S&P Global
Ratings

Credit Conditions Asia-Pacific:

COVID-19: Flatter Growth, Tougher Recovery

April 22, 2020

(Editor's Note: S&P Global Ratings' Credit Conditions Committees meet quarterly and on an ad hoc basis to review macroeconomic conditions in each of four regions (Asia-Pacific, Emerging Markets ex-Asia, North America, and Europe). Discussions center on identifying credit risks and their potential ratings effect 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 April 20 and 21, 2020).

Key Takeaways

- **Overall**. We expect GDP growth for Asia-Pacific to fall to 0.3% in 2020 before a gradual recovery, implying a two-year income loss of over US$2 trillion. In 2020, corporates could see on average 10% to 15% less revenue, and banks may incur over US$400 billion in extra credit costs because of the outbreak.
- **Risks.** Our top risks are stricter and longer COVID-19 measures, higher debt leverage, tighter financing conditions for lower-grade issuers--particularly in U.S. dollars--and that the U.S.-China dispute will reignite.
- **Credit.** While government monetary and fiscal actions provide some buffer, the slump in consumer and business demand will strain borrower credit quality, resulting in an escalation in missed or deferred payments and, for banks, higher nonperforming loans.

Credit conditions in Asia-Pacific going into the second half 2020 will be very tough. Containment measures to stem the spread of COVID-19 have escalated regionally (outside China) with global confirmed cases doubling to more than 2 million. These measures, together with business and consumer behavioral changes, are having a wider effect on credit conditions in Asia-Pacific beyond what we estimated in late March (see "Credit Conditions Asia-Pacific: As Bad As 1997, " published March 30, 2020). Based on the experience of China, we believe the COVID-19 recovery period will take much longer than many had earlier expected.

S&P Global Ratings has revised downward its Asia-Pacific economic forecasts for 2020. As detailed in "Up Next: The Complicated Transition From COVID-19 Lockdown, April 16, 2020", we have lowered our 2020 GDP forecasts by 1.9 percentage points (ppt) to 0.3% from the +2.2% estimate made in March 2020. In other words, our estimated hit to regional economic growth has doubled since March, and contrasts sharply with our pre-outbreak growth forecast of 4.8%.

COVID-19-affected U.S. and European economies are major trading partners of Asia-Pacific. While China began its economic recovery in the second quarter of 2020, the U.S. and Europe will likely be hit hardest in the quarter. We anticipate the recovery for major economies to be slow through the second half of 2020 before gathering strength going into 2021. However, 2021 growth--driven by a rebound of demand—will not likely make up for output lost during the downturn.

The long-term path to recovery remains clouded by uncertainties surrounding the COVID-19 spread and the potential damage to employment (see Economic Research: Jobs And The Climb Back From COVID-19, April 20, 2020), capital and productivity. Indeed, we have concerns about the healthcare and policy resources of some Asia-Pacific economies to suppress the virus. We recognize that credit conditions could worsen even beyond this revised base case. Consequently, we are revising the COVID-19 risk for the Asia-Pacific to very high from high. Our revised top Asia-Pacific risks are detailed in table 1.

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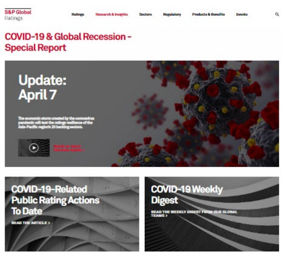


Table 1

Top Asia-Pacific Risks

Stricter and longer COVID-19 measures

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

The stages of COVID-19 spread in the region differ. China is late stage and starting to ease lockdown restrictions; and confirmed cases in Korea and Australia seem to be stabilizing. But those in Japan and Singapore are still rising while other Asia-Pacific countries appear to be in the early-to-middle stages. However, cases could still resurge in late-stage countries especially if there is a Europe or US-style surge among the early-to-middle stage countries, including the high-population countries of India and Indonesia. Such surge or resurgence may lead to stricter, longer or reimposed lockdowns, worsening Asia-Pacific's economic downturn.

Much higher debt leverage

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

The lockdowns and slump in demand are hitting the income of households, businesses and governments. The situation is compounded by higher borrowings. Governments are incurring more debt as they roll out stimulus to support the economy, employers and workers. Liabilities of businesses and consumers are also rising--directly, by fresh borrowings to cover cash-flow shortfalls, and indirectly, by deferring payments with creditors forbearing and capitalizing unpaid interest. The post COVID-19 world is likely to be one of lesser average credit quality. A risk at that time would be how government policy stimulus programs unwind.

Tighter financing conditions for lower-grade issuers and in U.S. dollars

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

The recent volatility in financial markets because of worries about the effect of COVID-19 on global growth underscores the refinancing risks that more highly leveraged borrowers in the region are facing. The lowering of policy interest rates by some governments in the region and liquidity injections into the banking system, are helping to alleviate the cost and availability of funding, However, shifting investor sentiment may cause spreads to widen and access to tighten at the lower end of the credit rating spectrum and for U.S. dollar funding for emerging market borrowers to also tighten.

U.S.-China strategic dispute reigniting

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

The January 2020 "phase one" trade deal seem to be marking a hiatus in the strategic and trade dispute between the U.S. and China. Besides which, the governments of both countries seem more focused on dealing with the effects of COVID-19. However, given that China may find it difficult to fulfill its pledges under the trade deal for 2020 given the COVID-19 situation, the dispute could reignite during this U.S. presidential election year.

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.

S&P Global Ratings acknowledges a high degree of uncertainty about the rate of spread and peak of the coronavirus outbreak. Some government authorities estimate the pandemic will peak about midyear, and we are using this assumption in assessing the economic and credit implications. We believe the measures adopted to contain COVID-19 have pushed the global economy into recession (see our macroeconomic and credit updates here: www.spglobal.com/ratings). As the situation evolves, we will update our assumptions and estimates accordingly.

Regional Credit Conditions

Three Spreads Dictate Outlook

The credit outlook for Asia-Pacific is driven by three spreads: spread and duration of COVID-19; spread and duration of healthcare-related lockdowns and restrictions; and credit and US dollar swap spreads demanded of borrowers and counterparties by the market.

Infection and lockdown. The stages of COVID-19 spread in the region differ. China is late stage (see chart 1d) and starting to ease lockdown restrictions; and confirmed cases in Korea and Australia seem to be stabilizing. But those in Japan and Singapore are still rising (see chart 1b) while other Asia-Pacific countries appear to be in the early-to-middle stages (see chart 1a). However, case clusters could still resurge in later stage countries especially if there is a Europe or US-style surge among the early-to-middle stage countries, including the high-population countries of India and Indonesia. Such surge or resurgence may lead to stricter, longer or reimposed lockdowns, worsening Asia-Pacific's economic downturn.

Chart 1a.

COVID-19 Phase One--Early Expansion. Confirmed Cases Per Population Relatively Low

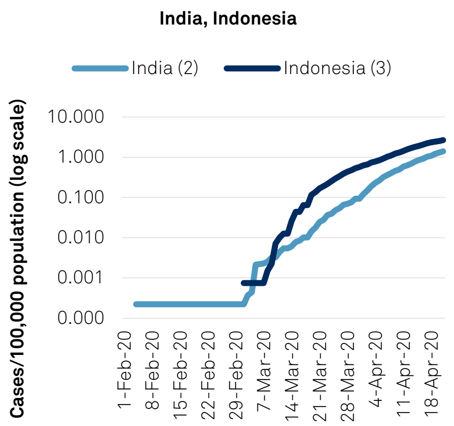


Chart 1b.

COVID-19 Phase Two--Mid-Expansion. Rising Or Steady Growth Rate

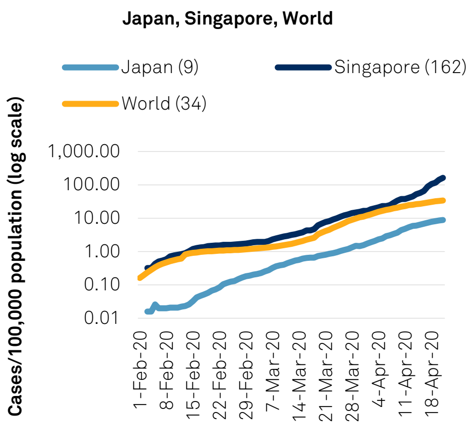


Chart 1c.

COVID-19 Phase Three--Late Expansion. Slowing Growth Rate

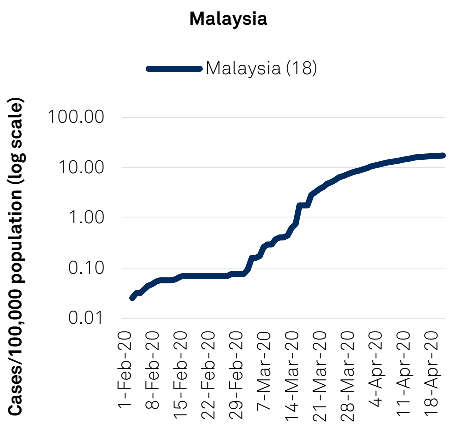
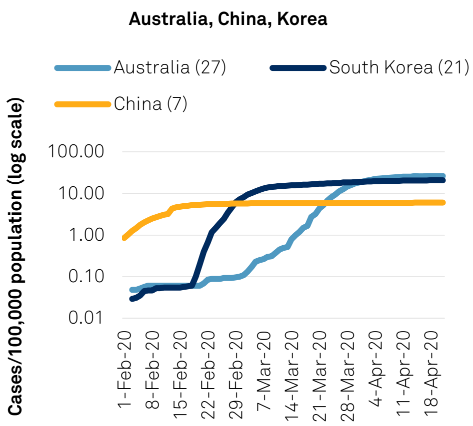


Chart 1d.

COVID-19 Phase Four--Stabilizing. Flattening Growth

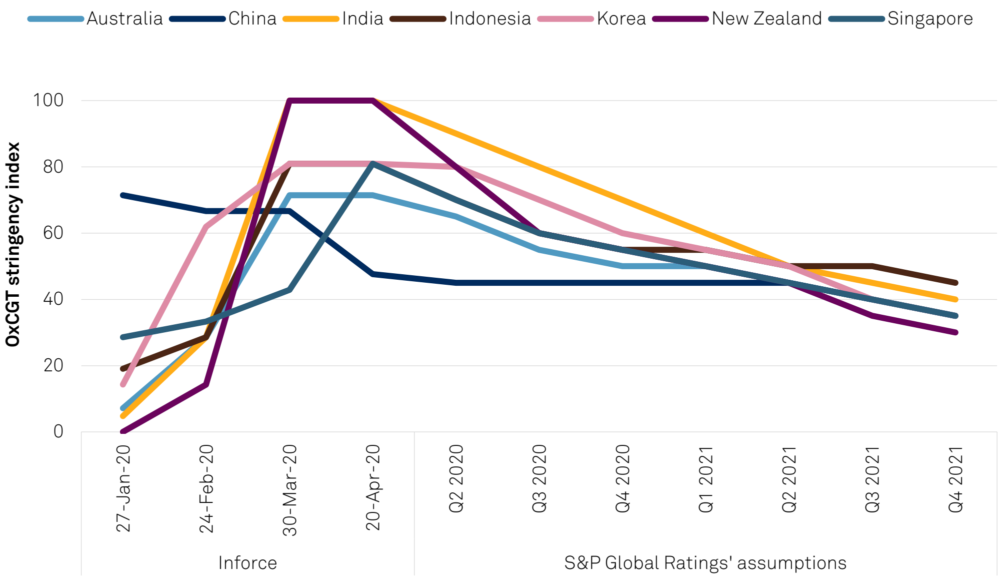


Numbers in brackets after geography names in chart legends indicate number of confirmed cases per 100,000 population.
Sources: World Health Organization, John Hopkins University Centre System Science and Engineering. Data as of April 21, 2020.

We assume the first-wave of COVID-19 infections will peak across Asia-Pacific by the second quarter of 2020 with most countries then entering a transition period where there will be a scaling down in social distancing and related measures as shown in chart 2. Chart 2 displays the stringency of such government responses, ranging from '0' (absent) to '100' ('very tight'), adapting the University of Oxford's COVID-19 Government Response Tracker (OxCGRT) Stringency Index. The University of Oxford collects information on COVID-19 policy responses governments have taken, scores the stringency of such measures, and aggregates these into an index.

Chart 2.

Assumptions Of COVID-19 Policies Restricting People Movement For Selected Asia-Pacific Countries, 2020-2021



Source: University of Oxford's COVID-19 Government Response Tracker (OxCGRT) Stringency Index.

Recent debt leverage. In April 2020, the Institute of International Finance (IIF) reported that global debt-to-GDP, inclusive of those of financial institutions, hit an all-time high of over 322% by end-2019[1]. The Bank for International Settlements (BIS) had in December 2019 estimated that global debt, excluding financial institutions, had reached US$187 trillion by mid-2019[2]. Indeed, the World Bank had expressed its concern in December 2019 about debt growth. It said that emerging and developing economies had seen the largest, fastest, and most broad-based debt surge in nearly five decades with debt climbing to US$55 trillion in 2018[3]. This followed the International Monetary Fund's (IMF) October 2019 warning that corporate sector vulnerability is already elevated in several systematically important economies because of rising debt and often weak debt servicing capacity[4].

As charts 3a to 3d illustrate, the debt-to-GDP leverage ratios of corporate, government and household sectors in Asia-Pacific were generally higher at end-2019 than just prior to the global financial crisis of 2008-2009.

[1] *Global Debt Monitor*, Institute of International Finance, April 7, 2020.
[2] *Credit to the non-financial sector* statistics, Bank for International Settlements, Dec. 8, 2019 update.
[3] *Global Waves Of Debt*, Advance Edition, World Bank, released December 2019.
[4] Global Corporate Vulnerabilities, Chapter 2, *Global Financial Stability Report*, International Monetary Fund, October 2019.

Chart 3a.

Total Debt-To-GDP For Selected Asia-Pacific Geographies, 2007 Versus 2019

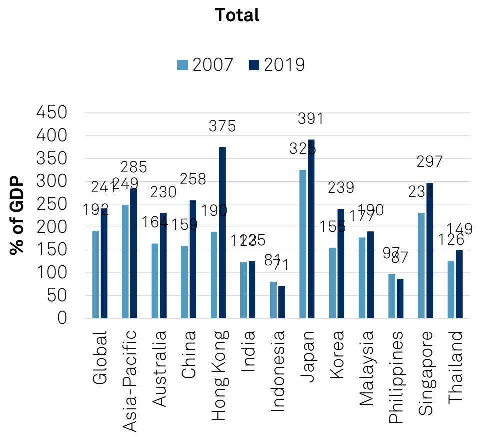


Chart 3b.

Debt-To-GDP Of Nonfinancial Corporate Sectors, 2007 Versus 2019

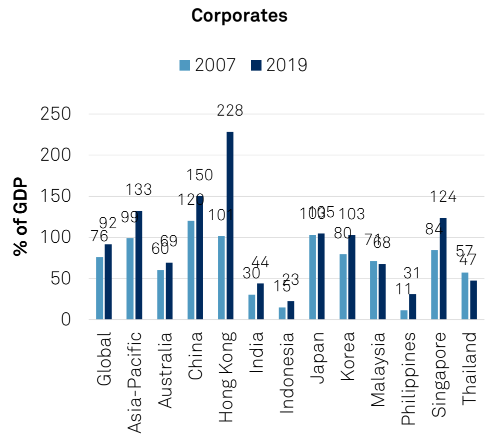


Chart 3c.

Debt-To-GDP Of Government Sectors, 2007 Versus 2019

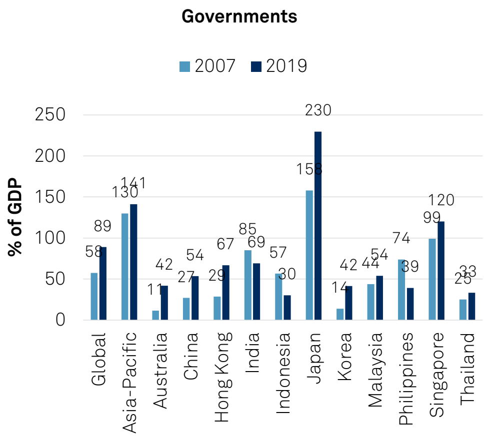
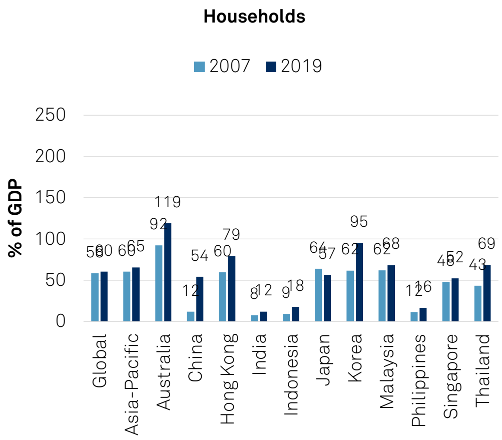


Chart 3d.

Debt-To-GDP Of Household Sectors, 2007 Versus 2019



Source: Institute of International Finance.

Future debt leverage. The lockdowns and slump in demand are hitting the income of households, businesses and governments. Lower income translates to higher debt leverage. The situation is compounded by higher borrowings. Governments are incurring higher net debt as they roll out stimulus packages to support the economy, employers and workers. Liabilities of businesses and consumers are also rising--directly, by fresh borrowings to cover cash-flow shortfalls, and indirectly, by deferring payments coming due with creditors forbearing and capitalizing unpaid interest. The post COVID-19 world is likely to be one of lower average credit quality.

Financing Conditions

More Challenging For Weaker Issuers

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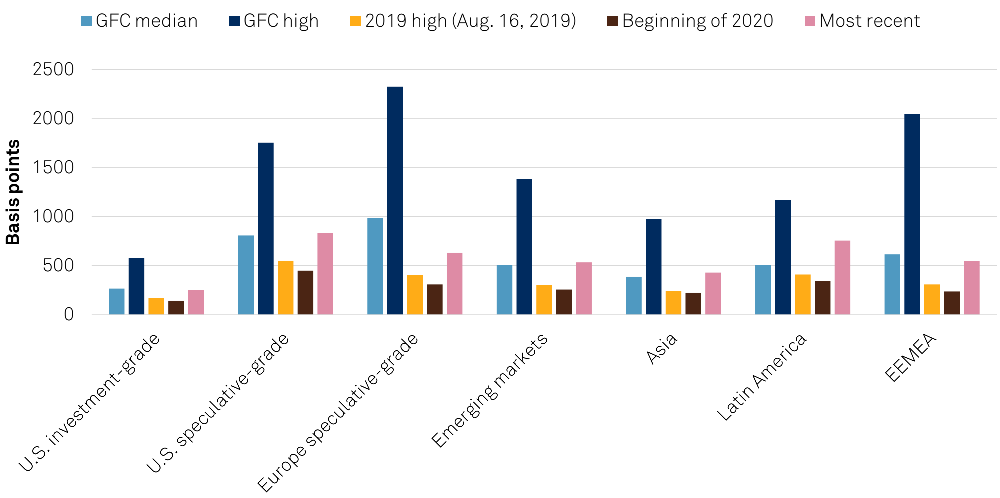
The likely shrinkage in GDP on account of the slowdown in global economic growth and the blow from the coronavirus outbreak will likely constrain demand for capital, and subsequently, bond issuance. Issuers with weaker credit profiles will find conditions increasingly difficult.

Central banks globally have stepped in with programs to limit economic damage and provide liquidity to the markets, the most recent of which was a multi-prong program where the Federal Reserve would lend to support state and local governments, employers, and households as well as an expanded quantitative easing program to account for recent "fallen angels" (no longer investment grade) such as Ford. These programs will allow investors to gradually take on risk assets, crucial to proper markets functioning. Spreads have tightened substantially across the curve though are still considerably elevated (see chart 4).

In Asia-Pacific, corporate and institutional borrowers continue to depend more on banks rather than other sources of credit (unlike the U.S.). All of last week's investment-grade issuance came from financials and sovereigns. The high-yield space remained quiet despite facing narrow spreads within the region.

Chart 4

Secondary Market Credit Spreads, U.S. And Emerging Markets



ICE Benchmark Administration Limited (IBA), 'ICE BofAML High Grade Emerging Markets Corporate Plus Sub-Index Option-Adjusted Spread', 'ICE BofAML Emerging Markets Corporate Plus Index Option-Adjusted Spread', 'ICE BofAML Asia Emerging Markets Corporate Plus Sub-Index Option-Adjusted Spread', 'ICE BofAML Latin America Emerging Markets Corporate Plus Sub-Index Option-Adjusted Spread', 'ICE BofAML Europe, the Middle East, and Africa (EMEA) Emerging Markets Corporate Plus Sub-Index Option-Adjusted Spread', retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BAMLEMRECRPIEMEAOAS, U.S. Investment-Grade and Speculative-Grade Spreads from S&P Global Ratings. April 20, 2020.

Macroeconomic Outlook

Two-Year Income Loss Over US$2 trillion

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We expect economic growth for Asia-Pacific to fall to 0.3% in 2020 followed by a gradual recovery (see charts 5a and 5b), implying a two-year income loss across the region of over US$2 trillion. We still see output returning to its pre-COVID-19 trend. However, a more extended climb back from the trough will mean activity returning to its pre-outbreak path only around 2023 (see chart 6).

We cannot and do not forecast the evolution of the pandemic, but we do need to make assumptions regarding social distancing measures to form our economic view. We assume the first-wave of infections will peak across the region by the second quarter. Afterwards, most economies will enter a transition period where social distancing measures fall in the continuum between full lockdowns and business as usual until mid-2021. At that point, we assume that lasting medical intervention is available and widely distributed through early 2022. Our forecasts imply that the cost of an initial month of full lockdown are converging to a full year growth hit of about 3% of GDP. This varies across countries.

Fiscal and monetary policies will limit some of the economic fallout but, most important, provide a bridge to a self-sustaining recovery in 2021. Economic risks remain on the downside. A surge in unemployment, despite policies supporting jobs, would mean a sharper downturn and a much flatter recovery path. The risk of a substantial tightening of U.S. dollar financing conditions has eased for now, in part due to Federal Reserve policies. However, risk aversion could re-emerge if virus containment fails, including in emerging markets.

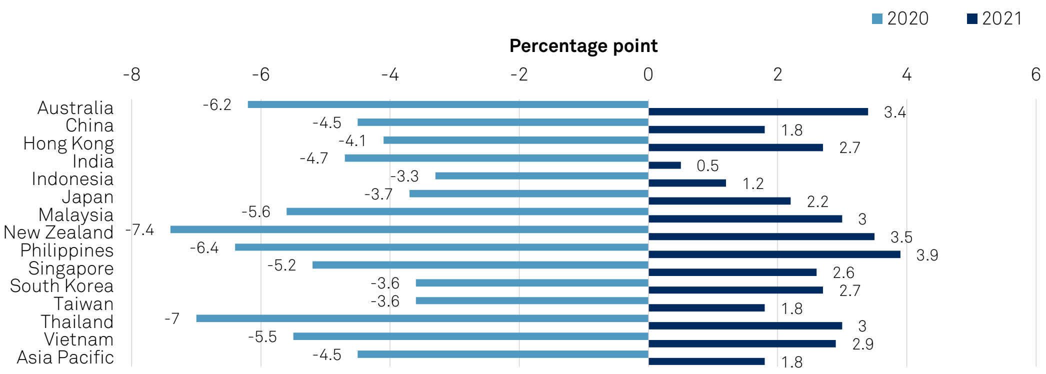
Chart 5a.

Asia-Pacific: Real GDP Forecast

Note: For India, the year runs April to March, e.g. 2019-- fiscal 2019 /2020, ending March 31, 2020. Source: S&P Global Ratings.

Chart 5b.

Asia-Pacific: Change From Dec. 2019 Forecast

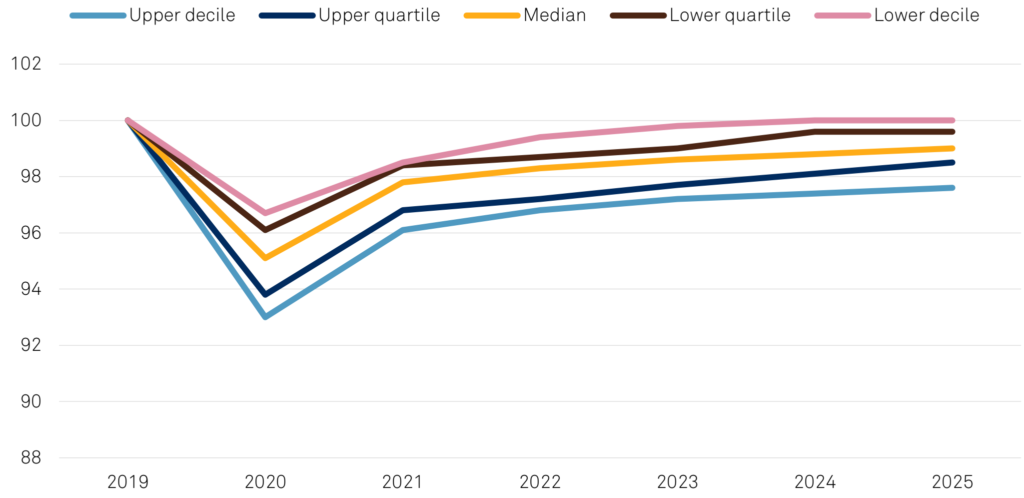


Note: For India, the year runs April to March, e.g. 2019-- fiscal 2019 /2020, ending March 31, 2020. Source: S&P Global Ratings.

Chart 6

Asia-Pacific's Forecast Climb Back From COVID-19

Distribution of real GDP forecast relative to trend across 14 Asia-Pacific economies



Note: Output relative to the long-run pre-COVID-19 trend. Forecasts for 2024 and 2025 are illustrative. Source: S&P Global Economics.

Sector Trends

Pain Across The Board

For the full list of analytical contacts, please see Appendix 2.

Rating actions. We have taken 121 ratings actions related to COVID-19 and oil prices in the Asia-Pacific (see charts 7a and 7b). While businesses and consumers in China are starting to move toward normalcy, the recovery process could well drag out for months. In the region, lower official interest rates and government stimulus are providing some relief, but the slump in demand is pressuring credit quality and raising default risk, particularly among issuers with weaker credit profiles.

Chart 7a.

Asia-Pacific: Number Of Issuers Affected By Rating Actions Related To COVID-19 And Oil Prices, By Geography, As Of April 16, 2020

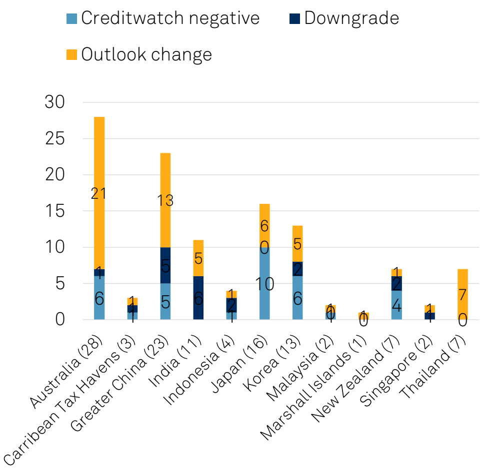
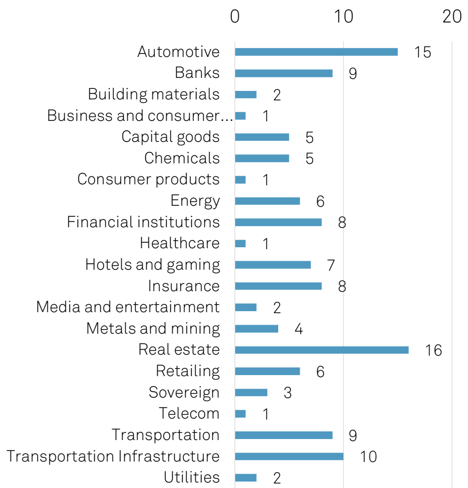


Chart 7b.

Asia-Pacific: Number Of Issuers Affected By Rating Actions Related To COVID-19 And Oil Prices, By Sector, As Of April 17, 2020



Note: These rating actions pertain to ratings where we mention COVID-19 as one factor or in combination with others.
Source: S&P Global Ratings. COVID-19: Coronavirus- And Oil Price-Related Public Rating Actions On Corporations, Sovereigns, And Project Finance To Date, Apr.20, 2020.

Corporate. The fallout from the COVID-19 pandemic and oil price decline has been broad across sectors in Asia-Pacific. It is being felt more intensely in the following sectors - aviation, auto, consumer products; gaming, leisure and lodging, materials, building and construction, metals and mining, oil and gas; retail and restaurants; transportation cyclical, and transportation infrastructure (see table 2). In table 2, the impact descriptors of high, medium and low; and potential impact on revenue, earnings and debt for the industry sectors are our qualitative views. They do not necessarily translate to risk of rating actions, which depend on a number of factors including initial headroom under a rating coupled with the expected length and severity of the pandemic. The potential change in revenue, earnings and debt pertain to change in 2020 over 2019.

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Table 2

Asia-Pacific: Relative Effect Of COVID-19 And Economic Conditions By Sector

Sectors	Relative impact*	Potential decline in 2020 revenue over 2019#1	Potential decline in 2020 earnings over 2019#2	Potential increase in 2020 debt over 2019#3	Notes
Corporate					
Auto	High	10%-15%	25% -40%	<5%	
Building Materials	Medium	5%-10%	15%-25%	<5%	1
Capital Goods	Medium	5%-10%	15%-25%	5-10%	
Chemicals	High	15%-25%	25%-40%	5-10%	
Consumer Products	Medium	5%-10%	10%-15%	5-10%	
Gaming	High	25%-40%	25%-40%	<5%	2
Metals and Mining	High	15%-25%	15%-25%	<5%	3
Oil and Gas	High	25%-40%	25%-40%	5-10%	
Real Estate Development	Medium	5%-10%	5%-10%	<5%	
REITs	Medium	5%-10%	5%-10%	<5%	4
Retail	High	15% -25%	15%-25%	<5%	
Technology	Medium	10%-15%	10%-15%	<5%	5
Telecommunication	Low	0%-5%	0%-5%	<5%	
Transportation	High	25%-40%	> 40%	<5%	6
Transportation Infrastructure	High	15%-25%	15% -25%	<5%	
Utilities	Low-Medium	5%-10%	0%-5%	<5%	
Financials and governments					
Financial Institutions	Medium	0%-5%	n.a.	<5%	7
Insurance	Medium	0%-5%	5%-10%	n.a.	8
Public finance	Medium	0%-5%	Deficit 0%-5%	<5%	9

*The impact descriptors (high, medium, low) and change in revenue, earnings and debt are our qualitative views. They do not necessarily translate to risk of rating actions, which depend on a number of factors including initial headroom under a rating coupled with the expected length and severity of the pandemic. #1 Revenue for financial institutions refers to Gross operating revenue (before costs including non-interest expense and LLP), LLP--Loan Loss Provisioning. #2Earnings for corporates refers to earnings before interest, tax, depreciation and amortization (EBITDA) for corporates. #3 Debt for financial institutions refers to liabilities (including deposits).

Notes:

1. Impact on building material sector is medium because we expect stimulus roll-out to mitigate overall impact. EBITDA will experience larger decline than revenues, because of less flexible cost structures of building material producers. Debt will not have material impact because companies have sufficient cash balance and operating cash flows to fund the shortfall.
2. Gaming sector is facing a zero or near-zero revenue scenario as countries declare state of emergency or have strict people movement. We expect recovery to take time even after virus is contained as weak consumer sentiment can linger and lower income affect discretionary spending appetite.
3. Weaker commodity prices and lower production volumes amid a drop in demand due to the coronavirus outbreak. Major capital growth projects are likely to be shelved.
4. Retail REITs are more impacted; office REITs are less impacted
5. The revenue and cash flow impact should be largely in line with the likely decline in global demand particularly for hardware and semiconductors.
6. Impact on earnings is larger given the operating leverage. The airlines industry is the hardest hit among all transportation segments
7. Revenue is likely to be impacted mainly by lower net interest margins in the 'lower for longer' rates environment. Despite the weak GDP outlook, asset growth and consequently liability growth will be assisted by government policies supporting bank lending.
8. The higher impact of earnings reflect unrealized losses incurred by the insurers' investment portfolios
9. Deficit 0-5% refers to percentage point widening in deficit level. Deficit level is the primary measure of budgetary performance

Financial institutions. COVID-19 has greatly affected our outlook on financial institutions for the year. From an asset quality perspective, the most affected banking systems in Asia-Pacific are China and India. We believe all systems will experience materially higher nonperforming assets in 2020. Key risks include worsening of the COVID-19 outbreak, property sector risks, high private sector indebtedness and high asset prices amid a protracted low interest rate environment. With risks on the downside we see the potential for further negative rating momentum across the region.

Insurance. As long-term investors, insurers face mounting challenges in their hunt for yield. Extreme equity market volatility will hurt valuations on investments and dent capital buffers, particularly for life insurers. The lower for longer interest rates will prop up reserving requirements. While guarantees on life policies have dropped over the years, legacy portfolios of high-guaranteed policies may return to pressure insurers' balance sheets. To cope, some insurers may increase credit appetite through allocation towards private debt and longer-duration assets. Forex volatility may affect Taiwan, Japan, and Korea players with big overseas investments. Overall, the worsening economic backdrop will undermine growth for the region's insurers.

Public finance. We expect most local and regional governments (LRGs) and public sector entities to post weaker financial performance driven by lower revenues. Among these, Chinese LRGs and Australian universities are highly exposed and will likely suffer immediate revenue declines owing to prolonged travel restrictions and containment measures. The level of fiscal stimulus remains a key risk. Chinese LRGs could respond to weakening economic growth with an aggressive increase in off-budget borrowing that would hit the long-term credit trend for the sector. We do however expect the ratings hit to be minimal given most entities still have sufficient buffers.

Sovereign. We took rating actions on sovereigns in Asia-Pacific as shown in table 3. (For further discussion, see "Credit FAQ: Sovereign Ratings And The Effects Of The COVID-19 Pandemic," April 17, 2020). Chart 8 shows the fiscal cost in percentage of GDP stimulus announced by various Asia-Pacific governments. Higher-rated governments in Asia-Pacific--including Australia, Japan, Hong Kong, and Singapore--have announced sizable support packages to cushion the shock of the COVID-19 pandemic on their economies. In comparison, sovereigns with lower ratings have responded with less spending. For some Asia-Pacific sovereigns--such as Pakistan, Sri Lanka, and India--fiscal or other constraints do not allow them to roll out large stimulus measures. This limits the short-term strains on fiscal support for the ratings. However, if the pandemic is prolonged, this could increase social dissatisfaction that could increase political instability. At the same time, the balance sheet damage suffered by businesses and households could weigh on the subsequent economic and fiscal recovery. Rating pressures on these sovereigns may still mount over time.

Table 3

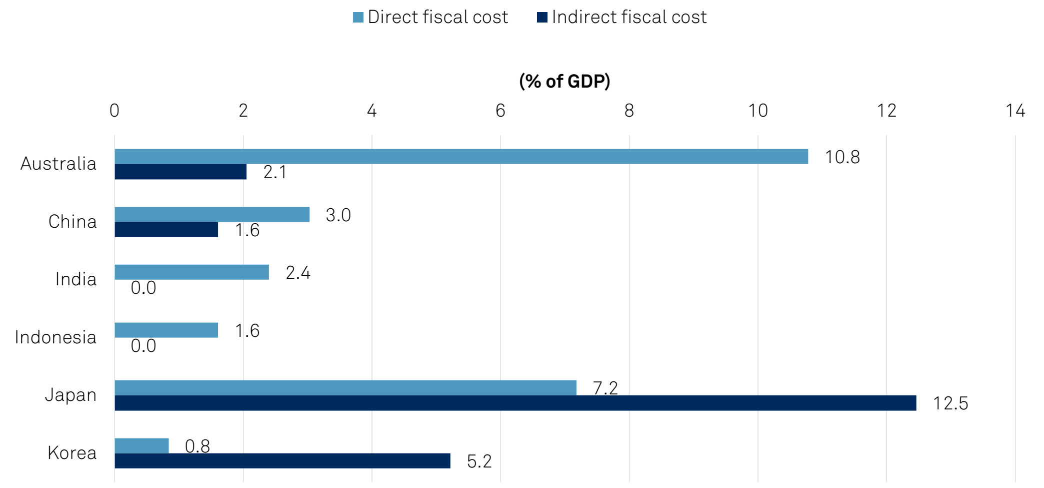
Asia-Pacific: Sovereign Rating Actions (Rating Or Outlook Change) Since The Beginning Of The COVID-19 Pandemic

	Current long-term foreign currency rating/outlook	Previous long-term foreign currency rating/outlook
Ratings or outlook Changes		
Australia	AAA/Negative	AAA/Stable
Thailand	BBB+/Stable	BBB+/Positive
Indonesia	BBB/Negative	BBB/Stable
Ratings or outlook Affirmed		
Japan	A+/Positive	A+/Positive
Korea	AA/Stable	AA/Stable
Malaysia	A-/Stable	A-/Stable

Ratings as of April 21, 2020.

Chart 8

Asia-Pacific Governments' Fiscal Response To COVID-19



Sources: IMF and S&P Global Ratings.

Structured Finance. China and Japan remain relatively stable in terms of collateral performance while Australia is expected to see weakening performance. The wage subsidies put in place by the Australian government, however, should moderate the strain on household budgets. An increase in unemployment remains a key risk that could lead to increasing arrears. Ratings below investment grade, less seasoned transactions, and those with larger exposures to self-employed borrowers will be more susceptible to downwards ratings strains.

We elaborate on individual industry sectors in table 4, selected corporate geographies in table 5 and banking systems in table 6.

Table 4

COVID-19 impact On Asia-Pacific Sectors

Sector	Impact*	Comment
Auto	High	Coronavirus will likely lead to very weak car sales in 2020/2021: U.S. (-15%-20%/10%-12%), China (-8%-10%/2%-4%), Europe (-15%-20%/9%-11%)
		Downward rating pressure could also increase due to very weak production activities. Factory operation has been broadly suspended in Europe and US because of lockdown policies. While we see gradual normalization at factories in China, supply chain disruption could also affect the operation given a remaining risk of a shortage of components, or disrupted logistics.
		High research and development expenditure will continue given that tighter environmental requirements could accelerate the financial burden for electrification and other new technologies.
		Severer global macro outlook could further weaken auto sales prospect in 2020
Building materials	Medium	Building materials producers recorded very weak first quarter results, as weak downstream construction activities led to significant drop in sales volume.
		Sales volume of key product types (e.g. cement) declined by 30% in first quarter. Price trended down as well, but remained within reasonable range.
		We expect the sector to recover starting from second quarter, as coronavirus outbreak comes under control and economic activities normalize. We also expect supportive stimulus measures to boost infrastructure spending in China in coming quarters.
		Lower GDP growth forecast could lead to weaker property and infrastructure construction, thus further pressurizing building materials demand and price across material types.
Capital goods	Medium	The significant pressure on earnings and profitability for overall APAC capital goods companies will continue, especially those having larger exposure to auto and commodity industry
		Credit metrics in the coming 12-18 months will deteriorate due to the shrinkage of economic activities and subdued capital spending on top of the increased leverage

Sector	Impact*	Comment
		Increasing concern on liquidity and refinancing risk for weaker companies, while investment grade companies are more resilient to the external environment because of stronger business base and good access to capital markets and sound bank relationship
		Narrowing rating headroom or strong downward pressure on ratings for issuers which are more exposed to weaker end–markets (auto, commodity, and /or which leverage increased
Chemicals	High	Following the deteriorating supply:demand balance in 2019, the pandemic has further pressured petrochemical spreads as we continue to see downside on the demand growth.
		With weakening spreads, we expect utilization rates for many chemical plants to be reduced over the next 1-2 quarters, which would squeeze profitability and cash flows for the companies.
		If the current pandemic were to prolong, we expect major investment plans by the chemical companies to be either cancelled or delayed, which were also evident during the previous downcycles.
		We expect downside pressure in chemical companies' earnings, which would deteriorate its credit quality for 2020, before showing signs of recovery in 2021. To combat this, we expect chemical companies to delay or cancel planned investments for future growth (i.e greenfield capacity expansion plans), and prioritize its cash-flow spendings.
Consumer products	Medium	Most consumer product companies in the region will likely see reduced operating cash flow for at least two quarters in 2020. Demand of discretionary goods will be severely pressured, while demand of consumer staples should be relatively stable. Retail sales of apparel and home appliances in China dropped by 30-35% in Jan-Feb, whereas sales of food and beverages still recorded positive single digit growth during the period.
		The outbreak has slowed consumer products production and distribution in China since end of Jan, with swift recovery in late February and March. The rest of the region will see higher level of disruptions from March onwards.
		Discretionary goods manufacturers with a weak balance sheet or imminent refinancing needs are most vulnerable. About 70% of our rated companies are consumer staples, among which 75% are Investment-grade companies.
		Discretionary goods manufacturers will see more rating pressure with compressed operating cash flow and higher leverage as wealth effect kicks in. Staple sector is largely stable being necessity to consumers during downturn.
Financial institutions	Medium	From an asset quality perspective, the most impacted banking systems in Asia-Pacific are China and India, noting that we believe all systems will experience materially higher nonperforming assets in 2020.
		Recent rating actions including on Australian, Thai and Indian banks have been negative. While many Asia-Pacific banks will exhibit resilience, negative rating momentum across the region is inevitable.
		An expectation of extraordinary government support for private sector systemically-important banks in a majority of banking systems across Asia Pacific – if ever required – affords a buffer.
		We currently estimate that COVID-19 and other market stresses will cause nonperforming assets and credit costs for full year 2020 for Asia-Pacific banking systems to increase by about US$1.4 trillion and US$440 billion.
Gaming	High	The gaming sector is significantly affected, given a sharp drop in visitation to casino properties, which will have a direct impact on revenue, EBITDA, cash flows.
		We have slashed our forecasts and have taken several negative rating actions: five entities on CreditWatch negative, three companies on negative outlooks.
		We expect a sharp decline in visitation in 1H, before slowing in 3Q and flattening out in 4Q. Meanwhile, we observed that capex and dividend payouts remain high. We will continue to monitor the financial discipline of gaming operators.
		Leverage has worsen as operators face near zero-revenue scenario on closures, with some operators tapping into RCF for liquidity. Any prolonged closure could spark downgrade on selected issuers as this could delay timing and magnitude of EBITDA and cashflow recovery.
Insurance	Medium	Volatile swings in capital markets will hurt investment assets' valuation and dent capital buffers, particularly that of life insurers.
		Lower-for-longer interest rates will prop up reserving requirements, while legacy policies of high-guaranteed investment returns will come back to haunt life insurers.
		The worsening economic backdrop will dent growth momentum for the region's insurers. Furthermore, social distancing limits life insurance agents' interaction with clients. Underwriting profits may improve for domestic non-life insurers, however momentarily, with reduced auto insurance claims as governments impose lock-down measures.
		Life insurance outlook is negative as thinning capital buffers weakens insurers' ability to withstand further investment market volatilities. New business contraction will intensify amid slower macro-economic outlook and persistent social distancing initiatives. Lapses and termination on insurance covers may hike given creeping unemployment.

Sector	Impact*	Comment
Metals and mining	High	Demand risk in focus: a prolonged reduction in Chinese industrial activity would negatively impact demand for key commodities, shifting market sentiment and adding volatility to commodity prices.
		A prolonged impact of COVID-19 could have significant ramifications on overall business and consumer sentiment, hurting global demand and commodity prices.
		Given that China accounts for over half of global demand for raw materials, the prospect of future stimulus measures in China and its effectiveness could play a meaningful role.
		Funding appetite will reduce, as major growth capital projects are shelved. Refinancing risk for high-yield issuers and emerging markets are likely to be pronounced.
Oil and gas	High	Oil price has a double whammy from both the demand side (COVID-19) and supply side (price war between Saudi Arabia and Russia primarily).
		We assume Brent oil price will recover to US$50/bbl level in 2021 from US$30/bbl this year based on our expectation that COVID-19 will be contained this year leading to demand recovery; and oil supply will reduce in response to the low oil price. The recent production cut agreement by OPEC+ may not be sufficient to offset the loss in oil demand depending on how long COVID-19 will drag on.
		Most of the rated oil companies in APAC are national oil companies with strong government support and bank financing capabilities that will enable them to weather through short-term oil price weakness. However if the current spot price (below $30/bbl) is to stay for longer, we will review the credits.
		A global recession implies a weaker oil demand, which in turn will lead to lower oil prices. This will have an immediate liquidity impact on weaker credits. The ratings of investment grade companies will be under pressure if the lower oil prices last for longer.
Public finance	Medium	Chinese local and regional governments (LRGs) and Australian universities are likely to suffer immediate revenue declines, driven by travel restrictions and containment measures.
		Other public entities generally keep sufficient buffers or the impact would come in delay at a smaller scale than what the sovereign can experience, but the buffers are narrowing as the recovery scenario becomes later and weaker.
		The level of fiscal stimulus remains a risk. With the bottom of the cycle not seen yet for most LRGs, LRGs could respond to weaker economic performance with more aggressive fiscal expansion, affecting longer-term credit trends in the LRG sector.
		Credit Impact: We expect most LRGs as well as public-sector entities to post weaker financial performance primarily driven by lower revenues. But ratings impact would remain minimal given most entities still keep sufficient buffers.
Real estate	Medium	The fact that the outbreak has become a global issue and mobility being dampened or restricted to varying degrees across APAC, property sales would be impacted in the short term. However, we believe that for the most part, home-buying demand has been deferred and has not disappeared. This means that a rebound could be expected, although this is highly contingent on when the outbreak would pass and consumer confidence can be restored.
		In recent weeks in China, rated developers' contracted sales are beginning to see some recovery. March sales are more or less back to the level a year ago for the industry, and are arguably better most people predicted. Most sales centers have reopened, with construction also resuming. But the sustainability of sales recovery is still uncertain at this point, given the impact of a global recession on the larger economy.
		Given developers, particularly in China, heavily rely on cash inflow from sales proceeds, weaker developers could face liquidity issues under these stressed operating conditions. For most, refinancing and maturity profiles have improved given the buoyant market conditions before the outbreak but prolonged market interruptions could spell more pressure for those with still large refinancing needs.
		Property development is a cyclical industry, and home demand will wane along with more job losses and recession. Therefore, although sales are holding up at the moment in some countries within APAC, the sustainability is still questionable. That said, policy response from various countries may serve to partly mitigate the negative impact. These include rate cut, liquidity easing, and also deferral of mortgage payments in some countries.
Real estate investment trusts	Medium	APAC's retail REITs will inevitably be more exposed to virus impact, given dwindling customer footfall and even some closure shopping malls from voluntary isolation amid infection fears. Some landlords start to offer rent concessions which will negatively affect their income, but the magnitude varies and it is hard to generalise. Office REITs are less exposed. There is no significant trend for landlords to offer rent concessions to tenants who adopt work-from-home.
		Some governments within APAC have also imposed moratorium on rental evictions, putting a dent in REITs' cash flows as they share the burden of tenants' reduced turnover. This may reduce early lease terminations for the REITs now, but could result in a portion of deferred rents from weaker tenants becoming bad debt after the moratorium.
		We expect negative rental reversions due to increasing vacancy and some early termination of leases. This impact is not immediate for REITs with staggered lease expiry profile and long lease term. That said, liquidity for most REIT are well supported by cash on hand and the availability of committed bank lines beyond one year. This is also because most property managers typically don't have substantial short-term debt relative to their capital structures.

Sector	Impact*	Comment
		We have slashed our forecasts and have taken several negative rating actions: Four retail REITs in Australia in two in China on negative outlook, one REIT in Australia and one in Hong Kong from positive to stable outlook. One retail REIT in Singapore was downgraded with a CreditWatch negative. One mall operator in Japan on negative outlook.
Retail	High	The retail sector credit risks have increased dramatically as the effort to contain COVID-19 results in store closures, changes to shopping habits and heightened risk of a broad based macro-economic decline
		We expect weaknesses for non-essential items such as clothing, footwear and personal accessory retailing will continue to intensify, while food retailing, (supermarkets, grocery stores, and liquor retailing) are expected to experience a strong lift in sales during periods of social distancing
		We expect the transition of consumers to e-commerce channels to accelerate. Retailers who have a robust IT infrastructure and digital presence will benefit. However this is predicated on minimal supply side disruptions impacting product availability and fulfillment of orders
		We believe the weaker economic outlook will result in a significant delay in recovery of some of our non-essential retailers' credit quality due to subdued consumer sentiment, resulting in more conservative consumer behaviors towards discretionary items and hence a slower than anticipated reversion to pre lockdown consumption levels.
Sovereign	Low	Most sovereign ratings can withstand a temporary deteriorations to economic and fiscal metrics resulting from the outbreak.
		Very strong stimulus policies to offset the economic impact of the outbreak could weaken fiscal and financial metrics, leading to future rating actions in some cases.
		A prolonged outbreak poses increased risks to fiscal metrics and could weaken support for political stability.
Structured finance	Medium	For consumer sectors, RMBS and ABS, impacts to employment and consumer confidence are key variables.
		China is starting to resume more normal levels of activities with no observed major performance change to date and Japan is expected to remain relatively stable in terms of collateral performance
		We expect collateral performance to weaken in coming months in Australia as widescale shutdowns take effect. Payment holidays being offered by lenders are currently supported by transaction level liquidity supports to transactions. Wage subsidies put in place by the Australian Government is expected to moderate the level of strain on household budgets.
		Arrears will increase for consumer sectors as unemployment increases. While ultimate arrears and losses arising from the impact of COVID-19 will be lower, the amount of loans where borrowers are unable to make existing scheduled loan repayments, will increase for Prime and non-conforming borrowers in Australia. The majority of RMBS tranches have excess credit support in addition to other structural features, which will support current ratings for many tranches. Ratings in the B and BB level, those transactions with larger exposures to self-employed borrowers, and less seasoned transactions will be more susceptible to ratings pressure.
Technology	Medium	What began as a supply chain disruption in China has now morphed into a global IT demand destruction. The industry is likely to experience a multi-quarter loss of demand as the virus, now a full blown pandemic, spreads unabated.
		Global IT spending could decline 3% year over year compared to previous forecast of 2-3% growth with a particular hit to smartphones (to -9% from +1~2%) and PCs (to -9% from -3~4%). This will lower semiconductor industry revenues by 6% in 2020 compared to our previous forecast for a 3% growth.
		Meaningful negative ratings actions are likely throughout 2020 as impact of revenue deferral or revenue destruction begins to emerge. We are paying particular attention to liquidity among non-investment grade issuers given the market dislocation and expect small hardware and highly leveraged software/services issuers to be the most impacted.
		We expect a medium credit impact on the technology sector with about 10% or less of rated issuers likely to experience downgrade actions for significant business and financial headwinds caused by COVID-19. This is because most rated APAC tech companies have relatively low leverage and limited refinancing needs, providing significant financial buffer to weather through this period of more distressed cash flow under our baseline assumptions.
Telecom	Low	We expect relatively limited direct impact on telecom operators given less volatile demands for telecom services, but intense competition and large capex continue to weigh on credit quality.
		We expect smartphone sales and new wireless subscription to decline, but lower marketing expenses should mitigate impacts to some extent. Given reduced travel, we expect wireless roaming revenues to decline although this doesn't account for major revenue portion.
		Reduced mobility and increasing working from home will boost data traffic and demand for broadband services. However, media business players could experience some decline in advertisement revenues.
Transportation cyclical	High	Transportation sector is one of the hardest hit. Disruptions to people flows and supply chains due to COVID-19 bring a slump in transportation demand in the region.

Sector	Impact*	Comment
		By segments, airlines and shipping are most exposed and likely to see significant passenger and freight volume drop until the health emergency gets contained and economic activity normalizes. Aircraft lessors can handle temporary disruptions, but in a scenario of prolonged air travel decline and possible failings of some airline companies, lessors could be exposed to a more significant second-order impact. Package express, postal services and logistics companies are also negatively affected but less exposed given their main focus on domestic markets.
		Fuel is a major cost item for most transportation companies, and the recent plunge in oil prices may cushion the earning impact, although with a substantial time lag for those companies that hedge. In addition, governments' aid packages may help alleviate the pressure on the airlines.
		Downward rating pressure could increase as economic recession further hits spending power and consumer confidence, which could limit the scale of future recovery. On the other hand, recovery timeline depends on government guidelines for re-opening travel. Liquidity remains the key credit driver for weaker transportation companies and the majority of airlines.
Transportation infrastructure	High	Global spread and curtailment of people movement due to COVID-19 has sharply intensified resulting in a big hit to air passenger traffic. As travel disruptions and restrictions (including domestic lockdowns) are becoming more pervasive; most rated airports (across Hong Kong, India, ANZ) will come under credit pressure with likely rating downgrade/negative outlook.
		Global supply chain disruptions, extended lockdowns, economic slowdown/recession result in negative impact on trade volume and port throughputs, with transshipment dependent ports hit more. Good financial cushion and diversified revenue source may cushion the impact and protect the ratings.
		Outside China, the impact on toll roads will be moderate-to-high, subject to asset locations, the mix of traffic (with passenger flow more vulnerable than freight transport), and the duration of the outbreak, though we expect roads to recover faster than airports. Impact on China's toll road sector is high as the moratorium of toll collection may reduce toll revenue in 2020 substantially; bank support to delay the debt repayment is the key to ease the liquidity stress of highly leveraged players.
		Sharp fall in economic growth well below trend will result in slower than expected recovery in cash flows; putting further downside pressure on ratings.
Utilities	Medium to low	Exposure to COVID risk is indirect. We expect modest impact on demand due to slowing economic conditions but offset by more residential usage. It varies across the region due to the nature of regulation, support from the government, and reforms. Customer support initiatives – such as tariff freeze or lower tariffs, deferral of collections - implemented by the governments will likely affect near term cash flows. We also expect an increase in bad debts.
		In China/ HK, we expect softer volumes to be offset by lower fuel costs, and lower debt cost through easing monetary policy and liquidity. In China, short term risk includes potential negative price intervention by governments.
		In South East Asia, grid constraints and demand will see capacity additions although it may slow down if capital access is constrained. Cautious and adequate funding prior to new projects is critical. Pacific utilities have limited exposure to COVID related risks, but lower interest rates will affect reset for regulated utilities. Some exposure to oil prices, but short term risk is manageable.

*The impact descriptor above (high, medium, low) is our qualitative view of the risk. It does not directly translate to risk of rating actions, which depend on a number of factors including initial headroom under a rating coupled with the expected length and severity of the pandemic.

Table 5

COVID-19 Effect On Corporate Sectors in Selected Asia-Pacific Geographies

Name and Contact	Geography	Impact*	Comment
Richard Timbs	Australia	Medium to high	In Australia, the COVID-19 pandemic and related government enforced social distancing measures have driven a significant number of ratings actions across a range of industries, including airlines, gaming, leisure, Retail REIT, building materials and oil and gas. In particular, lower rated entities in industries such as airlines and leisure have been particularly hard hit by the immediate collapse in demand and revenues, which have led to significant cash losses and liquidity erosion. Currently about 30% of corporate ratings in Australia are on negative outlook or credit watch, indicating potential further downside risks to credit quality. COVID-19 driven rating changes have so far been confined to sub investment grade issuers. For investment grade issuers, where liquidity and financial flexibility is typically much stronger, rating actions to date have been limited to negative outlook changes or CreditWatch placements.
Chang Li	China	Medium to high	We see rating pressure in China corporate sector, due to weak economic demand and refinancing risk. Production activity has improved in March and April, but consumption and manufacturing investment remain weak. Slump in demand continue to have negative impact on revenue and operating cash flows. Low rated corporates are still venerable to refinancing risk given the large amount of maturity in next two years. And many China issuers are relying on short-term financing which is weakening their capital structure.

Edward Chan	Hong Kong	Medium	Retail, food and beverage, hospitality and transportation are among the hardest hit sectors in Hong Kong as tourist arrival drops and extended social distancing measures are in place. The months of social unrest just before the outbreak has already weakened the business operating environment while unemployment numbers are progressively rising. However, impact to liquidity and general credit standing of large Hong Kong corporates are limited given ample cash accrued and experience of weathering through various health and financial crises. Moreover, many have real estate as a major profit contributor, where structural undersupply and low interest rates continue to support earnings from residential and office properties, despite a drag from the retail segment.
Neel Gopalakrishnan	India	Medium to high	We have had several negative actions in the sub-investment grade rated space due to a weak earnings outlook. Investment grade rated companies have been more resilient. A prolonged slowdown could lead to further negative actions in some cases, as we now expect meaningful earnings recovery in fiscal 2022 in our base case. Refinancing risk is manageable, at least for the rest of this year. But bond maturities in mid-2021 could drive rating actions for a couple of credits.
Xavier Jean	Indonesia	High	The Indonesian corporate sector is facing the COVID-19 situation in a situation of weakness, following years of leverage growth. More than one-third of rated companies in Indonesia are currently on negative outlook, with nearly half of the private companies we rate with ratings of 'B-' and below, the highest since the Asian financial crisis. Refinancing risk is a growing focal point for the sector as weaker investor sentiment and the currency depreciation are likely to complicate access to funding for smaller Indonesian issuers amid the maturity wall coming in 2021 and 2022. The consumer sentiment, already subdued coming into the COVID-19 crisis, is likely to weaken much further, with significant operating challenges in the automobile, retailing, commodities, hospitality and transportation sectors. The telecom – and consumer sentiment sector to a lesser extent – are likely to be somewhat more resilient. The weaker operating environment is also affecting the State-Owned sector, and exacerbates often highly leveraged balance sheets, though access to funding by state-owned companies does not seem as impaired as for the private sector.
Katsuyuki Nakai	Japan	Medium	We see heightened rating pressure in broad sectors in Japan. Downward pressure is particularly strong in auto, transportation infrastructure and retail companies in our portfolio. Given that majority of rated entities are in investment grade category, Japanese corporates generally have high resilience to severe business circumstances. In addition, most companies have stable liquidity, supported by solid relationship with lender banks. Therefore, we believe the risk of steep rating downgrade is relatively low.
Xavier Jean	Malaysia	Medium	The rated corporate sector in Malaysia is predominantly investment grade, with moderate leverage or operations in sectors such as telecoms which are proving somewhat more resilient to the current COID-19 situation. These companies are also proving fairly resilient to the recent depreciation of the ringgit. Negative rating actions in Malaysia have been concentrated to the commodity sectors, notably the metals, oil and gas and associated services, given declining commodity prices amid elevated capital spending or investment in working capital.
Xavier Jean	Singapore	Medium to high	The Singaporean corporate sector is among the most leveraged in the region, following years of significant capital spending and dividend payments. With our estimate of a median debt-to-EBITDA exceeding 5x for listed companies, we believe the sector is facing the COVID-19 outbreak and the related tough operating conditions with much weakened balance sheets, reduced liquidity and sizable debt piles. The closure of non-essential shops the stringent measures imposed by the Singapore government to curb COVID-19 transmission will likely continue to affect the credit quality of the real estate sector in general, with cash flows at some of the rated REITS potentially declining by 20%-40% amid rental rebates, deferments or cancellations. At the same time, lower commodity prices and slower global trade will continue to weigh on commodity or transportation and logistics-related sectors such as marine and oilfield services and capital goods.
JunHong Park	South Korea	Medium	Auto, refining/chemical, steel, retail and airline companies are more affected in Korea. Manufacturing activities are relatively normal without major shutdowns, but the impact from reduced demand for major export products is expected to be greater. We see no major liquidity issue for most investment grade companies given relatively large cash holdings and fairly good domestic capital market standing.
Raymond Hsu	Taiwan	Medium	COVID-19 has a medium impact on Taiwan corporate's revenue and cash flow with a particular hit on the transportation and commodity sectors. A shock in external demand will also materially hurt Taiwan's major export sectors such as electronics manufacturers. Despite a darkening outlook, rating downgrades remain scarce as most companies has the financial buffer to weather through this period of distressed cash flows under our baseline assumptions, given their generally significant leverage buffer for the current rating levels and flexibility on cutting capital spending to curb cash outflows. Government support on rated transportation companies and generally lower liquidity risk with a supportive banking environment also alleviate short-term credit risk. Nonetheless, downgrades could grow if a prolonged COVID-19 pandemic materially flatten the long-term global growth trajectory than we currently assume.

Xavier Jean	Thailand	Medium to high	The rated corporate sector in Thailand has been somewhat more resilient to the COVID-19 outbreak because it is concentrated to the larger, well diversified, and more financially prudent companies or those in sectors such as telecoms which are more resilient. Thai companies have, however, been among the most active companies in the region in undertaking large-scale, multi-billion dollar debt-funded acquisitions. This debt-funded expansion left a number of prominent conglomerate much more leveraged now than at the beginning of the decade amid weaker operating performance. Given the high contribution of tourism to Thailand's economy, the hospitality and retailing will be among the most affected sectors over the next few months. Commodity and energy producers will continue to face significant operating headwinds in the next few quarters amid declining oil and gas prices and chemical spreads – an important sector to Thailand's economic fabric. The balance sheet quality of on some of the large refiners and chemical producers has deteriorated significantly over the past six months from a combination of weaker profits and steady capital spending, though our expectation of parent or government support has left credit ratings on these companies mostly unchanged.

*The impact descriptor above (high, medium, low) is our qualitative view of the risk. It does not directly translate to risk of rating actions, which depend on a number of factors including initial headroom under a rating coupled with the expected length and severity of the epidemic.

Table 6

COVID-19 impact On Banking Sector in Asia-Pacific Geographies

Name and Contact	Geography	Impact*	Comment
Sharad Jain	Australia	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$27 billion (an additional 1.5% versus gross loans) and credit losses of US$12 billion (an additional 65 basis points (bps) versus gross loans). We expect operating income to contract due to low interest rates, a small drop in loan balances and reduced fee generating activities. Nevertheless, in our base case, we expect that earnings of most banks in the next two years will be sufficient to absorb the increase in credit losses. In our view, strong and timely monetary support by the Australian authorities has alleviated funding and liquidity risks to Australian banks from the global financial market dislocation.
Harry Hu	China	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$1.155 trillion (an additional 4.8% versus gross loans) and credit losses of US$329 billion (an additional 144 basis points versus gross loans). For 2020, the impact on the system's capital adequacy would be about 97 basis points before taking into account the loan-loss provision buffer that the sector built over previous years. We expect the impact on the largest Chinese banks to be manageable, while smaller banks with aggressive risk appetite or high geographic concentration in heavily hit regions could see a material squeeze on their asset quality, performance, and capitalization.
Shinoy Varghese	Hong Kong	Medium	We believe COVID-19 and related market stresses could cause an increase to NPAs of US$11 billion (an additional 0.9% versus gross loans) and credit losses of US$5 billion (an additional 35 basis points versus gross loans). This partially reflects changes in the forward-looking economic variables, will drive up provision costs under IFRS 9. Conservative underwriting and supportive government policies--including stimulus to corporate and the retail sector--should cushion the economy and the banking sector
Deepali Seth Chhabria	India	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$33 billion (an additional 2.6% versus gross loans) and credit losses of US$24 billion (an additional 160 basis points versus gross loans). India's complete lockdown with forced closures of non-essential businesses and declining demand are hurting the economy. We have revised the outlooks of a few Indian banks to negative as the downside risk has increased and the banking system is not entering the down cycle from a position of strength. The very high likelihood of Government support somewhat cushions the downside risk for Government owned banks.
Ivan Tan	Indonesia	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$6 billion (an additional 1.5% versus gross loans) and credit losses of US$2 billion (an additional 105 basis points versus gross loans). The outbreak is hitting tourism, transport, trade, manufacturing, and investment in Indonesia. The recent sharp rupiah depreciation has compounded risks. That said, Indonesian banks' capital and provisioning buffers have grown over the years and now offer a sizable capital cushion. The banks' Tier-1 capital ratio of 21.9% and capital adequacy ratio of 23.4%, as of December 2019, are among the highest in the region.
Ryoji Yoshizawa	Japan	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$118 billion (an additional 1.5% versus gross loans) and credit losses of US$40 billion (an additional 55 basis points versus gross loans). The increase in credit cost will add pressure to bank's already low profitability, but we expect majority of the banks we rate to be able to absorb the negative effects. The government has pledged to provide support on ailing SMEs and large corporation directly via their GRE arms, which would also become a mitigation factor. In addition, central banks' liquidity support has helped lenders weather tightening funding conditions, especially in foreign currencies.

Nancy Duan	Malaysia	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$3 billion (an additional 0.9% versus gross loans) and credit losses of US$1 billion (an additional 35 basis points versus gross loans). We expect, extensive moratorium program and temporary regulatory relaxation will help to contain banks' reported asset quality figures and spread out the credit losses to 2021 noting their strong capital buffers and sound underwriting skills. The continued resilience of domestic employment conditions is critical to our current view. Malaysian banks' loan books are greatly exposed to domestic household sector (~60%).
Lisa Barrett	New Zealand	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$5 billion (an additional 1.5% versus gross loans) and credit losses of US$3 billion (an additional 93 basis points versus gross loans). Even though credit losses may escalate, New Zealand banks' profitability should remain adequate to absorb increased credit losses, notwithstanding headwinds from low interest rates. The support measures announced by the central bank should alleviate any immediate funding and liquidity risks for the banks, in our view. We also consider that the four major banks in New Zealand are still likely to receive timely financial support from their Australian parents, if needed.
Nikita Anand	Philippines	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$3 billion (an additional 1.8% versus gross loans) and credit losses of US$2 billion (an additional 55 basis points versus gross loans). We expect trade, tourism, private-sector investments and consumption in the Philippines to get affected and this will drag on banks' lending business. We believe Philippine banks' good capital buffers, with an average tier-1 capital adequacy ratio of about 14%, will help them manage the rising risks. Stimulus packages and liquidity measures from the government and central bank should cushion the impact to affected borrowers.
Ivan Tan	Singapore	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$10 billion (an additional 1.5% versus gross loans) and credit losses of US$4 billion (an additional 55 basis points versus gross loans). As a trade-dependent economy and a major aviation hub, Singapore is likely to be hit hard by the COVID-19 outbreak. The forecasted credit cost is more than triple the historical norm due to widespread business disruptions, mirroring past recessions such as the Asia financial crisis. This credit cost is, however, increasing from a low base and we believe this could be largely covered by profits, leaving the bank's capital position intact.
Daehyun Kim	South Korea	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$20 billion (an additional 0.9% versus gross loans) and credit losses of US$9 billion (an additional 40 basis points versus gross loans). Nevertheless, we expect the Korean banks to maintain adequate capital buffers. The banks' moderate growth will likely support the banks' current capitalization despite profit weakening. The banks have tightened underwriting standards, built in additional provisioning and reduced exposure to risky corporate sectors such as shipbuilding, shipping and real estate project finance loans over the past several years.
Eunice Fan	Taiwan	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$9 billion (an additional 0.9% versus gross loans) and credit losses of US$5 billion (an additional 47 basis points versus gross loans). Nonetheless, we currently believe the banking sector is sufficiently capitalized to absorb a rise in credit costs and weakening profitability. Abundant liquidity provides an additional buffer. Moreover, we believe the government's several measures--fiscal stimulus, monetary easing, soft loans, credit guarantees, tax reduction and compensation to virus-hit businesses—will support borrowers' debt servicing capacity.
Deepali Seth Chhabria	Thailand	Medium	We currently estimate that COVID-19 and related market stresses could cause an increase to NPAs of US$8 billion (an additional 1.5% versus gross loans) and credit losses of US$3 billion (an additional 69 basis points versus gross loans). That said, Thai banks have good capital levels and high provision coverage ratios, around 150%. Banks may partially dip into their provisions. Thailand's household leverage, at 79%, is one of the highest among emerging markets. If the economic weakness is accompanied by job losses in tourism and general commercial sectors, it could lead to higher delinquencies and severely hit asset quality. The credit profiles of banks with limited buffer could come under strain.
Amit Pandey	Vietnam	Medium	In 2020, COVID-19 pandemic will affect the Vietnam's relatively open economy through tourism, export sectors (US & China are key export markets and exports/GDP is over 100%) and weakening domestic demand due to social distancing measures. We expect a reversal in the improving trend of asset quality for the banking system. We estimate that credit cost could rise up to 100bps or twice the levels experienced in last few years. The loan growth has been brisk in the recent years and these portfolios are yet to fully season, information on borrowers is slim, system has high leverage and macro-prudential norms are limited. We expect bank's capitalization to weaken due to increase in credit cost, and note structurally low profitability compared to regional peers and thin capital buffers.

*The impact descriptor above (high, medium, low) is our qualitative view of the risk. It does not directly translate to risk of rating actions, which depend on a number of factors including initial headroom under a rating coupled with the expected length and severity of the epidemic. NPA: Nonperforming assets. Credit Losses: Charge against profit and loss for bad and doubtful debts. Bpts: Basis points. NPAs and credit losses are current estimates for 2020 based on S&PG economic forecasts published Apr. 17, 2020, and other inputs. Estimates are subject to change dependent on COVID-19 pathway and other market stresses.

Related Research

- COVID-19: Coronavirus- And Oil Price-Related Public Rating Actions On Corporations, Sovereigns, And Project Finance To Date, April 20, 2020
- Economic Research: Jobs And The Climb Back From COVID-19, Apr 20, 2020.
- Credit FAQ: Sovereign Ratings And The Effects Of The COVID-19 Pandemic," Apr 17, 2020
- Up Next: The Complicated Transition From COVID-19 Lockdown, April 16, 2020.
- Credit Conditions Asia-Pacific: As Bad As 1997, March 30, 2020

This report does not constitute a rating action.

Appendix 1: Economic Data And Forecast Summaries

Table A1

Australia – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	1.8	-4.0	5.7	3.1	2.6
CPI inflation %	1.6	0.5	1.0	1.5	1.8
Unemployment rate %	5.2	7.5	6.8	6.1	5.4
Policy rate % (EOP)	0.75	0.25	0.25	0.50	1.00
Exchange rate (US$ per A$)	0.70	0.65	0.67	0.69	0.70

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A2

China – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	6.1	1.2	7.4	4.7	5.3
CPI inflation %	2.9	3.2	1.2	1.4	1.6
Unemployment rate %	3.6	4.9	4.5	4.1	3.6
Exchange rate (per US$)	6.99	7.11	7.15	7.19	7.23

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A3

Hong Kong – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	-1.2	-3.9	4.8	2.6	2.4
CPI inflation %	2.9	-0.4	1	1.4	1.6
Unemployment rate %	3	4.5	4	3.7	3.5
Exchange rate (per US$)	7.79	7.8	7.8	7.8	7.8

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A5

India – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	5.02	1.8	7.5	6.5	6.8
CPI inflation %	4.7	4.4	4.5	4.4	4.4
Policy rate % (EOP)	4.40	3.50	5.00	5.00	5.00
Exchange rate (per US$)	74.4	73	74.5	76.5	78.5

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. 2019 figure is an estimate for India.
For India, 2019 = FY 2019 / 20, 2020 = FY 2020 / 21, 2021 = FY 2021 / 22, 2022 = FY 2022 / 23, 2023 = FY 2023 / 24.

Table A6

Indonesia – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	5	1.8	6.3	5.6	5.2
CPI inflation %	2.8	2.8	3.3	3.2	3.2
Unemployment rate %	5.2	6.2	5.6	5.5	5.3
Policy rate % (EOP)	5.00	4.25	4.50	4.50	4.50
Exchange rate (per US$)	13883	15300	15100	14900	14700

Sources: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A7

Japan – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	0.8	-3.6	3	0.9	0.8
CPI inflation %	0.5	-0.8	0.1	0.6	1
Unemployment rate %	2.3	3.3	3	2.7	2.4
Policy rate % (EOP)	-0.07	-0.07	-0.07	-0.07	-0.07
Exchange rate (per US$)	109.12	106	105	103	101

Sources: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A8

Malaysia – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	4.3	-1.1	7.6	5.1	4.7
CPI Inflation %	0.7	1.1	1.6	1.7	2
Unemployment rate %	3.3	4.3	3.8	3.7	3.5
Policy rate % (EOP)	3.00	1.75	2.00	2.25	2.50
Exchange rate (per US$)	4.09	4.28	4.24	4.2	4.16

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A9

New Zealand – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	2.2	-5	6	3.4	3
CPI Inflation %	1.6	0.4	1	1.7	1.9
Unemployment rate %	4.1	6.2	5.6	5.2	4.9
Policy rate % (EOP)	1.00	0.25	0.25	0.75	1.25
Exchange rate (US$ per NZD)	0.67	0.62	0.64	0.65	0.66

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A10

Philippines – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f

Real GDP %	5.9	-0.2	9	6.7	7
CPI inflation %	2.5	1	2.2	2.5	2.7
Unemployment rate %	5.1	6.8	5.5	5.4	5.4
Policy rate % (EOP)	4.00	2.00	2.50	3.00	3.00
Exchange rate (per US$)	50.74	53	52.33	51.67	51

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A11

Singapore – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	0.7	-3.8	6.2	2.5	2.5
CPI inflation %	0.6	-0.5	0.8	1.4	1.8
Unemployment rate %	2.3	3.2	2.7	2.5	2.4
Exchange rate (per US$)	1.35	1.4	1.39	1.37	1.35

Sources: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A12

South Korea – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	2	-1.5	5	3.9	2.5
CPI inflation %	0.4	-0.5	0.2	0.5	1
Unemployment rate %	3.8	5.2	4.7	4.3	3.9
Policy rate % (EOP)	1.25	0.50	0.50	0.75	1.00
Exchange rate (per US$)	1157.8	1200	1150	1100	1100

Source: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A13

Taiwan – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	2.7	-1.2	4	2.6	2.4
CPI inflation %	0.6	-0.5	0	0.5	1
Unemployment rate %	3.7	4.4	4.2	4	3.8
Policy rate % (EOP)	1.38	0.88	1.13	1.13	1.13
Exchange rate (per US$)	30.11	30	29.7	29.4	29.2

Sources: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A14

Thailand – S&P Global Ratings Economic Outlook

	2019	2020f	2021f	2022f	2023f
Real GDP %	2.4	-4.2	6.2	4.2	3.7
CPI inflation %	0.7	-0.5	0	1.2	1.5
Unemployment rate %	1	1.9	1.7	1.5	1.4
Policy rate % (EOP)	1.25	0.50	0.75	0.75	0.75

Exchange rate (per US$)	30.15	32.5	32	31.7	31.2

Sources: Oxford Economics; f--S&P Global Ratings forecast; End of Period - Q4 values. Unemployment rate shown is the period average.

Table A15

Regional – S&P Global Ratings Economic Outlook

Real GDP (%)	2019	2020f	2021f	2022f	2023f
Asia Pacific	4.7	0.3	6.7	4.6	4.8
Eurozone	1.2	(7.3)	5.6	3.7	1.9
Latin America 5	0.6	(5.3)	3.2	2.7	2.6
U.S.	2.3	(5.2)	6.2	2.5	2.4

Asia Pac 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.

Appendix 2: List Of Analytical Contacts

List of Contacts in Table 4

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