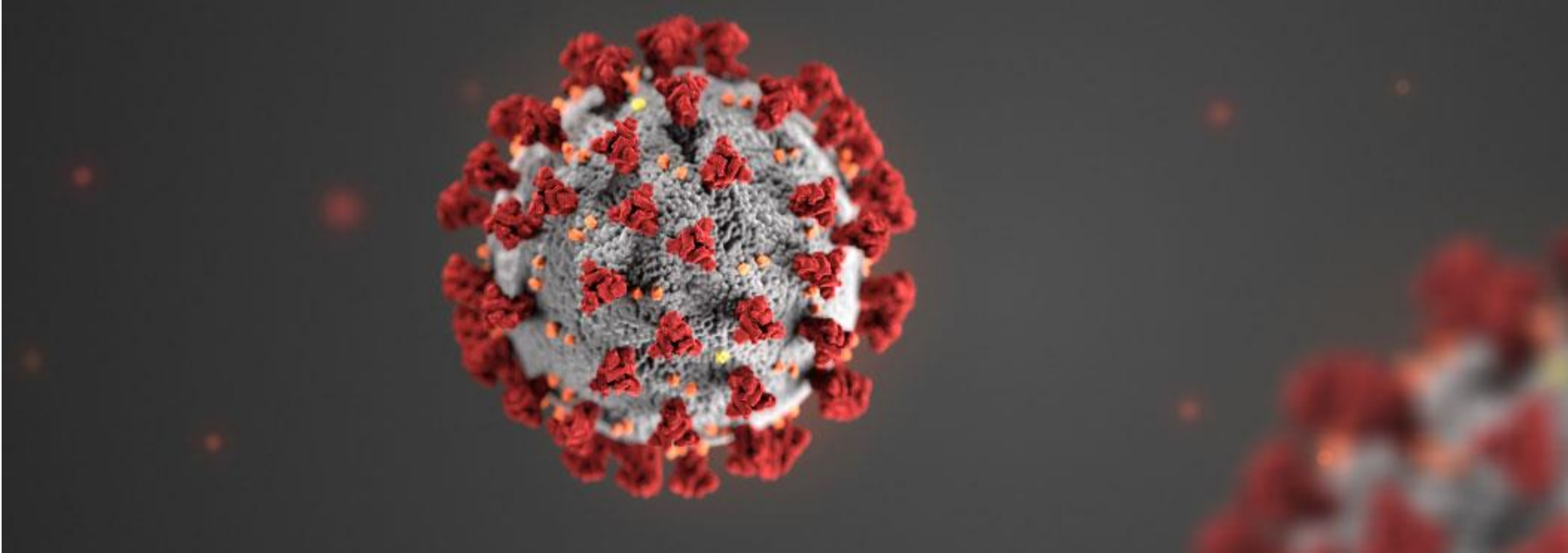


Complicated Transition From COVID-19 Lockdown

S&P Global Economics

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Global Economics | **What We Are Learning**

Sudden-stop economics

- Lockdowns often necessary to contain COVID
- Economic cost is large (initial 1 month \approx 3% of full-year GDP in Asia-Pacific)

Who gets hurt and how policymakers will react

- Services and SMEs especially hard hit. Jobs vulnerable.
- Massive, wide-ranging policy easing. Creative monetary policy. Worry about side-effects later.

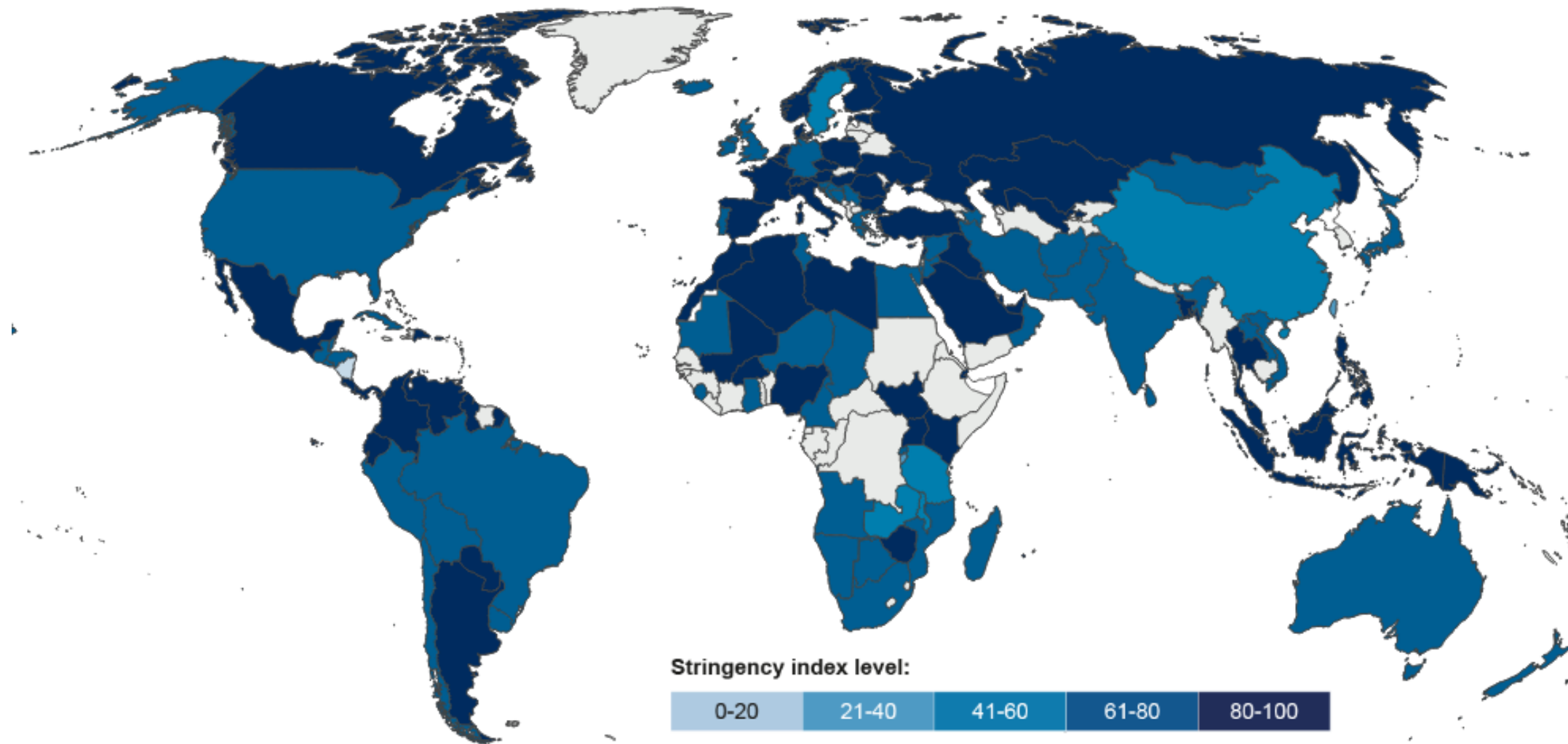
After lockdown comes transition

- Countries will move randomly on continuum between lockdown and business-as-usual
- Some activities will be depressed. Recovery will be gradual

What we do not yet know is how the world will change

- Less travel, more healthcare. Fewer casinos, more clinics
- But we will only learn about the long-run effects on the economy gradually over time
- This is important for the timing of stimulus withdrawal

Global Economics | From Lockdown To Transition



Oxford COVID-19 Government Response Tracker collects publicly available information on 13 indicators of government response (S1–S13). Nine of the indicators (S1–S7, S12 and S13) take policies such as school closures, travel bans, etc, and are recorded on an ordinal scale; the others (S8–S11) are financial indicators such as fiscal or monetary measures.

The tracker aggregates the policy scores (not the financial scores) into a common 'Stringency Index' (0-100). Note that this index simply records the number and strictness of government policies, and should not be interpreted as 'scoring' the appropriateness or effectiveness of a country's response. A higher position in the Stringency Index does not necessarily mean that a country's response is 'better' than others lower on the index.

Source: Hale, Thomas, Sam Webster, Anna Petherick, Toby Phillips, and Beatriz Kira (2020). Oxford COVID-19 Government Response Tracker, Blavatnik School of Government.

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Global Economics | Assumptions and Forecasts

Difficult transition through mid-2021, policies are a bridge to the recovery

- We cannot and do not predict the evolution of the pandemic, but we do need assumptions to have any sort of view about the economy. Uncertainty, of course, remains high.
- We assume first-wave containment by end-Q2, complicated transition, medical resolution mid-2021. Policies are a bridge to the (eventual) recovery

Global Economic Growth Forecasts (%)						
	2019	2020	2021	Change from Dec 2019:		Trend
				2020	2021	
Australia	1.8	-4.0	5.7	-6.2	3.4	2.5 - 2.7
China	6.1	1.2	7.4	-4.5	1.8	5.5 - 5.7
India	5.0	1.8	7.5	-4.7	0.5	6.5 - 7.0
Indonesia	5.0	1.8	6.3	-3.3	1.2	5.0 - 5.2
Japan	0.8	-3.6	3.0	-3.7	2.2	0.7 - 0.9
Korea	2.0	-1.5	5.0	-3.6	2.7	2.5 - 2.7
Asia-Pacific	4.7	0.3	6.7	-4.5	1.9	...
U.S.	2.3	-5.2	6.2	-7.5	4.3	...
Eurozone	1.2	-7.3	5.6	-8.5	4.6	...
World	2.9	-2.3	5.8	-5.5	2.5	...

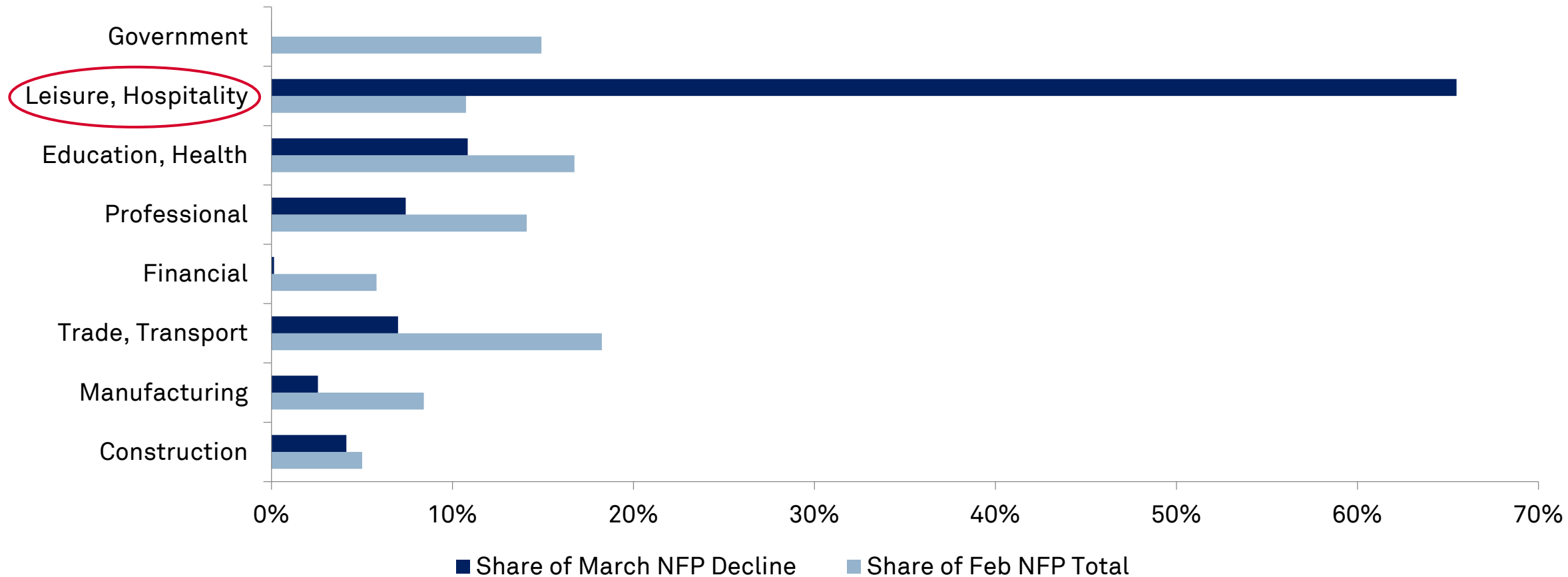
Note: Actual for 2019. Fiscal year for India. Trend refers to the S&P Global Economics' pre-COVID estimate of the current growth rate achievable when the economy is at full capacity and inflation is stable at the target rate. Asia-Pacific and World are PPP GDP-weighted averages.

Source: S&P Global Economics.

Global Economics | Service Sector Stress

An early read from timely U.S. labor market data

Early Job Losses Concentrated In Some Parts Of The Service Sector
Share of job losses in recent non-farm payroll reports



Source: BLS, S&P Global Economics.

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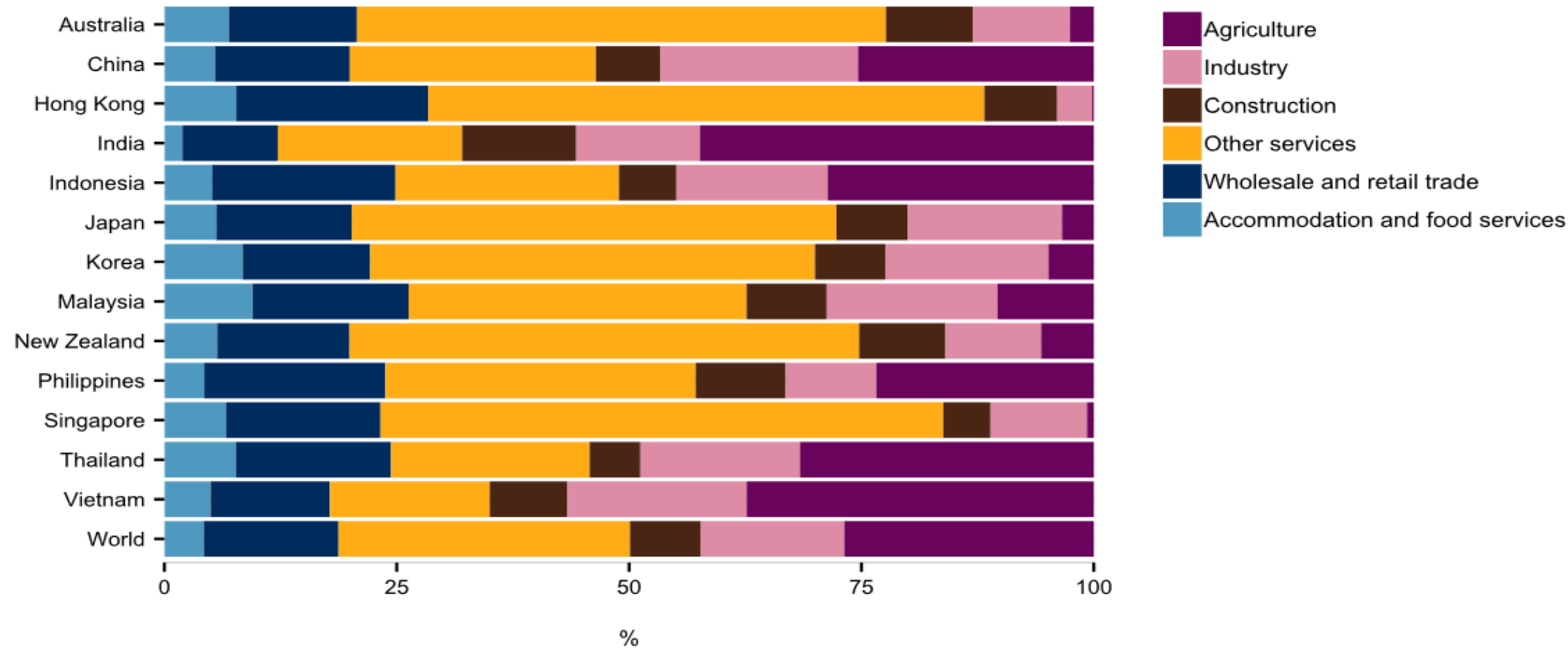
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Asia-Pacific Economics | Service Sector Stress

Asia is the world's factory but most workers are in the service sector

The Service Sector Is The Largest Employer Across Asia-Pacific

Share of total employment by sector in 2019



Source: International Labor Organization and S&P Global Economics.
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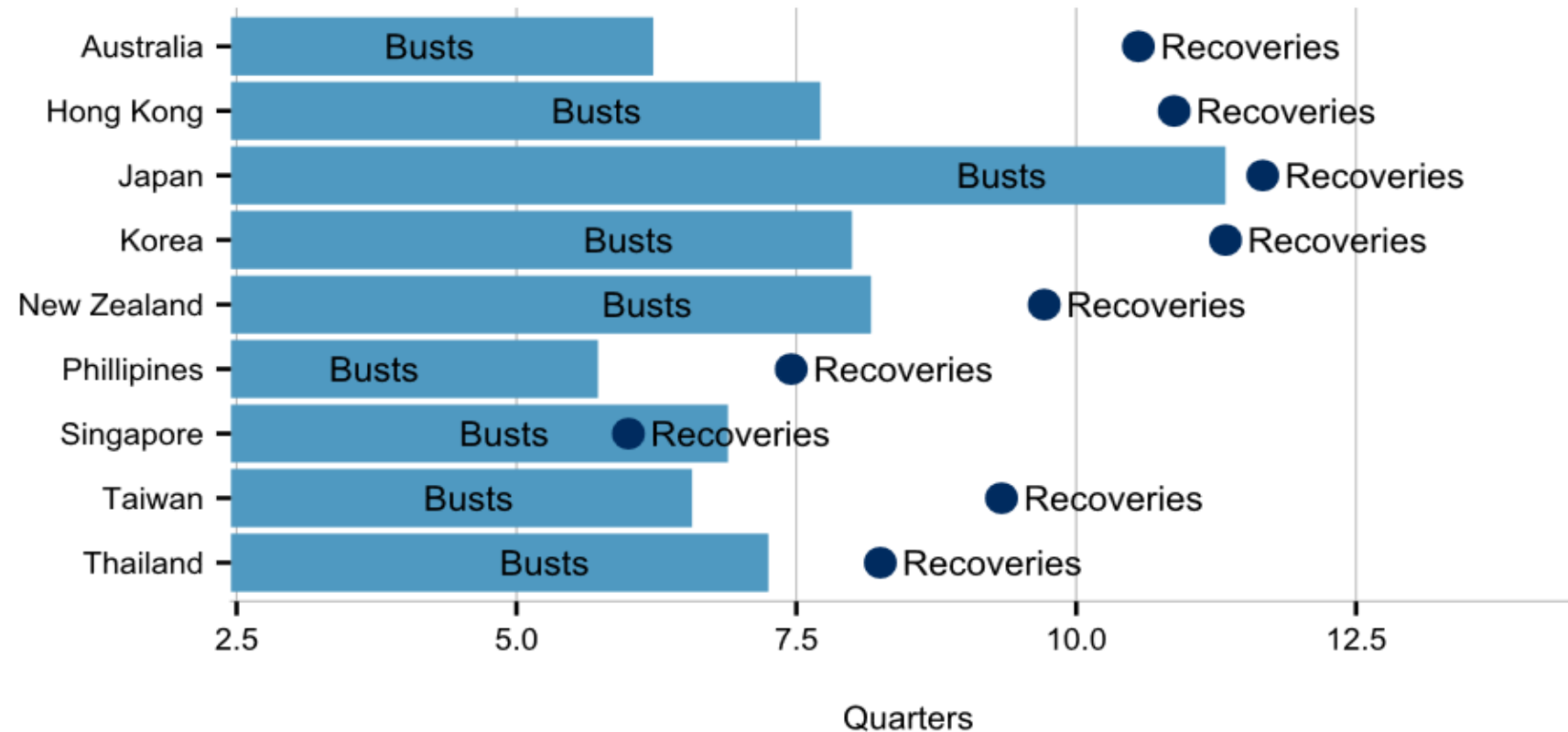
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Asia-Pacific Economics | Jobs Asymmetry

Jobs are easily lost but hard to win back

Jobs Busts Are Short And Recoveries Are Long

Average duration of up and down cycles in the unemployment rate since 1980



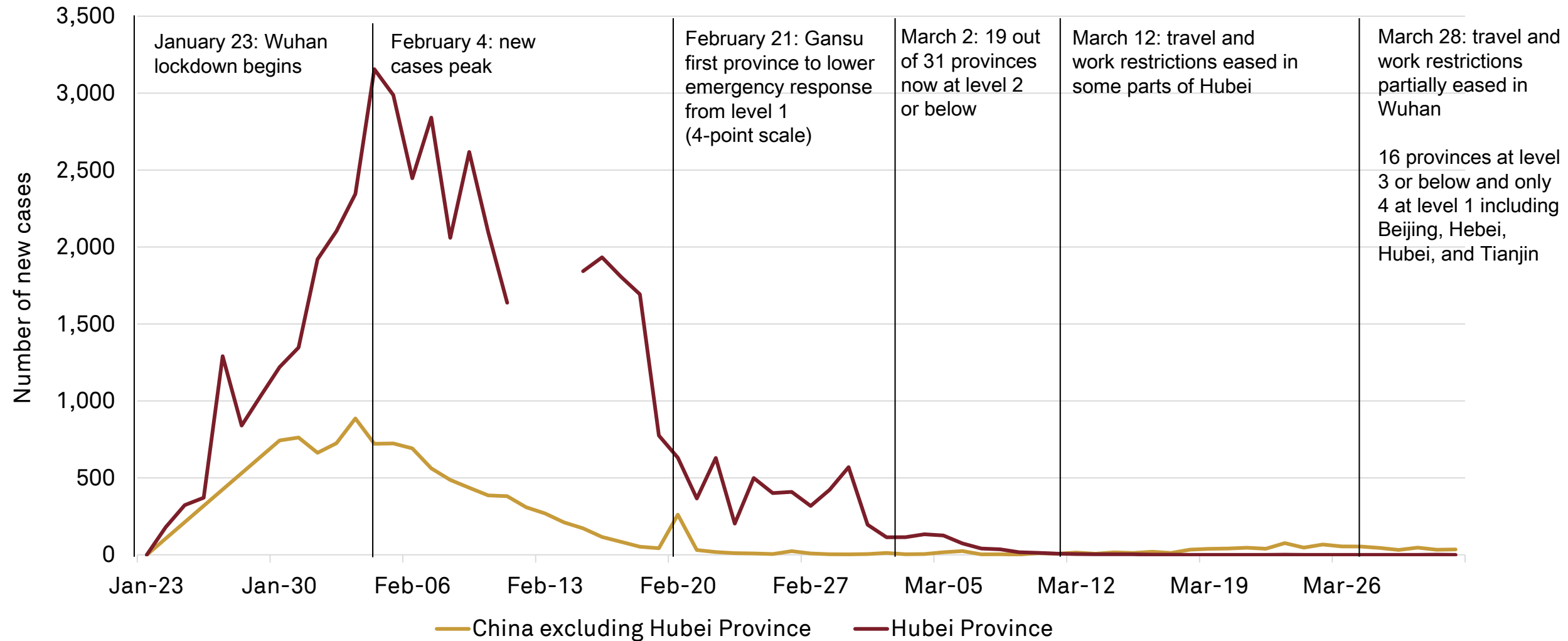
Note: Cycles identified by the Bry-Boschan algorithm using data from 1980 where available.

Source: CEIC and S&P Global Economics.

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Asia-Pacific Economics | China's Slow Return

China's Approach Triggered An Economic Sudden-Stop But Contained The First Wave Of Infections



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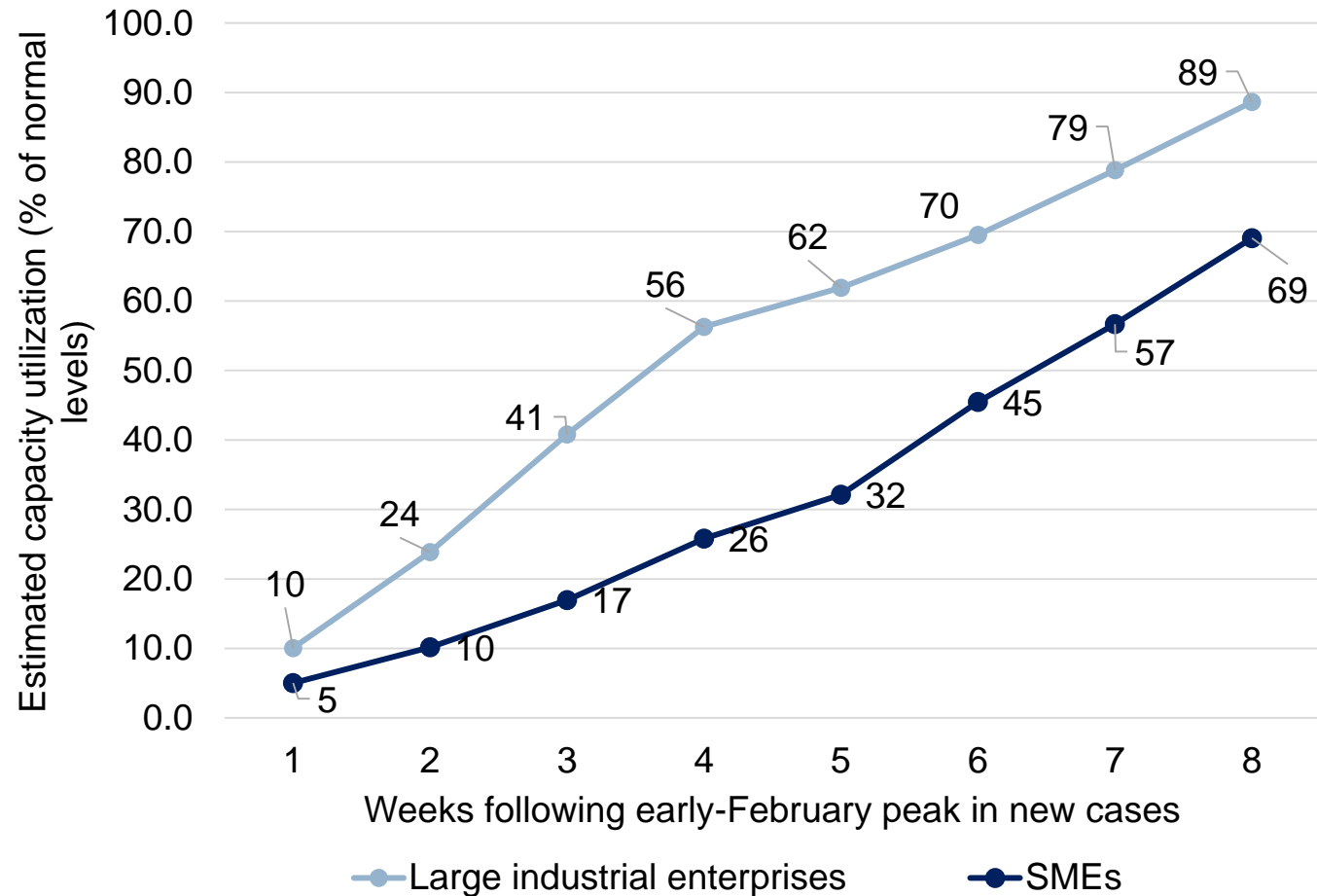
Note: Days during which measurement methodology changed have been excluded to show the underlying trend.

Source: National Health Commission of China and S&P Global Economics.

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Asia-Pacific Economics | China's Slow Return

Large Industrial Firms Recover Quicker Than SMEs

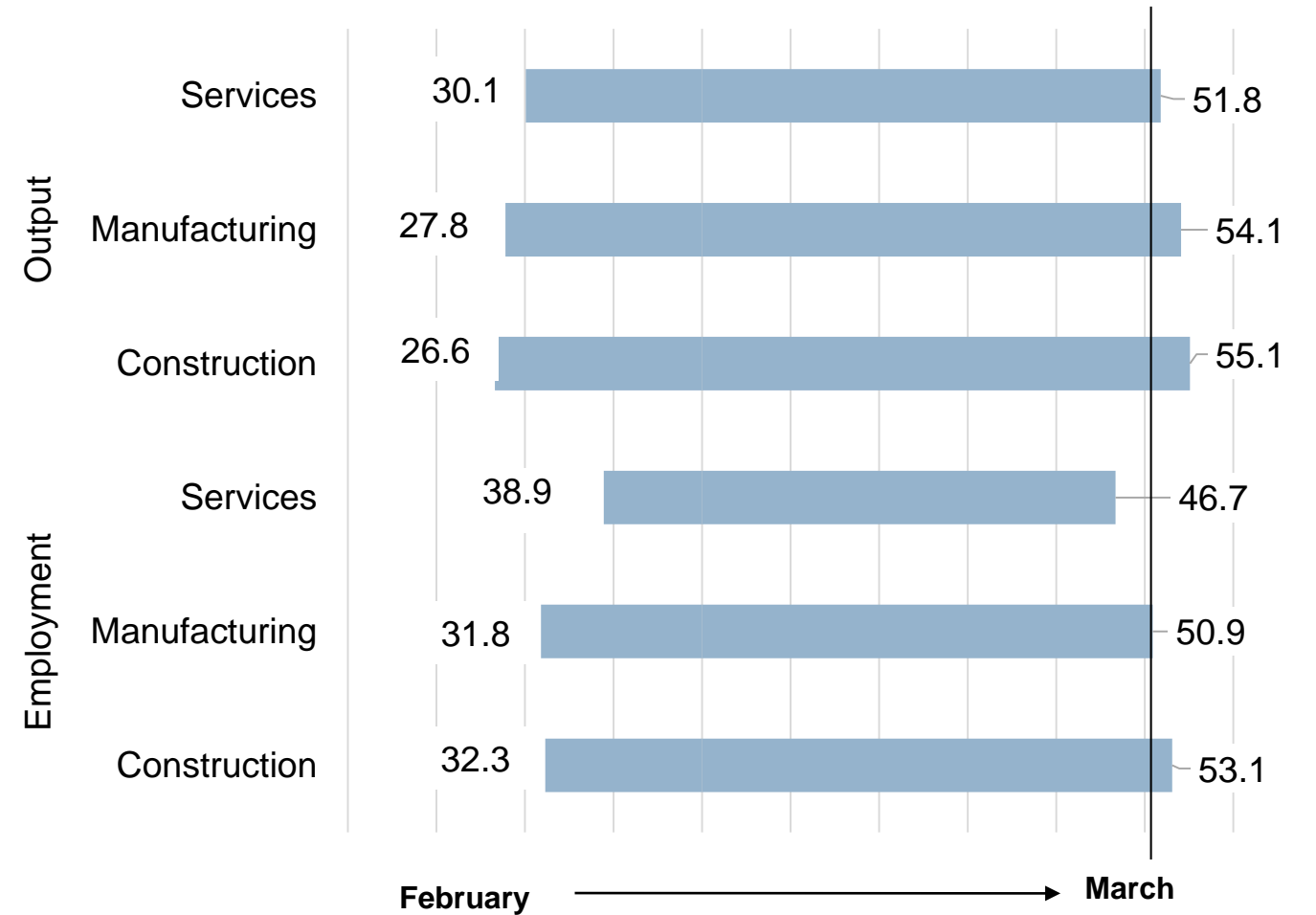


Note: Capacity utilization estimated from plant resumption rates and worker return rates. Missing data are interpolated or estimated.

Source: Ministry of Industry and Information Technology (MIIT); State Council; and S&P Global Economics.

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PMI Services Lagging Manufacturing Pick Up



Note: Official Purchasing Managers Index (PMI) for February and March 2020. A number above (below) 50 indicates a majority of firms reported higher (lower) output or employment compared to the previous month.

Source: National Bureau of Statistics and S&P Global Economics.

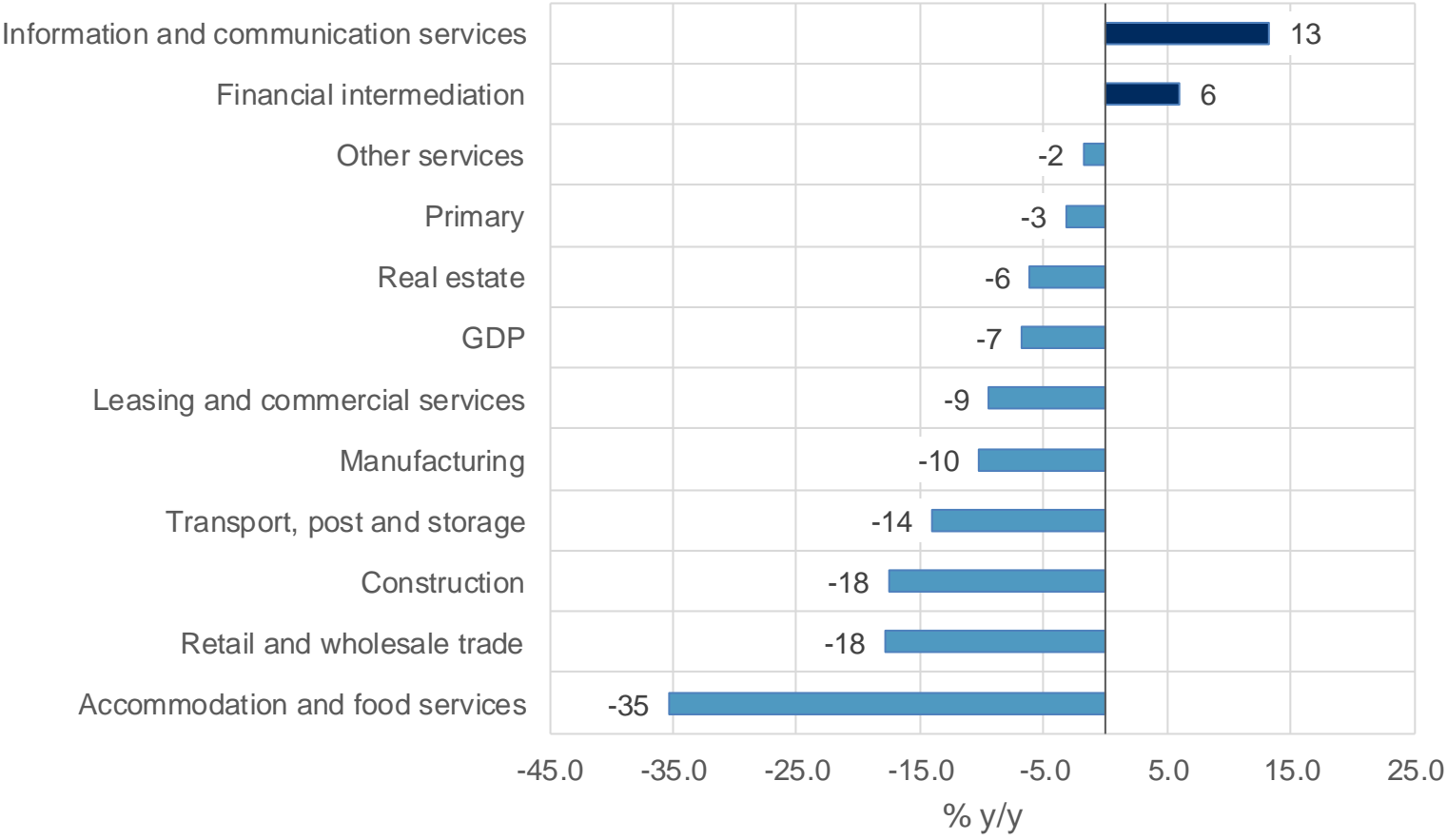
Asia-Pacific Economics | China's Q1 Shock

China's GDP gives an early reading of who hurts most across sectors

- No surprise. Hospitality and retail. Construction hurt by migrant labor travel restrictions.

China's Economy Shrank Almost 7% In Q1 From A Year Ago

Real GDP index percent change y/y



Source: NBS.
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Asia-Pacific Economics | China's Building Stimulus

China is healing and stimulus is building—tailwind for growth in H2 if virus remains contained

- Financial conditions are easing quickly reflecting easing across
- Net new credit flows now resembling previous easing cycle

China's Stimulus Is Showing Up In New Credit Flows

Seasonally-adjusted total social financing credit as a share of trend GDP



Note: Trend nominal GDP calculated from a Hodrick-Precostt filter with forecasts to address end-point bias. Credit includes bank loans, trust loans, entrusted loans, net corporate bond issuance, and net local government bond issuance. Three-month seasonally-adjusted sum as a ratio of annualized trend GDP.

Source: People's Bank of China; CEIC; and S&P Global Economics.

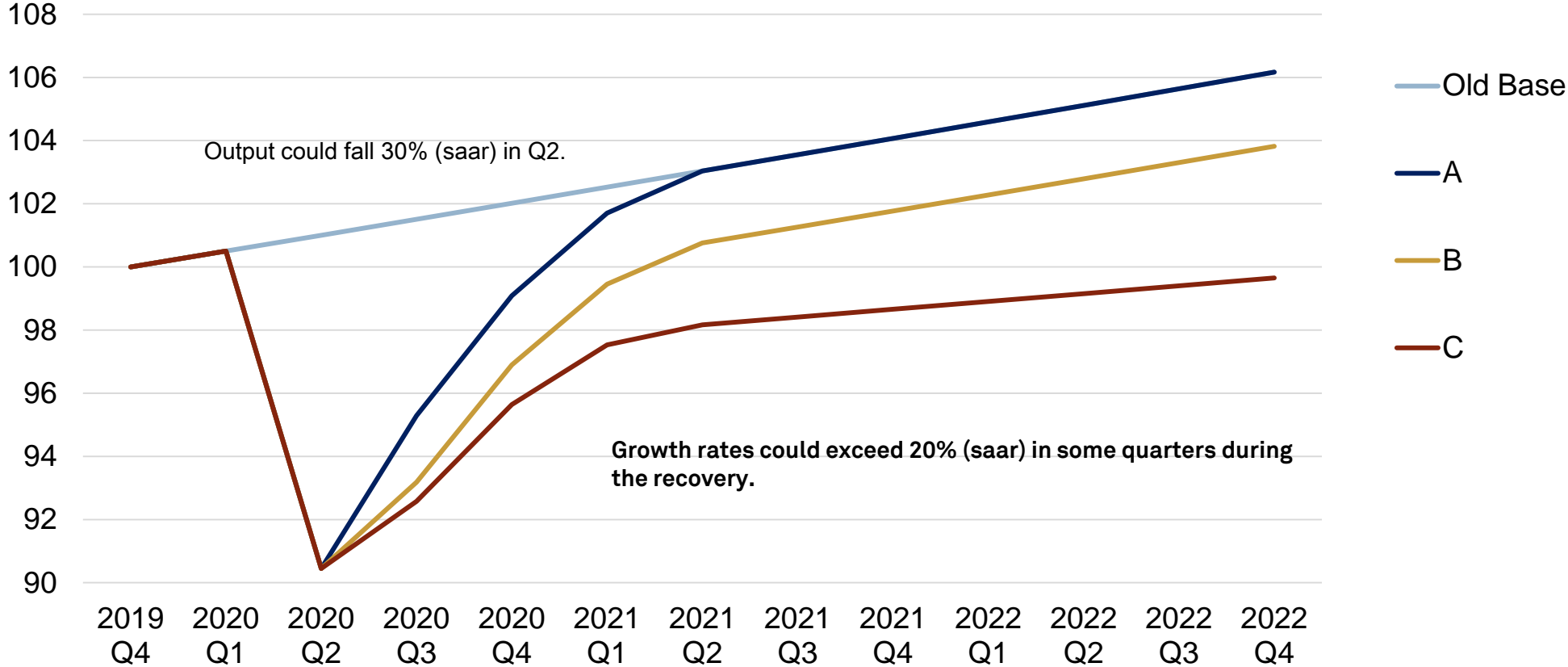
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Global Economics | Mapping the Recovery

Different recovery paths

- Three things to consider post-COVID
- 1. Potential output; 2. potential growth; 3. speed of recovery. Important for policy.

Three Possible Post-COVID-19 Paths For Any Economy
Simulated recovery paths



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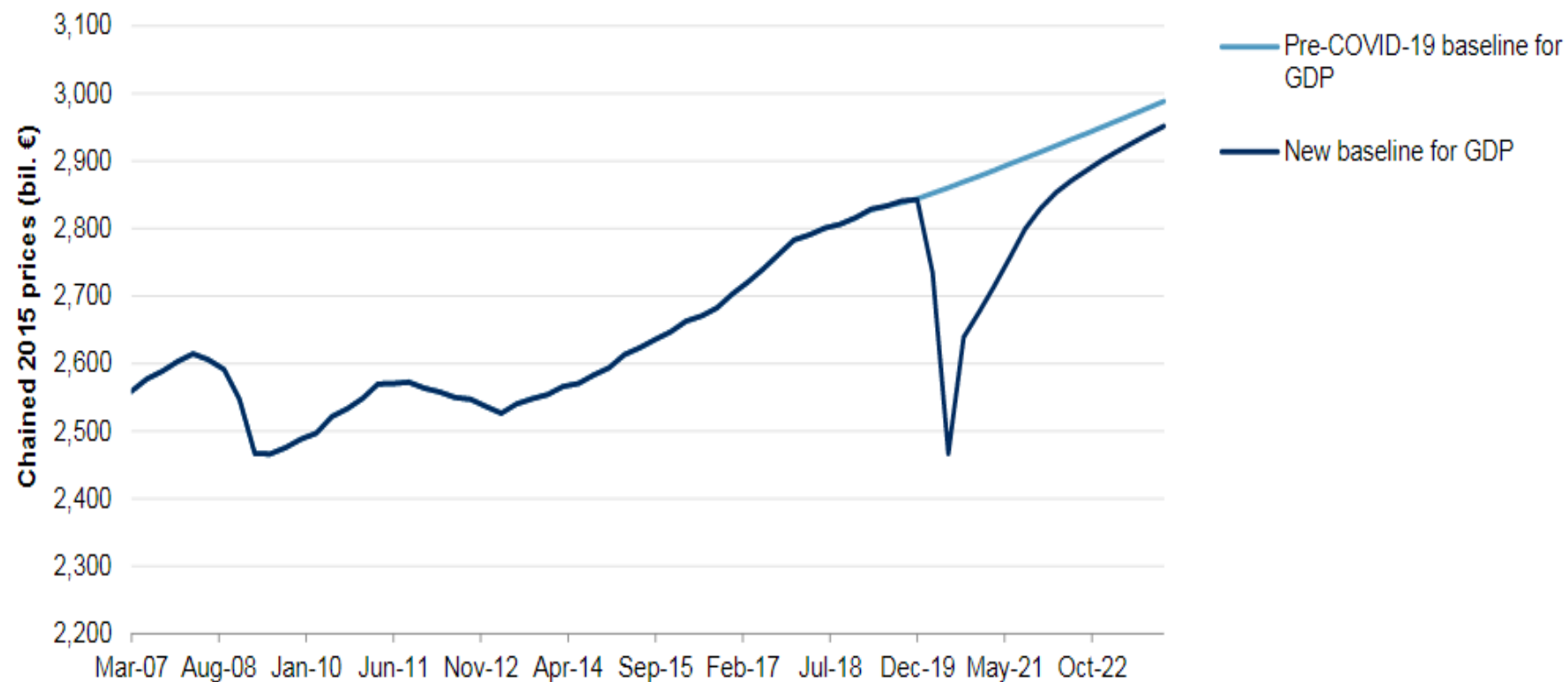
Global Economics | Mapping the Recovery

A long lingering hit on Europe

- We forecast the eurozone economy be roughly 1.4% smaller in 2023 than we had expected before the pandemic began

S&P Global Forecasts For Europe's Economy

Real GDP forecast level relative to the pre-COVID trend



Source: S&P Global Economics.

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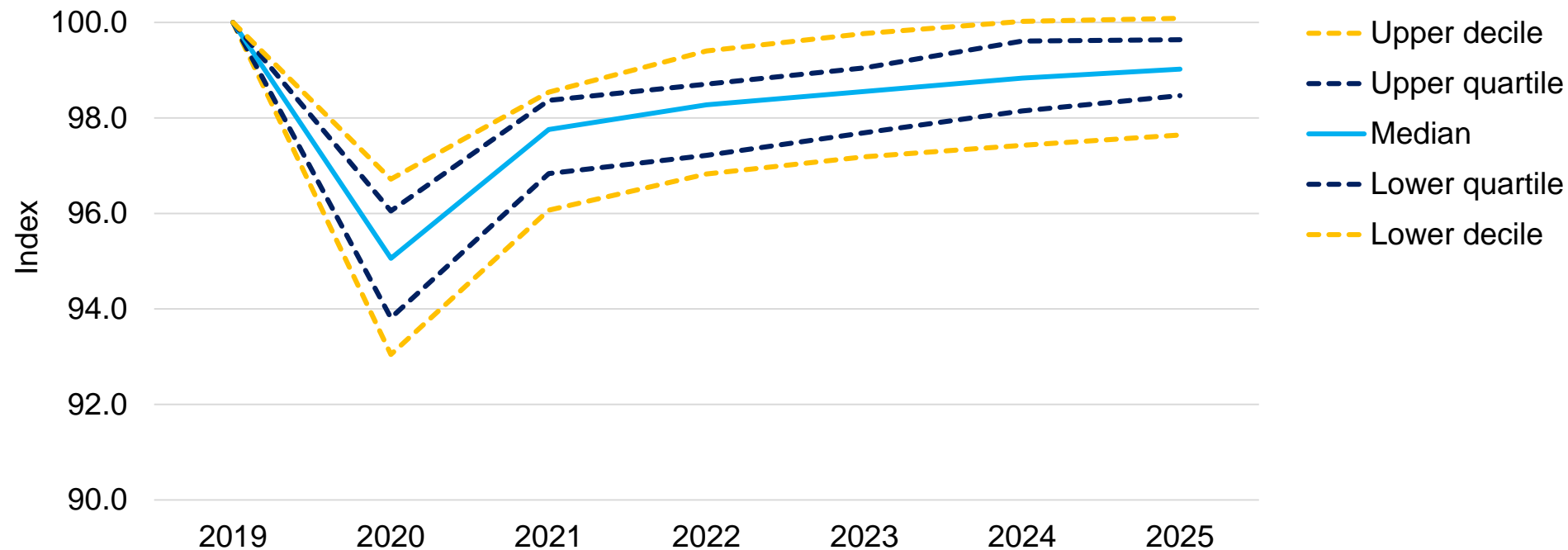
Global Economics | Mapping the Recovery

The world will change. Fewer casinos, more clinics. But impact on output in long run still uncertain

- Long-run will be driven by the labor force, tangible and intangible capital, and productivity.
- We we still expect activity to return close to the pre-COVID-19 trend at some point in 2023

S&P Global Forecasts Asia-Pacific Will Climb Back Gradually

Real GDP forecast level relative to the pre-COVID trend



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

Global Economics | **Downside Risks To The Outlook**

Pandemic

- Transition is bumpy, second and third waves of infection, intermittent lockdowns
- Timing of vaccine and therapy

SMEs

- Access to finance, buffers
- Duration matters

Jobs

- Policies supporting employment may wane
- Could severely affect labor force

Financial conditions

- Federal Reserve and other G10 central bank policies have eased pressures, especially on US\$
- Creates policy space for bridging to the recovery

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