

One Region, Two Recoveries

June 29, 2021

Key Takeaways

- **Overall:** The COVID-19 vaccination rate in Asia-Pacific is much slower than that of the U.S. and Western Europe. Governments are set to expedite vaccination following the resurgence of infections with new variants in the region. The region's unbalanced "K"-shaped recovery is highlighted by export growth benefiting China and some developed economies, while higher COVID caseloads weigh on growth in some developing markets. The disparity means that rating trends remain divergent.
- **Immediate risks:** In countries with lagging economic activity, we see a threat of delayed revenue rebounds and higher debt accumulation. Recurring infections and lockdowns could further impede people mobility and dampen demand. Fears of higher inflationary pressures will accelerate resets of risk pricing.
- **Structural risks:** Increasing government and investor interest in climate change indicates "less green" borrowers may be challenged by greenhouse gas policies and credit-availability constraints. Technology issues could impact issuers' operations short-term (e.g. chip shortages) and their business models long-term. Meanwhile, the U.S.-China strategic confrontation is persisting (as **seen in** the recent G-7 communique).
- **Credit:** Most rated issuers have thus far been able to manage the health and operating environment challenges, thanks in part to government support measures. Consequently, credit quality has largely steadied with negative rating actions tapering. However, some issuers do remain vulnerable. Over 10% of ratings across asset classes are on a net negative rating bias, implying significant downgrade risk.

(Editor's Note: S&P Global Ratings' Credit Conditions Committees meet quarterly to review macroeconomic conditions in each of four regions (Asia-Pacific, North America, Europe, and Emerging Markets). Discussions center on identifying credit risks and their potential ratings impact in various asset classes, as well as borrowing and lending trends for businesses and consumers. This commentary reflects views discussed in the Asia-Pacific committee on June 22, 2021.)

Race between variants and vaccination. The diverging credit conditions between geographies and sectors will widen further given varying COVID-19 containment and vaccination progress. Countries such as India, Malaysia, Thailand, and Philippines continue to struggle with containing the virus. "Early exiters" such as China, Taiwan, and Singapore have also seen a pickup in infections. These setbacks resulted in the reimposition of lockdowns and movement restrictions, reducing mobility. They've also renewed determination to boost vaccination rates; however, vaccine shortages in some places may impede the effort to narrow the gap. Subdued consumer spending could postpone resumption of revenues for mobility dependent and discretionary consumption sectors. Delays in resumption of international travel will further impact revenue and economic recoveries for some airlines and tourism-dependent countries, respectively. Furthermore, supply-chain constraints and mounting commodities prices could dent the earnings of industrial producers. Collectively, this slows down issuers' ability to unwind amplified debt built up from the pandemic.

Mobility restrictions dent economic growth. We've marginally lowered our Asia-Pacific economic growth forecast to 7.1% in 2021 from 7.3%. While exporters including China saw upward revisions, varying degrees of COVID resurgence underpinned downward revisions in emerging markets including India, Malaysia, Philippines, and Thailand. A low vaccination rate and uneven access to vaccines highlight the region's vulnerability to more infectious variants, which leads to reimposition (though usually more targeted) of lockdowns. With the unbalanced recovery momentum likely to persist, stress on households and corporates could intensify, pushing up credit losses for banks. We expect the region's governments to maintain accommodative monetary policies to facilitate fuller economic repair. However, the capacity for further lowering policy rates is limited.

Regional Credit Conditions Chair

Eunice Tan

Hong Kong

eunice.tan@spglobal.com

+852-2533-3553

Asia-Pacific Credit Research

Terry E Chan, CFA

Melbourne

+61-3-9631-2174

terry.chan@spglobal.com

Contents

Financing Conditions	5
Macroeconomic Outlook	6
Sector Trends	7
Nonfinancial Corporates	9
Financial Institutions	10
Insurance	11
Public Finance	12
Sovereign	13
Structured Finance	14
Appendix 1: Ratings trends	16
Appendix 2: Economic data and forecast summaries	17

Credit Conditions Asia-Pacific: One Region, Two Recoveries

Risk-on, risk-off. Fears of higher inflation and interest rates could drive volatile risk-repricing and exacerbate refinancing challenges, particularly for highly leveraged corporate borrowers. Tighter financing conditions and higher debt-servicing costs will pressure these high-yield issuers. An earlier-than-expected tightening of monetary policies could spark capital flight, knocking borrowers highly reliant on U.S. dollar funding. Likewise, the winds of ESG change could see increasingly divergent funding access for some sectors (such as oil and gas, fossil fuel-intensive utilities, and metals and mining) as countries and financial institutions seek to limit exposure to carbon-intensive segments.

The net outlook bias for issuers we rate in Asia-Pacific improves to about one-tenth negative. An improving outlook bias in recent months implies credit quality has steadied. That said, the nonfinancial corporate sector continues to see elevated downgrade or default risk due to uneven recoveries across segments, with our outlook bias at -15% in May 2021. While some sectors (semiconductors, utilities, metals and mining, and auto) may recoup pre-pandemic revenue levels in 2021, some airlines and hospitality segments could see revenue recovery to pre-COVID levels beyond 2024 due to further delays in international travel resumption. Although economic recovery and relief measures from regional governments continue to support issuers' debt-servicing ability and reduce banks' credit losses, the unwinding of extraordinary COVID-19 stimulus is inevitable. In China, the successful containment of the pandemic enables policymakers to shift their focus back on curtailing debt growth. We expect the country's scaling back of capital spending at the national level will result in a bigger burden for local governments. Given support is growing more selective, some weaker state-owned enterprises could fall between the cracks and defaults could come.

While a further escalation of U.S.-China tensions seems unlikely, the relationship remains strenuous. The race between the world's two largest economies is evolving into a long-distance event, with the U.S. rallying its allies to jointly confront China. Given the new Biden administration's more inclusive approach, through seeking consensus with its European counterparts, short-term volatility will likely reduce. However, increasingly hawkish stances by either party could escalate tensions quickly, disrupting cross-border trade flows and reverberating to regional economies.

Table 1 lists our top Asia-Pacific risks.

Table 1

Top Asia-Pacific Risks

Near-Term Risks

Slower and uneven revenue recovery to amplify debt overhangs

Risk level* Very low Moderate Elevated **High** Very high **Risk trend**** Improving **Unchanged** Worsening

Exports and strong industrial production have lubricated recoveries in China and more developed economies. COVID resurgence in some countries points to divergent revenue recovery across geographies and sectors. While fiscal stimulus aids the ongoing revenue restoration, domestic consumption remains lackluster for most countries and may not normalize until late 2021/early 2022. Mobility-related sectors such as retail and hospitality may face further revenue growth delays, while slower resumption of international travel will drag some airlines' revenue recovery to pre-COVID levels. Prolonged pain in revenues and earnings will amplify debt burdens, especially for small to midsized companies with higher debt built up. This situation could be exacerbated by investors and lenders demanding higher yields, raising debt-servicing costs.

Return of restrictions amid slow vaccination rollout

Risk level* Very low Moderate Elevated **High** Very high **Risk trend**** Improving **Unchanged** Worsening

Case resurgence across Asia-Pacific highlights the threat of more infectious COVID-19 variants amid sluggish vaccination rates. The reintroduction of lockdowns and tighter mobility restrictions will dent the trajectory of economic recovery, particularly for consumption and tourism-dependent economies. Countries such as India, Malaysia, Thailand, Philippines, and Indonesia continue to struggle with the virus containment while early exiters (such as Taiwan, Singapore, and Australia) have seen sporadic upticks in infections. While the recent pickup in vaccination rates across some geographies looks promising, the race to inoculate Asia-Pacific's 4.7 billion remains challenging given ongoing vaccine shortages and uncertain vaccine efficacy against new virus strains.

Higher inflationary pressures and interest rates

Risk level* Very low Moderate **Elevated** High Very high **Risk trend**** Improving **Unchanged** **Worsening**

While we expect central banks to keep policy rates low to support fuller recoveries, creditors could reset their risk-return expectations. Higher risk premiums could be driven by a disorderly reset, which could occur because of investors' rising fear of inflation, or unexpected adverse events (such as a major borrower default). An earlier than expected shift in U.S. interest rates or domestic monetary policies could see financial and real assets repricing (i.e. higher yields), debt servicing costs rising, and funding availability tightening. For emerging-market borrowers highly reliant on U.S. dollar funding, the reset would amplify refinancing challenges.

Longer-Term Structural Risks

Net-zero emissions, climate change, and technology risks accelerate

Risk level* Very low Moderate **Elevated** High Very high **Risk trend**** Improving **Unchanged** **Worsening**

Carbon neutrality policy directives, climate change and technology risks could alter issuers' mid- to long-term operations, with the degree of implications varying across sectors. Climate physical risk (e.g. typhoons, floods, bushfires) appears to have increased in Asia-Pacific. Meanwhile, policy risks (e.g. imposition of environmental policies by governments inside and outside a country) and financing access risk (e.g. investors and lenders shying away from high carbon industries) remain elevated. Some sectors (such as oil and gas, and thermal power utilities) are susceptible to tighter financing access as investors seek to curtail exposure to brown industries. Given accelerated digitalization, technology risk pertains to the potential obsolescence of traditional business models and increasing frequency of cyberattacks.

U.S.-China strategic confrontation escalating

Risk level* Very low Moderate **Elevated** High Very high **Risk trend**** Improving **Unchanged** Worsening

The new U.S. administration appears to have modified the stance on its strategic confrontation with China to "engaging allies" (as evidenced by the June 2021 G-7 communique) from the previous "go it alone" approach. We now expect less short-term risk volatility, while actions (albeit continuing) by both sides are likely to be more measured. Consequently, we lowered the risk level to elevated from high. That said, the risk remains a medium-to-long term one. Further actions and counteractions could constrain cross-border investments, and increase costs of traded goods and services, intellectual property, investments, and financial transactions between the world's largest economies. This in turn would have a knock-on effect to other regions' economies. In addition, targeted sectors and industry players could suffer disproportionately.

Sources: S&P Global Ratings.

* **Risk levels** may be classified as very low, moderate, elevated, high, or very high, and are evaluated by considering both the likelihood and systemic effect of such an event occurring over the next one to two years. Typically, these risks are not factored into our base case rating assumptions unless the risk level is very high.

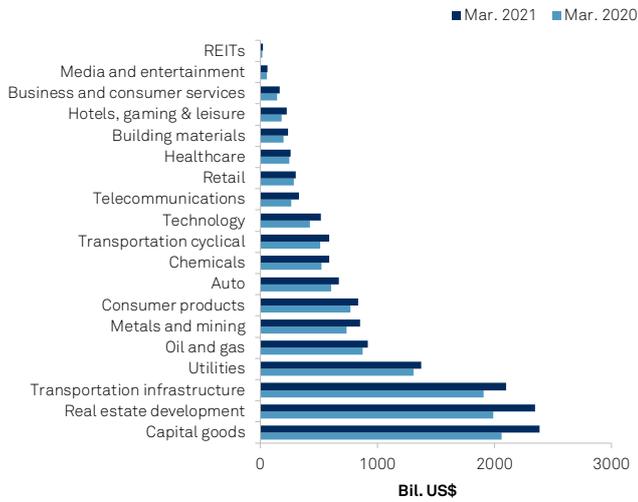
** **Risk trend** reflects our current view on whether the risk level could increase or decrease over the next 12 months.

Credit Conditions Asia-Pacific: One Region, Two Recoveries

Chart 1

Debt Volumes Edging Up Since March 2020

Still, year-on-year debt growth varies significantly among sectors



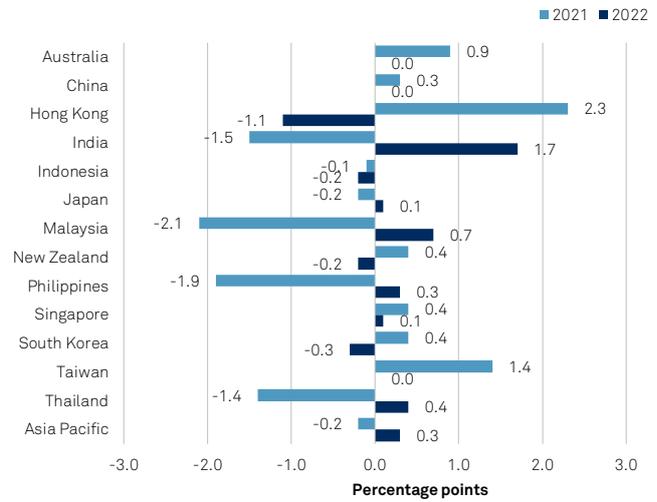
Note: Shown are absolute debt volumes for 18,900 nonfinancial corporates in Asia Pacific by sector, as of Mar. 2021.

Source: S&P Global Market Intelligence.

Chart 2

Asia-Pacific: Changes In Economic Forecast

Current real GDP forecast versus March 2021



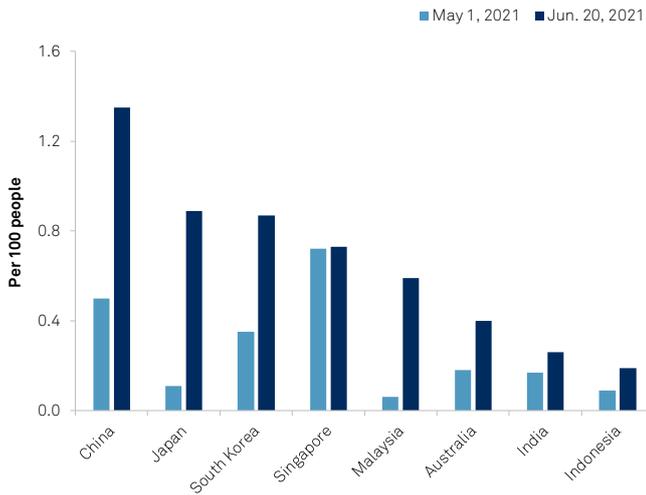
Note: For India, the year runs April to March, e.g. 2021--fiscal 2021 /2022, ending March 31, 2022.

Source: S&P Global Economics.

Chart 3

Vaccination Rates Climb Sharply But With Divergence

A mixed bag--outperformers and underperformers in the race to vaccinate



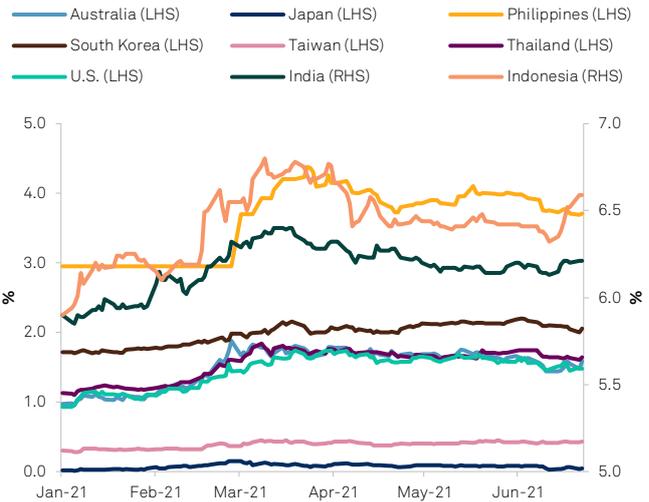
Note: Shown is the rolling 7-day average per 100 people in the population, counted as a single dose, as of June 20, 2021.

Source: Our World In Data.

Chart 4

10-Year Government Bond Yields Remain Elevated

Asia-Pacific yields came down marginally following a sharp climb in February



Data as of June 22, 2021. LHS--Left hand scale. RHS--Right hand scale. 10Y--Ten year.

Source: S&P Global Market Intelligence.

Financing Conditions

Markets Expect Higher Rates

As the region's domestic demand lags exports in the recovery, we expect central banks to remain broadly supportive, keeping policy rates low. Despite the prior progress with COVID controls, some economies in the region had to tighten restrictions and return to soft lockdowns as cases rise, especially economies in South and Southeast Asia. East Asia also faced pockets of reinfection. While this has led to renewed vaccine drives, the region's progression continues to lag that of the U.S. and Europe. As such, the long-term path to recovery is still under a cloud of uncertainty.

For spreads, the U.S. credit composite spreads have been narrowing, with investment-grade (IG) now standing at 117 basis points, and speculative-grade (SG) spread at 352 basis points (as of June 8, see chart 5--based on tenor baskets of 7-10 years for IG and 3-5 years for SG). Asia-Pacific (dollar bond) option-adjusted spreads for IG and HY have generally shown a slight downtrend as well, in line with those of the U.S. However, benchmark yields are beginning to normalize, with government bond yields higher than end-2020 in many cases, indicating the market's view of higher interest rates in the upcoming years. This pattern holds for both local currency and U.S.-dollar-denominated government bonds, and as such is beginning to lift financing costs off last year's record lows.

Based on where businesses are operated from, Asia-Pacific issuers we rate had five defaults so far in 2021 (through June 9). As a comparison, this year's global corporate default tally (based on where the business is located) has risen to 45 (through June 9). The oil and gas sector currently leads the default tally both globally (seven) and in the U.S. (four). Although the global energy and natural resources 12-month speculative-grade default rate of 15.5% remains well above its five-year average of 10.9%, it is showing signs of normalization as the total number of defaults has slowed in 2021 versus 2020 (see "[Peabody Energy's Second Selective Default Of 2021 Brings The Corporate Tally To 45](#)," published on RatingsDirect on June 14, 2021).

What to look for

Through June 8, 2021, year to date Asia-Pacific corporate (financial and nonfinancial) bond issuance reached US\$932 billion, with the cumulative issuance (through May 30) at the highest level seen since 2017 (see chart 6). Part of this reflects ESG deals from Chinese property firms and South/Southeast Asia. However, investor sentiment has been edgy and demand for high yield deals has seen significant ebbs and flows throughout the year. If interest rates experience a sudden and sharp repricing, this could combine with already tenuous investor sentiment to heighten refinancing risk in the region.

Primary contacts

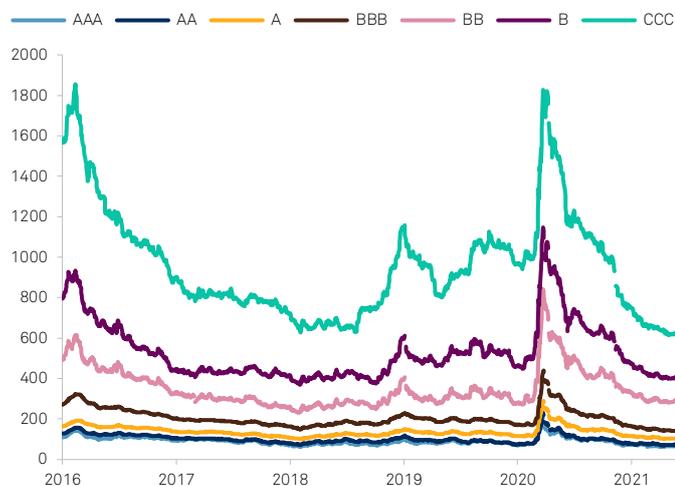
Sudeep Kesh
New York
sudeep.kesh@spglobal.com
+1-212-438-7982

Xu Han
New York
xu.han@spglobal.com
+1-212-438-1491

Vince Conti
Singapore
vincent.conti@spglobal.com
+65-6216-1188

Chart 5

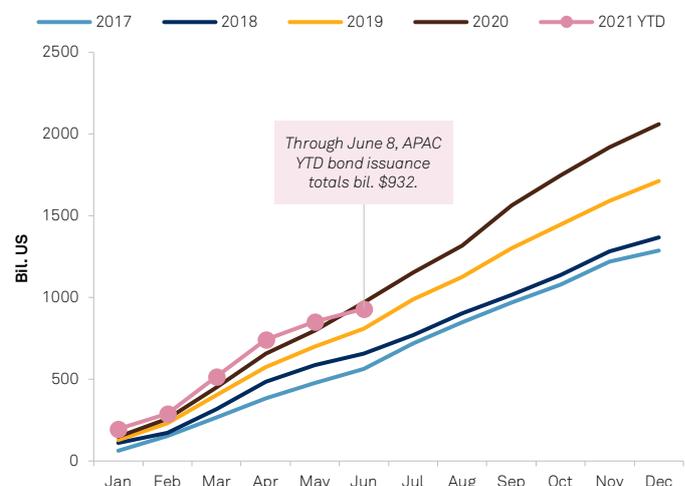
U.S. Spreads By Rating Category



Option-adjusted spreads computed on a pool of over 20,000 U.S.-domiciled bonds with par values of over US\$100 million that are rated by S&P Global Ratings. Data as of June 8, 2021. Source: S&P Global Ratings; Refinitiv.

Chart 6

Asia-Pacific Cumulative Corporate Bond Issuance



Note: Data as of June 8, 2021. YTD--Year to date. Source: S&P Ratings Research; Refinitiv.

Macroeconomic Outlook

Uneven Recovery In Asia-Pacific

Asia-Pacific, after some success in suppressing COVID-19 in the first stage of the pandemic, has stumbled in the shift to vaccination and reopening. Early success may have bred some complacency and the vaccine rollout was slow to start, as governments were late to secure supplies and residents were hesitant to get a jab, at least initially.

This has changed. Earlier defenses have been breached by new variants and pandemic fatigue. Intermittent and targeted lockdowns have returned. In response, governments either sped up domestic production of vaccines, scaled up orders from abroad, and started to promote mass vaccinations. Perhaps even more important, rising infections appears to have reduced vaccine hesitancy among populations. The vaccination gap with Europe and the U.S. should keep closing but a slow start has already affected the outlook.

Asia-Pacific's patchy performance in the second stage of the pandemic will mean its recovery remains unbalanced for a while longer. Exports are contributing to some upward revisions to our growth forecasts for 2021, but as many trading partners reopen and consumers spend more on services, the impulse from exports will wane. Private consumption is exerting a drag and while we expect an improvement in the next few quarters, much depends on the pace of the vaccine rollout.

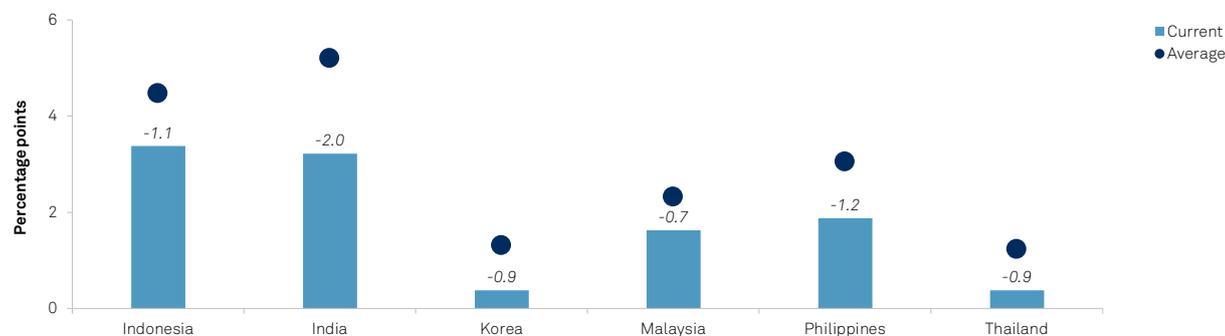
The recovery still has a long runway, except for a few cases where output is either close to or above the pre-COVID trend. This is a better measure of where we are in the recovery than comparing with the pre-COVID level, since each economy's trend growth rate is different. Economies with higher trend growth will naturally reach pre-COVID activity levels faster but would still be far away from their pre-COVID trend levels. For example, while activity in India is back to pre-COVID levels, official data suggest it remains nearly 12% below where it would have been in the absence of the pandemic. There is much healing left to do.

These gaps suggest that demand-push price pressures will remain subdued and the recent rise of inflation across the region is, for the most part, transitory. Low domestic inflation should mean central banks keep policy rates low, but an uneven global recovery will make life difficult for some emerging markets. The Federal Reserve recently upgraded its growth and inflation forecasts and brought forward its calendar for hiking interest rates.

For emerging markets, this is a doubled-edged sword because faster global growth could be accompanied by rapid exchange rate depreciation as interest rate expectations elsewhere re-price higher. Risks are heightened because interest rate differentials with the U.S. are narrower now than the post-global financial crisis average. These differentials can be important for capital flows and sensitivity to U.S. policy shifts could be high. If central banks raise rates due to these external factors while domestic fundamentals suggest no change, the pace of recovery could slow.

Chart 7

Interest Rate Differentials With The U.S. Are Much Narrower Than Normal



Note: Labels show how much lower the current interest rate differential is relative to normal.

Source: CEIC and S&P Global Economics.

The views expressed here are the independent opinions of S&P Global Ratings' economics group, which is separate from but provides forecasts and other input to S&P Global Ratings' analysts. S&P Global Ratings' analysts use these views in determining and assigning credit ratings in ratings committees, which exercise analytical judgment in accordance with S&P Global Ratings' publicly available methodologies.

Primary contacts

Shaun Roache

Singapore
shaun.roache@spglobal.com
+65-6597-6137

Vishrut Rana

Singapore
vishrut.rana@spglobal.com
+65-6216-1008

Sector Trends

Pockets Of Vulnerability Remain

Our net rating outlook bias across asset classes has improved to -11.5% in May 2021 from -15.7% in March, reflecting stabilizing credit quality and recovering economic outlooks. Economic recoveries, fiscal support and regulatory forbearance measures allowed financial institutions to reduce credit losses, raising the bias ratio to -6% in May 2021 from -15% in March 2021. For insurance companies, restored capital buffers can limit fallout from investment market volatility. Household balance sheets in Asia-Pacific remain healthy. This supports the strong collateral performance of consumer asset classes, with stabilizing delinquency rates for asset backed securities (ABS) and residential mortgage-backed securities (RMBS). Elevated levels of public spending and continued erosion of revenue bases among local and regional governments (LRGs) to support fuller economic recoveries keeps outlook bias at -20% for regional LRGs. Improving commodity prices, upticks in industrial production, and reviving auto demand have helped to halve the outlook bias for corporates to -15% in May 2021 (May 2020: -25%).

What's changed?

Deepening divergence within the corporate sector. An improving economic outlook has supported normalization in the corporate sectors, halving the negative outlook bias over the past 12 months. But the recovery remains uneven across sectors with deepening divergence among countries. Prolonged increases in commodities prices support the credit quality of oil and gas, and metals and mining. The negative outlook bias has also notably reduced in the auto and building materials sectors. However, our negative outlook bias remains elevated for gaming and retailing companies as venues stay closed and subdued consumption persists.

Resurgences in COVID-19. The influx of more infectious variants amid slow vaccination rates has prompted a number of governments to reinstate lockdowns and social distancing measures. Vaccination rates are now revving up, but the still-low proportion of coverage will delay the return to normalcy.

Key risks

Widespread reinfections and vaccine shortfalls. Slow vaccination rates within Asia-Pacific, when compared to some Western countries, point to susceptibility towards new COVID-19 variants. Should future mutations of the virus be more transmissible, infection rates may rebound quickly--prompting a return of movement control measures. Meanwhile, vaccine shortages could further curtail the rollout of vaccination plans across the region.

Tighter refinancing conditions. Disorderly risk-repricing reset could tighten Asia-Pacific's financial conditions. Uneven access to funding, particularly for some pandemic-added segments and high yield, could push issuers into default. In the event of a major unexpected default, sharp risk re-pricing could exacerbate debt-servicing costs.

Key assumption

Unbalanced economic recovery. Asia Pacific's patchy vaccination rates will mean a broad-based recovery remains some time to go. Consequent to the reimposition of lockdowns in emerging markets, we lowered our growth forecast marginally for 2021. Still-strong export activities meant diverging fortunes among the exporting and consumption-centric economies. Meanwhile, we expect central banks to keep policy rates low to support fuller economic recovery. We anticipate a more balanced growth later in 2021 and especially 2022.

What to look for

Financial costs. Normalization of benchmark yields reflects the market's expectation of higher interest rates over the next few years. Financing costs are expected to start climbing up from the record low observed in the previous year.

Higher input costs to weigh on corporate earnings. While we perceive the current inflationary pressures as transitory, prolonged hikes in input costs (both materials and labor), without passing through to consumers, could dilute margins and erode earnings of corporate issuers, impacting rating headroom. Particularly for highly competitive or saturated segments, the ability to pass through such costs might be limited. Given the pace of increase in input prices and corporates' ability to pass costs to consumers are not uniform across sectors, selective downward pressure on profitability underpins the unevenness in the path of recovery.

Primary contact

Eunice Tan

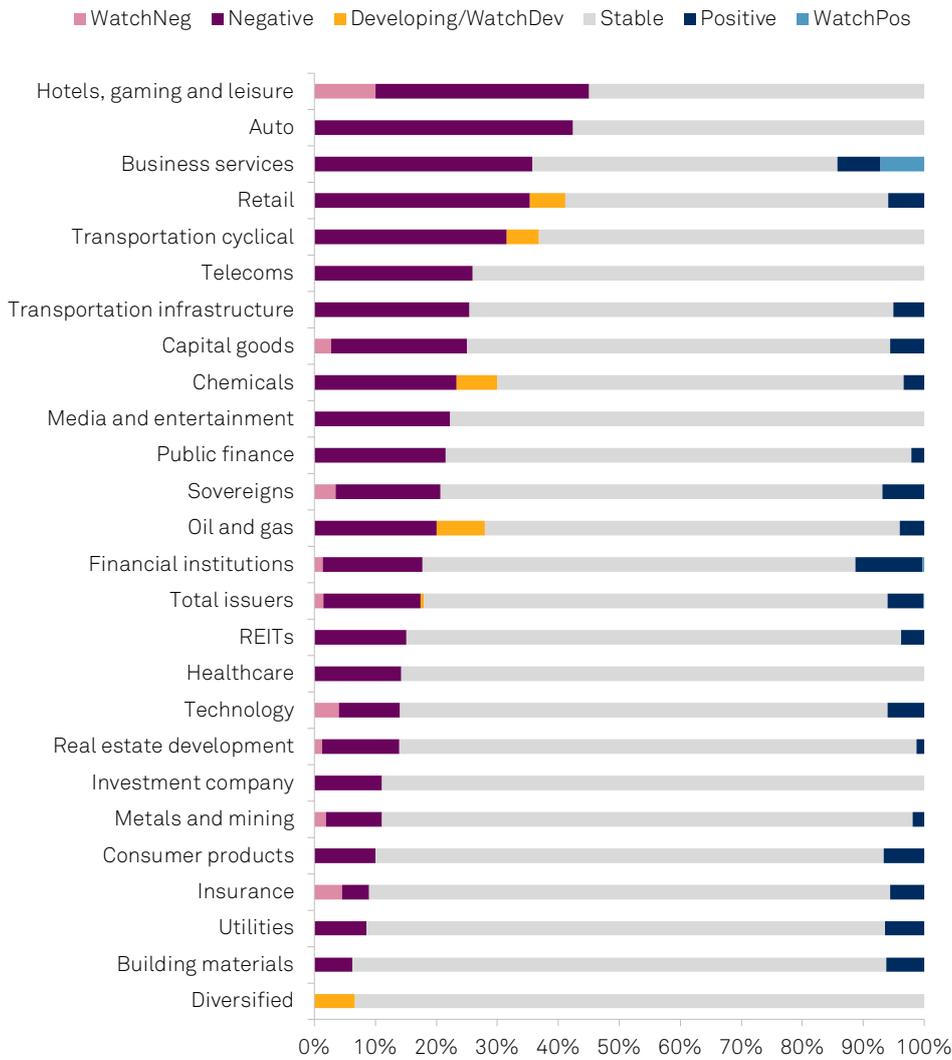
Hong Kong

eunice.tan@spglobal.com

+852-2533-3553

Chart 8

Net Outlook Bias Distribution Of Asia-Pacific Issuers By Sector, May 31, 2021



Note: We calculate the net outlook bias by deducting the percentage of negative outlooks and CreditWatch negative listings against the percentage of positive outlooks and CreditWatch positive listings. A minus figure indicates that the former exceeds the latter, and a positive figure, vice versa.

Source: S&P Global Ratings.

Nonfinancial Corporates

Financing Conditions Remain Selective

- New COVID waves have thus far had a minimal impact on revenue and profit recovery in the region. A sustained recovery depends on vaccination coverage and efficacy to new variants.
- Financing conditions remain two-tier--widely available and inexpensive for the larger and more solid borrowers and much more selective and/or expensive for weaker credits, with volatile investor sentiment.
- Rising commodity and energy prices and supply chain or labor shortages will cap margin improvements in the services, building materials, metals, auto, consumer products and capital goods sectors in 2021 and 2022.

Primary contact

Anthony Flintoff
Singapore
anthony.flintoff@spglobal.com
+65- 6239-6380

Xavier Jean
Singapore
xavier.jean@spglobal.com
+65-6239-6346

What's changed?

Infections rising but the impact on revenue and profit growth momentum is modest so far. The resurgence of COVID-19 has not yet materially altered the corporate recovery that had been building up--in some sectors. In most of the affected countries, either lockdowns are localized or companies have put measures in place to limit production stoppage or develop new sales channels for their products.

Pace of recovery. We still expect most sectors in Asia-Pacific to recover to their pre-pandemic levels in the second half of 2022. Regionally, essential retail, consumer staples, telecommunications, and utilities sectors have already recovered to, or close to, pre-pandemic levels. Revenue and profit momentum have picked up steam in the discretionary retail, homebuilders, and hardware/semiconductor sectors with their path to recovery shortened by around six months from our earlier estimates to the first half of 2022. The recovery path across countries within Asia-Pacific also differs significantly, with issuers in the same sectors but in different countries recovering at different speeds. Real estate in China (nearing full recovery) and in Indonesia (recovery likely in end-2022 or 2023) highlights these regional differences.

Key risks

Funding availability. More than half of speculative-grade corporate ratings in Asia-Pacific have a negative outlook because of weakening liquidity or reduced access to funding amid growing refinancing requirements. Capital providers have been increasingly selective in extending long-term and working capital financing. Hit or miss fundraising initiatives suggest that improving investor sentiment toward speculative-grade issuers in Asia does not appear to be firmly entrenched. Market timing is as much of a factor for a successful transaction as credit fundamentals. We see this situation persisting through 2021, with only short funding windows.

Downside rating risks persist with uneven recovery. Downside rating risks persist regionally, heading into the second half of 2021. As a region, the percentage of nonfinancial issuers with further downside potential over the next 12-24 months is still about twice as high as it was in 2019. A little more than 20% of our ratings on investment-grade issuers, and a little over one in four ratings on speculative-grade issuers still had a negative outlook or were on CreditWatch with negative implications as of end-May.

Key assumption

Modest revenue and profit growth to continue through 2021 and in 2022. Revenue and profit for rated companies in Asia-Pacific to grow about 10% in 2021 versus 2020 amid recovering volumes. That momentum continues in 2022, with an average profit growth of 5%-8% across the region and across sectors.

What to look for

Pace of vaccine rollout and efficacy against evolving variants. The pace of the vaccine rollouts, especially in emerging markets, as well as efficacy of the vaccines against evolving variants (like Delta), will be crucial for a sustained recovery in consumer confidence and funding availability region wide.

Capital market volatility. Further bouts of market volatility or a sharp rise in interest rates could complicate liquidity and refinancing access for weaker borrowers in emerging Asia.

Financial Institutions

COVID-Related Credit Losses Remain Elevated

Primary contact

Gavin Gunning

Melbourne

gavin.gunning@spglobal.com

+61-3-9631-2092

- COVID-19 is hitting lenders' asset quality hard compared to pre-COVID-19 levels.
- Fiscal support and forbearance have contained damage, but downside risks remain as these programs unwind, and as the region contends with further infections and slow vaccinations.
- We estimate that credit losses will rise by about US\$581 billion to year-end 2022 because of COVID-19 and other market stresses.

What's changed?

High credit losses. Post-COVID-19 credit losses are high compared with 2019's tally of US\$329 billion. On the brighter side, post-COVID-19 peak credit losses will likely be lower than we initially forecast in late 2020.

Support from authorities is aiding resilience. Fiscal and monetary policy support and regulatory forbearance are significant buffers. But for this support, ratings would likely be lower.

Some green shoots. Economic risk trends in Australia were revised to stable from negative. This is a positive for the country's financial institutions and reduces the (still-negative) pan-region net outlook bias at end May 2021.

Key risks

A downturn that is more severe than our base case. A more severe economic hit would intensify damage on households and corporates, thereby magnifying banks' credit losses. Regionally, slow vaccinations will constrain the economic recovery with credit losses still vulnerable until the health situation improves.

Leverage, corporate insolvencies, and property. Higher corporate and government sector leverage, and anticipated higher corporate defaults in 2021, are also among our top risks. Also, Asia-Pacific banks' property exposures are significant, and the full effect of COVID-19 on banks' asset quality is not yet evident.

Key assumptions

Strong economic rebound. A return to pre-COVID-19 metrics for asset quality and profitability will be slow and is unlikely to occur until end-2022 for many banking systems. Capitalization trends are expected to be broadly stable.

Highly supportive governments. Short-term fiscal and monetary support for households and corporates from public authorities will continue to stabilize bank credit. Ultimately, we expect many systemically important banks would be beneficiaries of extraordinary government support in the unlikely event it was ever required.

What to look for

Recovery from COVID-19 and the end of supports and moratoriums. The subdued interest margins outlook will dampen profitability prospects. Inflation may alleviate interest margins pressure, to an extent, and weigh on credit losses. Eventual stabilization of underlying economic risk trends (as has occurred recently in Australia) in line with our base case will in turn have a stabilizing effect on banks' asset quality.

Insurance

Rates And Volatility Complicate Reinvestments

- Stabilizing credit trends marked by restored capital buffers support insurers' financial strengths.
- Low interest rates and volatile investment markets increase insurers' reinvestment challenges amid yield chasing.
- Insurance topline recovery to hold up despite COVID-19 resurgence.

Primary contact

WenWen Chen

Hong Kong

wenwen.chen@spglobal.com

+852-2533-3559

What's changed?

Low rates and market swings to squeeze investment returns. Investment yield chase amid the backdrop of low rates and capital market swings mean insurers' risk appetite could rise--diluting the earlier restored capital buffers. Insurers' unhedged foreign exchange exposure may lead to further earnings volatility.

Resilient premium recovery despite COVID-19 resurgence. Accelerated digital sales and gradual resumption of social interaction will underpin a return of sales activities for life insurers. Recent resurgence in COVID-19 cases will likely constrain sales momentum in markets like Malaysia, Thailand, Singapore and Taiwan. Property/casualty insurers' top-line growth to benefit from economic recoveries and favorable rate developments for commercial lines.

Key risks

Heightened investment market volatility. Sharper market turmoil and asset impairments could dilute insurers' capital and earnings. Markets that adopt moving-average discount factors could demand hikes in reserves.

Case resurgence amid slow vaccine rollout. Reinstatement of movement restriction measures may dent economic recovery, slowing demand for insurance coverage. Hikes in unemployment may lead to more loan delinquencies. This combined with withdrawals of various governmental stimulus could hit mortgage-insurance providers.

Key assumptions

Asset risk will rise. Persistent reinvestment challenges will likely prompt insurers to take on greater credit and market risks. This is in addition to the inherent asset-liability mismatch positions among many life insurers in the region.

What to look for

Greater insurance protection awareness. Demand for health and medical insurance coverage will rise, post pandemic.

Non-modeled risks. Rapid urbanization and increased frequency of weather-related events make it harder to model risks. Increased reinsurance cost should weigh on the profit margins of property and casualty insurers.

Regulatory and accounting updates. Evolving regulatory and accounting developments signify prospective changes in business and investment strategies, and result in rising operational costs.

Public Finance

New Policy Measures To Fit Recovery

- Fiscal recovery generally lags economic momentum in most systems.
- Even early exiters from COVID remain reliant on high capital spending plans, such as LRGs in Australia and China, and won't completely unwind existing aggressive fiscal stimulus any earlier than 2022.
- Financial burden weighs on regions still under containment measures, which could gradually erode creditworthiness.

Primary contact

Susan Chu

Hong Kong

susan.chu@spglobal.com

+852-2912-3055

What's changed?

Economic rebounds to provide more options for LRGs. The budget focus has shifted from treating and containing the outbreak, to using capital spending to stimulate the economy. A stronger recovery than we expected in some areas will provide local governments with capacity to decide their spending in the most effective manner while at the same time benefiting from gradual revenue recoveries.

Key risks

Public spending stays high to sustain economic momentum. Fiscal revenues will remain dented for most LRGs, even as pressure to spend remains high. Repeated waves of infection or sputtering vaccination drives would worsen these strains. India's ability to get back on path after its second COVID wave could determine its economic rebound momentum, leading to more pressures on state governments' financial performance.

Contagion fears. Fears will continue to prevent travel and hinder consumption in Asia. Vaccination progress is becoming a race against virus variants, and such variants will make countries cautious on reopening borders. This is a weight for some pandemic-sensitive public-finance segments such as Australian universities.

Key assumptions

Varying scope for countercyclical measures. Most LRGs will not raise taxes and are unlikely to recover their revenue bases soon. Uncertainty will spur LRGs to increase spending, especially capital expenditure to sustain growth. This will create greater risk to fiscal positions. Australian and New Zealand LRGs have greater spending discretion to prompt a recovery, but expansionary policies are weighing on their finances. China's LRGs can still rely on large cash transfers and new borrowings, subject to ongoing support from the central government. The finances of Indian LRGs remain stretched and further handicapped by limited financial flexibility. Japanese LRGs will look to the central government to undertake nationwide economic stimulus, rather than squeezing their already-damaged budgets.

What to look for

Policy shifts. Any aggressive LRG fiscal expansions, either to sustain growth or to maintain social stability, could erode credit quality. LRGs in economies experiencing stronger economic rebounds should be able to normalize more quickly. That said, China is one of the first to recover, yet we see scope for accumulated stress to strike state-owned enterprises. Any moves to provide large-scale bailouts to stressed entities would be a credit negative for their local-government owners.

Sovereign

Risks To A Goldilocks Recovery Multiply

- Accelerated vaccine drives have increased optimism of easing sovereign pressures.
- At the same time, new virus strains pose complicated risks.
- Supply chain bottlenecks and volatile financial conditions could slow recovery of metrics.

Primary contact

KimEng Tan

Singapore

kimeng.tan@spglobal.com

+65-6239-6350

What's changed?

Supply and logistical risks to export recovery. A shortage of semiconductor chips and bottlenecks in container shipping have disrupted production and raised manufacturers' costs.

Global interest rates and commodity prices have picked up. Interest rates are picking up in some countries amid improving economic outlooks. Meanwhile, supply shortages have resulted in increasing commodity prices.

Disruptions to vaccines supply as Indian cases rebounded. The increase in COVID-19 cases in India since April has disrupted its vaccine exports, affecting the mostly low-to-middle income economies that depend on these vaccines. This may prolong the pandemic in these economies and increase incidences of viral mutations.

Key risks

COVID-19 variants. If mutations outpace vaccine rollouts and infection rates rebound in the region, sovereign credit metrics could weaken significantly.

Sudden capital swings. Sharp deterioration in investor sentiment in emerging markets could see swift capital outflows. In lower-rated sovereigns dependent on imported sources of energy, higher oil prices would weaken their external balances and exacerbate capital outflows.

Dampened manufacturing recovery may weigh on growth and fiscal recovery. Rising component and commodity prices, as well as shipping costs, could hobble production recoveries. If these trends persist and government support tapers off, weaker demand may intensify pressures on manufacturers. In China, mounting economic or labor-market pressures could accelerate credit growth; financial instability risks may limit capacity to provide support.

Key assumptions

Global economic activity will recover without major volatility. Recoveries to become more entrenched as the vaccination rates in key economies rise, supported by gradually climbing interest rates and commodity prices.

What to look for

Geopolitical developments that could disrupt momentum. U.S.-China tensions are increasingly being played out with displays of military prowess. Accidental contacts that escalate these tensions could spill over into trade and financial interactions.

COVID-19 disruptions in 2021. Poor efficacy of vaccines against potential new variants of COVID-19 presents risks that could be exacerbated if speed of mutation and the variety of resistant viruses increase.

Structured Finance

Resilient Households A Key Support

- Consumer asset classes remain buoyant in the region supported by better than expected employment outcomes in most major markets.
- New originators, low interest rates, and changing regulatory landscapes may shift risk profiles across structured finance markets.

Primary contact

Narelle Coneybear

Sydney

narelle.coneybear@spglobal.com

+61-2-9255-9838

What's changed?

Asia-Pacific. Consumer asset classes have demonstrated stability and resilience. Employment indicators are looking positive for most major markets.

Key risks

Virus resurgence and threat to consumer confidence. The threat of virus resurgence particularly in countries that have managed the pandemic to date, may hurt consumer confidence ultimately feeding through to the performance of consumer credit backed and mortgage backed loans.

Asset price inflation and the effectiveness of regulatory "handbrakes." Rising house prices in some markets may test the effectiveness of regulatory interventions designed to cool emerging pockets of overheating.

Key assumptions

Structural supports. Ratings should be stable, with low levels of speculative-grade ratings and structural supports to cushion some deterioration. Positive employment trends and low interest rates support debt serviceability on residential mortgage-backed securities (RMBS).

What to look for

Regulatory shift may slow issuance in China. In our view, limits on mortgage loans and changes in how mortgage loans backing RMBS are to be reported for regulatory purposes could feed through to RMBS issuance. On Dec. 31, 2020, the People's Bank of China and the China Banking and Insurance Regulatory Commission jointly announced requirements for domestic banks to comply with ceilings on their property loans over the next two to four years. The new regulation, effective from Jan. 1, 2021, will cap real estate loans and personal housing loans for banks.

LIBOR cessation. For structured finance transactions referencing Japanese yen LIBOR, we anticipate the transition to new benchmarks will accelerate in the second half of 2021. Market participants are paying attention to whether transitions to new benchmarks can be achieved smoothly.

Housing market dynamics. Property price growth in Australia in most markets may shift the mix of borrowers in coming months as investors return to the market in greater numbers. Longer term supply constraints, prolonged low interest rates, and potential relaxation in consumer lending regulation may shift the risk profiles in RMBS in Australia.

This report does not constitute a rating action.

S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any persons in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

Appendix 1: Ratings trends

Table 2

Net Outlook Bias of Asia-Pacific Issuers by Sector, May 31, 2021

	May 2020	Aug. 2020	Oct. 2020	Mar 2021	May 31 2021	No. of entities	Notional average rating
Auto OEM and suppliers	-71%	-67%	-65%	-45%	-42%	33	BBB
Building materials	-13%	-20%	-13%	7%	0%	16	BBB-
Business services	-25%	-36%	-42%	-25%	-21%	14	BB+
Capital goods	-15%	-15%	-19%	-24%	-19%	36	BBB
Chemicals	-30%	-46%	-31%	-26%	-20%	30	BBB-
Consumer products	-24%	-21%	-18%	-13%	-3%	30	BBB-
Diversified	-7%	-13%	-13%	-7%	0%	15	A-
Healthcare	-38%	-38%	-38%	-29%	-14%	7	BB+
Hotels, gaming and leisure	-78%	-67%	-44%	-42%	-45%	20	BB+
Investment company	-10%	-20%	-10%	0%	-11%	9	A-
Media and entertainment	-22%	-22%	-44%	-40%	-22%	9	BBB+
Metals and mining	-24%	-22%	-24%	-17%	-9%	54	BB+
Oil and gas	-34%	-39%	-39%	-24%	-16%	25	BBB+
Real estate development	-11%	-11%	-12%	-9%	-13%	79	BB-
Real estate investment trusts	-25%	-22%	-18%	-16%	-11%	53	A-
Retail	-31%	-38%	-22%	-29%	-29%	17	BBB-
Technology	-17%	-20%	-20%	-11%	-8%	50	BBB-
Telecommunications	-26%	-26%	-33%	-25%	-26%	27	BBB+
Transportation cyclical	-55%	-40%	-40%	-42%	-32%	19	BB+
Transportation infrastructure	-37%	-31%	-29%	-27%	-20%	59	BBB+
Utilities	-5%	-6%	-4%	-5%	-2%	94	BBB+
Total corporates	-25%	-25%	-23%	-19%	-15%	696	BBB
Financial institutions	-14%	-17%	-18%	-15%	-6%	373	BBB+
Insurance	1%	-4%	-8%	-4%	-3%	178	A
Public finance	2%	-10%	-12%	-20%	-19%	93	A+
Sovereign	4%	-10%	-10%	-17%	-14%	29	BBB+
Total issuers	-17%	-19%	-19%	-16%	-11%	1,369	BBB+

Light blue colored cells indicate improvement from prior period, navy blue, deterioration.

Appendix 2: Economic data and forecast summaries

Table A1

Australia--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-2.4	4.9	3.3	2.6	2.5
Inflation %	0.9	2.0	2.1	2.2	2.3
Unemployment rate %	6.5	5.3	4.8	4.6	4.5
Policy rate % (EOP)	0.10	0.10	0.10	0.50	0.75
Exchange rate (US\$ per A\$)	0.77	0.78	0.78	0.79	0.79

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. A\$--Australian dollar. Sources: Oxford Economics, S&P Global Ratings.

Table A2

China--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	2.3	8.3	5.1	5.0	4.8
Inflation %	2.5	1.8	2.1	2.2	2.2
Unemployment rate %	5.7	5.2	5.1	5.0	4.9
Exchange rate (per US\$)	6.52	6.40	6.30	6.30	6.20

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A3

Hong Kong--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-6.1	6.5	2.5	2.0	1.9
Inflation %	0.3	2.4	2.0	1.8	1.7
Unemployment rate %	5.9	6.2	5.1	4.3	3.8
Exchange rate (per US\$)	7.75	7.80	7.80	7.80	7.80

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A4

India--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-7.3	9.5	7.8	5.7	6.5
Inflation %	6.2	5.3	4.5	4.5	4.3
Policy rate % (EOP)	4.00	4.25	4.75	5.00	5.25
Exchange rate (per US\$)	72.9	75.0	76.0	77.0	78.0

Note: Inflation and unemployment rate shown are the period average. For India, 2020 means fiscal 2020/2021 (year ending March 31, 2021); 2021 means fiscal 2021/2022 (year ending March 31, 2022); and so forth. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Credit Conditions Asia-Pacific: One Region, Two Recoveries

Table A5

Indonesia--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-2.1	4.4	5.2	5.3	4.8
Inflation %	2.0	2.2	2.7	2.8	2.8
Unemployment rate %	6.2	6.1	5.6	5.3	5.2
Policy rate % (EOP)	3.75	3.50	4.00	4.50	4.50
Exchange rate (per US\$)	14050	14500	14650	14800	14950

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A6

Japan--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-4.7	2.5	2.1	1.0	0.9
Inflation %	0.0	0.0	0.5	0.8	0.9
Unemployment rate %	2.8	2.8	2.7	2.4	2.3
Policy rate % (EOP)	-0.10	-0.10	-0.10	-0.10	-0.10
Exchange rate (per US\$)	103.5	108.0	107.0	106.0	105.0

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A7

Malaysia--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-5.6	4.1	6.3	5.0	4.7
Inflation %	-1.1	3.3	2.1	2.1	2.2
Unemployment rate %	4.5	4.8	4.4	4.0	3.7
Policy rate % (EOP)	1.75	1.75	2.00	2.50	2.50
Exchange rate (per US\$)	4.01	4.15	4.18	4.22	4.22

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A8

New Zealand--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-1.2	4.6	2.8	2.9	2.8
Inflation %	1.7	2.3	2.2	2.2	2.1
Unemployment rate %	4.6	4.6	4.3	4.1	4.0
Policy rate % (EOP)	0.25	0.25	0.50	1.00	1.00
Exchange rate (US\$ per NZ\$)	0.72	0.71	0.71	0.72	0.72

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. NZ\$--New Zealand dollar. Sources: Oxford Economics, S&P Global Ratings.

Table A9

Philippines--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-9.6	6.0	7.5	7.3	7.5
Inflation %	2.6	4.5	2.2	2.2	2.5
Unemployment rate %	10.4	8.3	6.6	5.4	4.4
Policy rate % (EOP)	2.00	2.00	2.25	2.75	3.00
Exchange rate (per US\$)	48.04	48.2	48.7	50.8	50.0

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A10

Singapore--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-5.4	6.2	3.8	2.8	2.6
Inflation %	-0.2	1.6	1.8	1.7	1.7
Unemployment rate %	3.0	3.1	2.6	2.3	2.3
Exchange rate (per US\$)	1.32	1.33	1.34	1.34	1.33

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A11

South Korea--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-0.9	4.0	2.8	2.5	2.5
Inflation %	0.5	1.7	1.5	1.4	1.4
Unemployment rate %	4.0	3.8	3.4	3.3	3.2
Policy rate % (EOP)	0.50	0.75	1.25	1.25	1.25
Exchange rate (per US\$)	1088	1110	1100	1090	1080

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A12

Taiwan--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	3.1	5.6	2.7	2.5	2.5
Inflation %	-0.2	1.4	1.1	1.0	0.9
Unemployment rate %	3.8	3.6	3.6	3.5	3.5
Policy rate % (EOP)	1.13	1.13	1.38	1.38	1.38
Exchange rate (per US\$)	28.5	28.1	28.1	28.0	27.9

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A13

Thailand--S&P Global Ratings Economic Outlook

	2020	2021f	2022f	2023f	2024f
Real GDP %	-6.1	2.8	4.9	4.6	2.9
Inflation %	-0.8	1.0	1.0	1.1	1.0
Unemployment rate %	1.7	1.9	1.6	1.4	1.2
Policy rate % (EOP)	0.50	0.50	0.50	0.50	0.50
Exchange rate (per US\$)	30.04	31.49	31.93	31.68	31.30

Note: Inflation and unemployment rate shown are the period average. f--S&P Global Ratings forecast. EOP--End of period. Sources: Oxford Economics, S&P Global Ratings.

Table A14

Regional--S&P Global Ratings Economic Outlook

Real GDP (%)	2020	2021f	2022f	2023f	2024f
Asia Pacific	-1.5	7.1	5.2	4.6	4.5
Eurozone	-6.7	4.4	4.5	2.2	1.6
Latin America 5	-6.6	5.7	2.5	2.3	2.3
U.S.	-3.5	6.7	3.7	2.6	1.8

Asia Pacific and Latin America 5 aggregate GDP growth numbers are based on current purchasing power parity GDP weights. U.S. percentages are annual average percentage changes. Latin America 5 comprises Argentina, Brazil, Chile, Colombia, and Mexico. Source: S&P Global Ratings.

Copyright © 2021 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.spcapitaliq.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Australia: S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

spglobal.com/ratings