advanced economies to begin reducing policy accommodation in 2022-23. The currently elevated inflationary pressures (Exhibit 12), resulting from rising commodity prices and supply-side disruptions, should also subside in 2022, although the risk of higher-than-expected inflation remains, especially in the US, and could lead to faster monetary policy tightening.

Exhibit 9
Government borrowing costs for AEs are at all-time lows
10-year government bond yields (%)



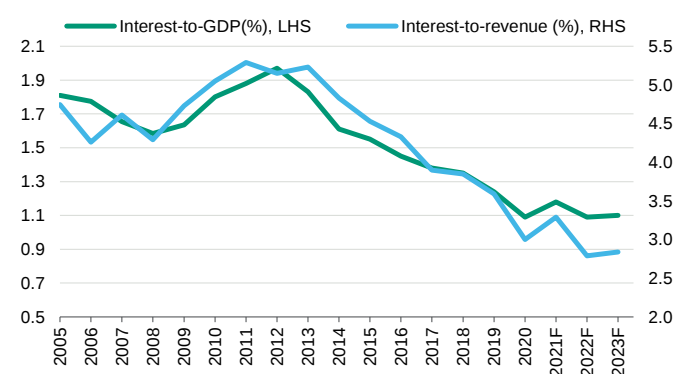
Sources: Haver and Moody's Investors Service

Exhibit 10
EM credit spreads returned to pre-pandemic levels, except Africa
EMBIG sovereign spreads (basis points)*



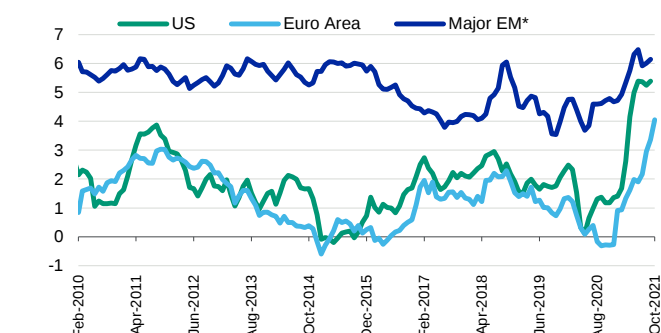
*Regional sub-indices of J.P. Morgan's Emerging Markets Bond Index - Global
Sources: Haver and Moody's Investors Service

Exhibit 11
Interest burdens and affordability in advanced economies
Medians



Source: Moody's Investors Service

Exhibit 12
Currently high inflation levels are likely to decrease in 2022
Consumer price index (year-over-year % change)

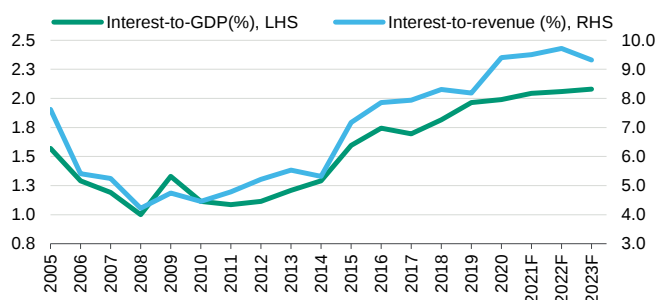


* Simple average of China, India, Brazil, Russia, Mexico, Indonesia, Turkey, Saudi Arabia, and South Africa
Sources: Haver and Moody's Investors Service

- » **However, most emerging market sovereigns will face higher debt-servicing costs than in 2019**, and these costs will remain high over the next two years (Exhibit 13). For example, Indonesia, Sri Lanka, Peru and South Africa already had high debt burdens pre-pandemic and are at risk of a further deterioration in debt affordability. In fact, financing conditions have already started to tighten for emerging markets (Exhibit 14) despite the continued very weak domestic demand in the largest among these economies, especially those that face price pressures largely as a result of negative supply shocks. Several emerging market central banks, including in Brazil, Russia and [Mexico](#) (Baa1 negative), are already raising policy rates, in many cases from levels that were negative in real terms. Others may follow in the coming months (including in India, South Africa and Indonesia) and move to a more neutral policy stance in the face of inflationary pressures. One exception is [Turkey](#) (B2 negative), where the central bank has started lowering its policy rate following a tightening cycle that began in August 2020. But even there the longevity of the nascent easing cycle and its impact on domestic borrowing costs will depend on a supportive external financing environment.
- » **Although not our baseline, there is a risk of sudden and sustained tightening**, in particular if major global central banks fall behind the curve and need to tighten faster and more aggressively than expected. Emerging market sovereigns with large gross financing needs and/or those that are reliant on external funding, are most exposed to rising government liquidity and external vulnerability risks if global monetary policy normalisation were to accelerate (Exhibit 15). The sovereigns that will be most exposed include Sri Lanka, South Africa, Indonesia, Brazil, Turkey, [Egypt](#) (B2 stable) and Bahrain – with Maldives, Fiji, [Mongolia](#) (B3 stable) and Tunisia likely to record the largest current account deficits, reflecting high external funding needs. Unlike during 2020 and 2021, the emerging market sovereigns that will face growing fiscal and external imbalances will not have the same access to [unconditional official assistance](#) in the form of the IMF's rapid credit facilities, rapid financing instruments and Special Drawing Rights.

Exhibit 13

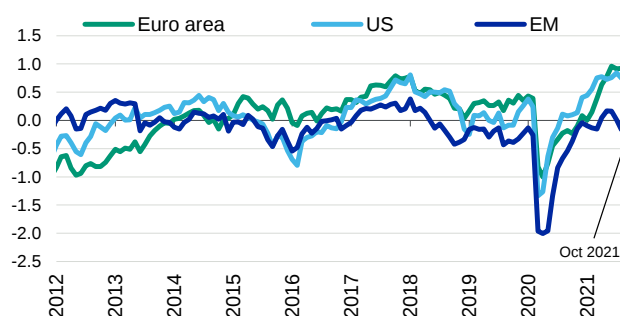
Interest burdens and affordability in emerging markets Medians



Source: Moody's Investors Service

Exhibit 14

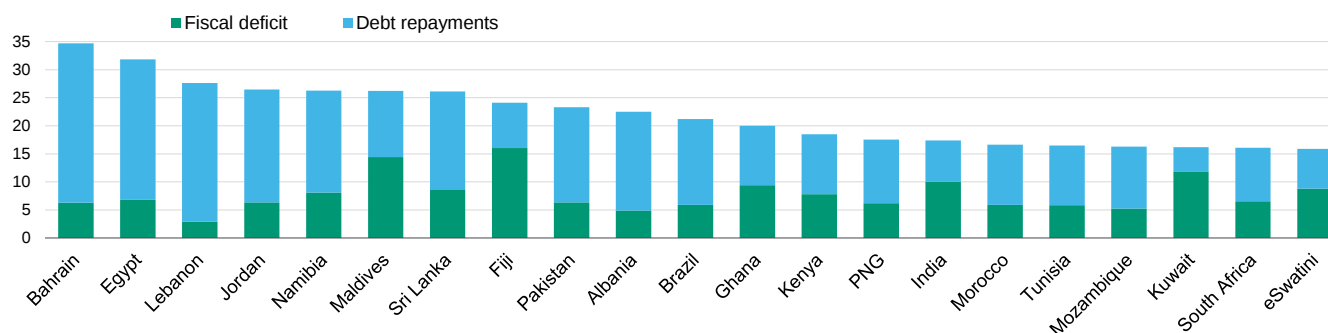
Financial conditions have started tightening for emerging markets Moody's Financial Conditions Index*



* Vertical axis shows standard deviations above/below the long-term average
Source: Moody's Investors Service

Exhibit 15

Emerging markets with large gross borrowing needs are most exposed to tightening financing conditions Government gross financing needs (% of GDP, 2022F)



Source: Moody's Investors Service

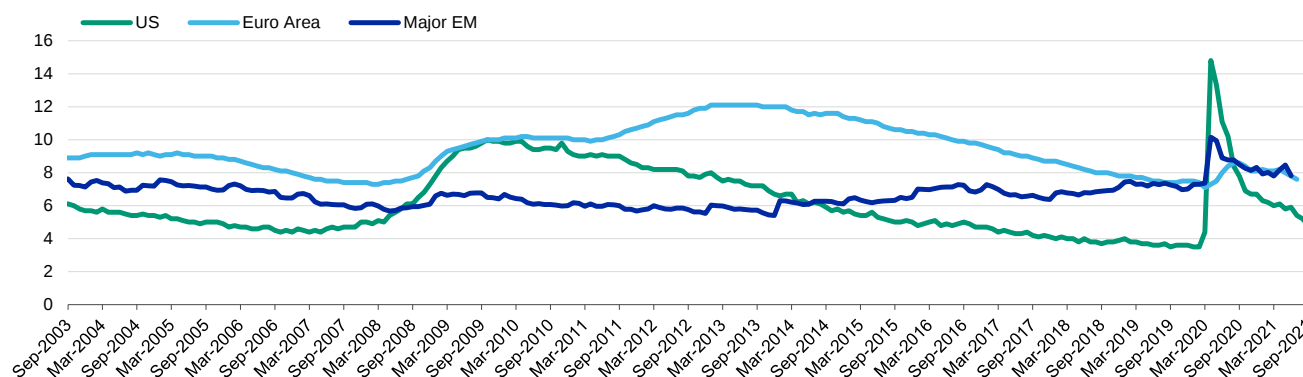
Sovereigns will bear the social and institutional costs of the pandemic, and also face increasing demands to address climate and energy transition risks

The coronavirus shock has increased social pressures due to the widespread loss of jobs (Exhibit 16) and incomes, exacerbating pre-existing income disparities based on skills and educational and, in some cases, racial, ethnic and gender differences. A gradual withdrawal of extraordinary fiscal support measures, which we expect to continue over the coming years, combined with pandemic-related economic scarring (for some), will further exacerbate these challenges and increase social risks. The growing social pressure will, in turn, raise the prospect of greater political instability, while also contributing to rising geopolitical tensions. Political risks have also increased in a number of countries due to popular dissatisfaction with governments' handling of the pandemic and control of infection levels. While this applies to sovereigns globally, across regions and various income levels, we expect this political risk to be most pronounced in Latin America, Emerging Asia, Africa and the Middle East.

- » **In emerging markets, scheduled elections in 2022 will bring social and political risks to the fore.** In Latin America the main examples of increased social and political risks are Peru, [Chile](#) (A1 negative) and [Paraguay](#) (Ba1 stable), but also [Guatemala](#) (Ba1 negative), Brazil and [Colombia](#) (Baa2 stable) given the upcoming 2022 elections there. In emerging Asia Pacific, we expect income inequality and structural unemployment to play an important role in elections scheduled for 2022 in the [Philippines](#) (Baa2 stable), some states in India, and [Korea](#) (Aa2 stable), while frustrations over low vaccination rates and lingering pandemic restrictions risk fueling social unrest in other parts of the region. In the Middle East, heightened social challenges and governments' perceived mishandling of the coronavirus pandemic have already sparked a constitutional crisis and a sharp increase of government liquidity risks in Tunisia,⁶ and will significantly delay the recovery in [Lebanon](#) (C) and [Iraq](#) (Caa1 stable), where pre-existing political and policy paralysis has deepened during the pandemic. Meanwhile, economic disruptions due to the pandemic have also exacerbated the long-standing volatile security situation in the Sahel region of Sub-Saharan Africa,⁷ exacerbating violent conflicts and political instability in [Mali](#) (Caa1 stable), [Niger](#) (B3 stable) and [Nigeria](#) (B2 negative).
- » **Advanced economies will also have to grapple with social challenges although these are unlikely to translate into higher political risk.** Social pressures are emerging in countries such as [Australia](#) (Aaa stable) and France, mainly in the form of waves of anti-lockdown and anti-vaccination protests, although we expect political risk there to likely remain modest. In western Europe, social pressures will continue to emanate from adverse pre-pandemic demographic trends that manifest in the form of labour shortages and migration pressures. In the US, strong household balance sheets at an aggregate level have supported a quicker economic recovery. However, the country has recorded an increase in income and wealth inequality, disproportionately affecting the Black and other minority communities. This trend represents a long-standing [vulnerability for the US economy](#), which will weigh on its fiscal, economic and institutional strength in years to come.⁸

Exhibit 16

Unemployment remains above the pre-pandemic level Unemployment rate, %, national definition



Note: Major EMs is the simple average of China, India, Brazil, Russia, Mexico, Indonesia, Turkey, Saudi Arabia, Argentina. Data not available for every month.

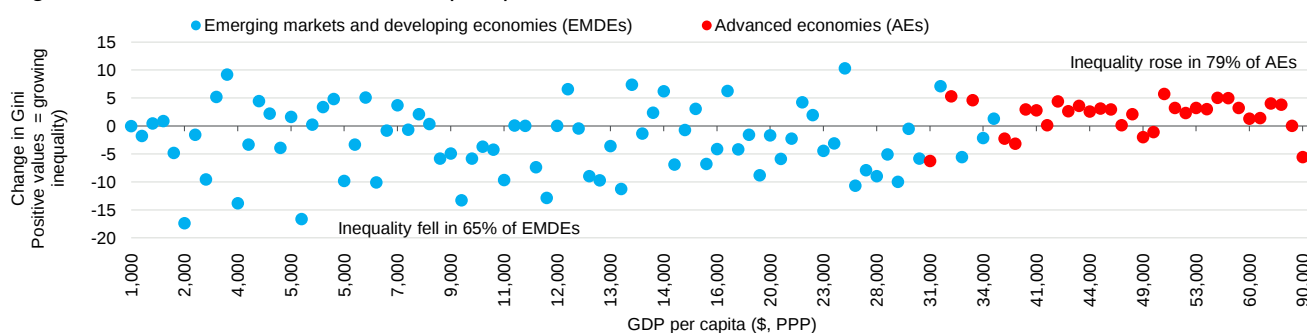
Sources: Haver and Moody's Investors Service

- » **The coronavirus shock has also reinforced societal expectations for governments to continue playing a large role in the economy**, mainly by building or maintaining stronger social safety nets and addressing income inequality which has increased in the majority of advanced economies over the past 25 years (Exhibit 17). This will not only make it difficult for governments to reduce the size of fiscal support, but also further constrain policy flexibility and leave most sovereigns with complex policy challenges. According to the IMF, on-budget stimulus measures implemented during the pandemic have amounted to 13% of GDP on average in the G20 advanced economies. While some of these measures have in-built sunset clauses, governments will need to decide which measures are best retained to respond to their populations' and electorates' demands. China's government is now targeting common prosperity, an objective that will be challenging to achieve while managing a potentially destabilising transition.⁹
- » **Society's broadening demands on governments also include longer-term challenges such as climate change and energy transition**, and, in some cases, popular demands for a stronger standing for their nation on the global geopolitical scene. In the US, growing popular demands to address climate change and increase government spending on healthcare, education and childcare are increasing political divisions and have delayed passage of the pending \$1 trillion bipartisan Infrastructure Investment and Jobs Act.
- The accelerating pace of global energy transition poses a long-term risk for oil and gas-reliant sovereigns, especially in Latin America and Africa, where extraction costs are higher and global energy transition is not being prioritised given higher oil prices in 2021 and most likely also in 2022. Among the Gulf Cooperation Council states, [Saudi Arabia](#) (A1 negative) and the [United Arab Emirates](#) (Aa2 stable) are slowly progressing their ambitious plans to reduce their high reliance on hydrocarbons while also focusing on renewables and alternative fuels like blue and green hydrogen. However, a materially higher diversification of their economies will likely take many years to achieve and will require supportive oil prices to underpin necessary public investment without undermining the stability of their public finances. Meanwhile, higher oil prices also reduce the immediate pressure to advance reforms, making hydrocarbon-reliant sovereigns vulnerable to future declines in oil demand and prices.
 - The world's largest economies, including the US, EU and China, have all announced ambitious net zero greenhouse gas emissions targets that will require significant shifts in consumer preferences, regulation, technology and investment flows. However, there has been only modest progress in developing emissions reduction plans in line with these policy pledges.
- » **Domestic social pressures, exacerbated by the lasting effects of the pandemic, also have the potential to spill over into geopolitical tensions** along well-established pre-pandemic fault lines. These include the tensions between the US and Iran, and the US and North Korea, over the latter countries' nuclear programs and ambitions, as well as the unresolved territorial conflict between Russia and [Ukraine](#) (B3 stable). A further fault line is the competition between the US and China in a number of areas, as well as military tensions over the long-standing territorial dispute between China and other neighbouring countries in the South China Sea in the context of China's more assertive foreign policy stance. This tension was heightened in September 2021 by the security pact agreed between the US, UK and Australia in the Asia-Pacific region, widely seen as an effort to counter China. In this context, the US recently passed the [Innovation and Competition Act](#), which provides subsidies in key areas of competition (principally artificial intelligence, biotech, and telecoms), with the aim of curbing China's influence and economic power.

Exhibit 17

Over the past three decades, inequality diminished in most poor countries, but increased in most rich countries

Change in Gini index over 1990-2019 and 2019 GDP per capita



Sources: IMF and Moody's Investors Service

Moody's related publications

Key 2021 sector research

- » [Credit Conditions – Global: 2022 Outlook – Global credit environment will stabilize as COVID-19 uncertainties ebb](#), 1 November 2021
- » [Government Policy – China: 'Common prosperity' agenda will create transition risks, with longer-term benefits if well implemented](#), 20 October 2021
- » [Credit Conditions – India: Drivers of the outlook revisions to stable on India and Indian issuers \(Slides\)](#), 12 October 2021
- » [Sovereigns – Global: FAQ on post-pandemic sovereign debt dynamics](#), 29 September 2021
- » [Credit Conditions – China: Government actions on Evergrande likely to avoid financial, social instability but not preclude economic costs](#), 27 September 2021
- » [Sovereigns – Global: Water management risks curb economic strength in South Asia, Middle East, Africa, may create wider long-term pressures](#), 4 August 2021
- » [Sovereigns – Global: Scarring from COVID-19 pandemic will increase fiscal risks and social pressures](#), 22 July 2021
- » [Sovereigns – Africa: Varied availability of domestic funding sources in Africa drives liquidity risks](#), 6 July 2021
- » [Sovereign – Euro Area: Rebuilding fiscal shock-absorption capacity will be a key post-pandemic credit driver](#), 2 July 2021
- » [Sovereigns – Latin America & Caribbean: Credit impact of ESG marginally lower in LatAm than in most other EM regions](#), 30 June 2021
- » [Policy Challenges – Global: Risks from phasing out policy support have receded as recovery progresses](#), 30 June 2021
- » [Sovereigns – Emerging Markets: Social safety nets support credit quality by improving response to shocks, reducing social tensions](#), 10 June 2021
- » [Sovereigns – Global: Physical climate risk weighs on sovereigns; adaptation efforts yet to be widely tested](#), 5 May 2021
- » [Sovereigns – Global: New scores depict varied and largely credit-negative impact of ESG factors](#), 18 January 2021

Endnotes

- 1 St Maarten is currently on review for downgrade, and Lebanon's C rating has no outlook. For illustrative purposes they are counted as negative outlooks.
- 2 Directionally stable rating actions comprise affirmations and confirmations. Directionally positive actions comprise upgrades, changes in outlook to positive, or changes in outlook from negative to stable.
- 3 Directionally positive outlook changes comprise changes to a positive outlook as well as changes in outlook to stable from negative. Directionally negative outlook changes are changes in outlook to negative as well as changes in outlook to a stable outlook from positive.
- 4 Please see [Government of Vietnam: Slow vaccination deployment will likely spur repeat lockdowns that threaten economic rebound, a credit negative](#), 16 July 2021
- 5 Please see [Sovereigns – Global: FAQ on post-pandemic sovereign debt dynamics](#), 29 September 2021
- 6 Please see [Government of Tunisia: Constitutional crisis escalates political event risk, dims economic reform prospects](#), 26 July 2021
- 7 Please see [Sovereigns – Africa: Growing insecurity in the Sahel risks dampening growth and fiscal consolidation](#), 19 July 2021
- 8 Please see [Government of United States: Racial disparities exemplify the long-standing and growing income and wealth inequalities that raise social risk](#), 14 July 2020
- 9 Please see [Government Policy – China: 'Common prosperity' agenda will create transition risks, with longer-term benefits if well implemented](#), 20 October 2021

© 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1300834