ASIA AND PACIFIC DEPARTMENT

**Navigating the Pandemic:
Asia's Multi-Speed Recovery**

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Outline

I. The Global Context

II. Zooming in on Asia—Patches of Green Shoots

III. Our Forecast—Uncertain, Multi-speed Recovery

IV. Risks—Trade, Balance Sheets, and Rising Inequality

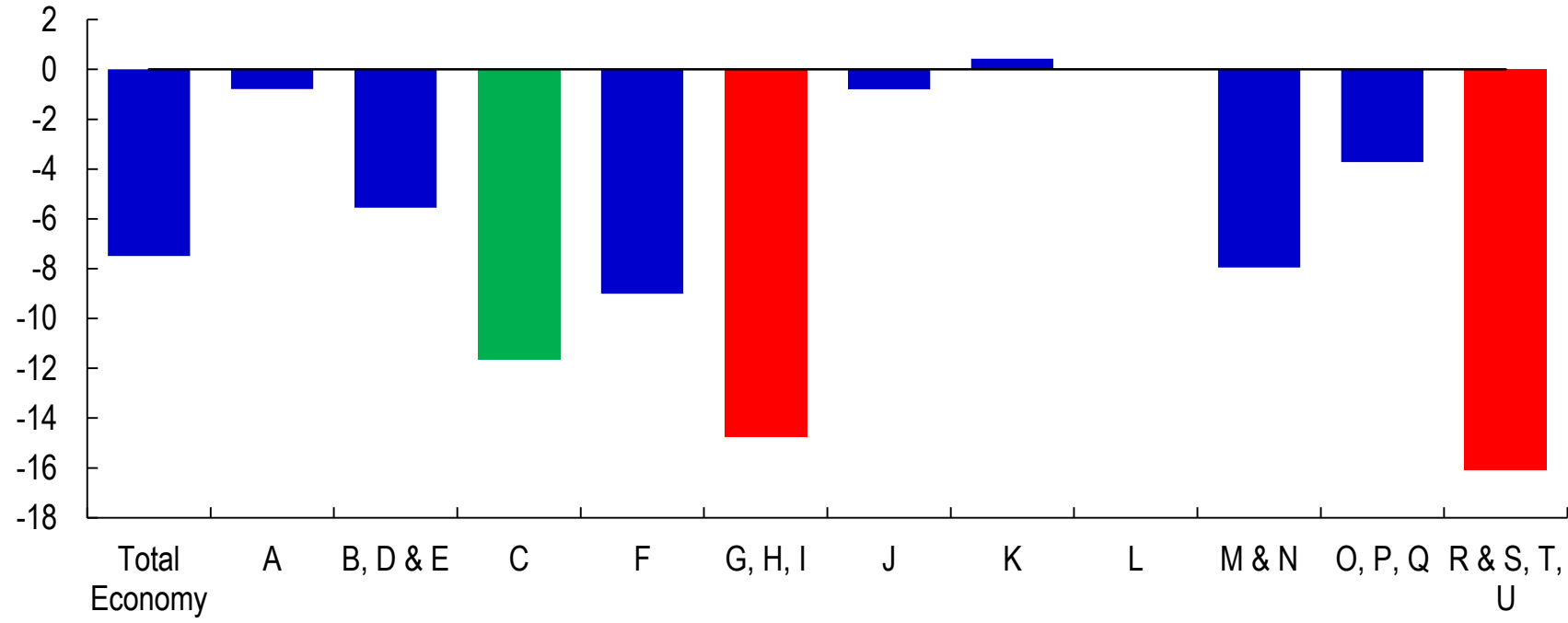V. Early Lessons and Policy Recommendations

The Global Context 3

Unprecedented recession, with services hit especially hard

GDP Projections (2019=100)
(index)

- WEO January 2020
- WEO April 2020
- WEO June 2020
- WEO Latest
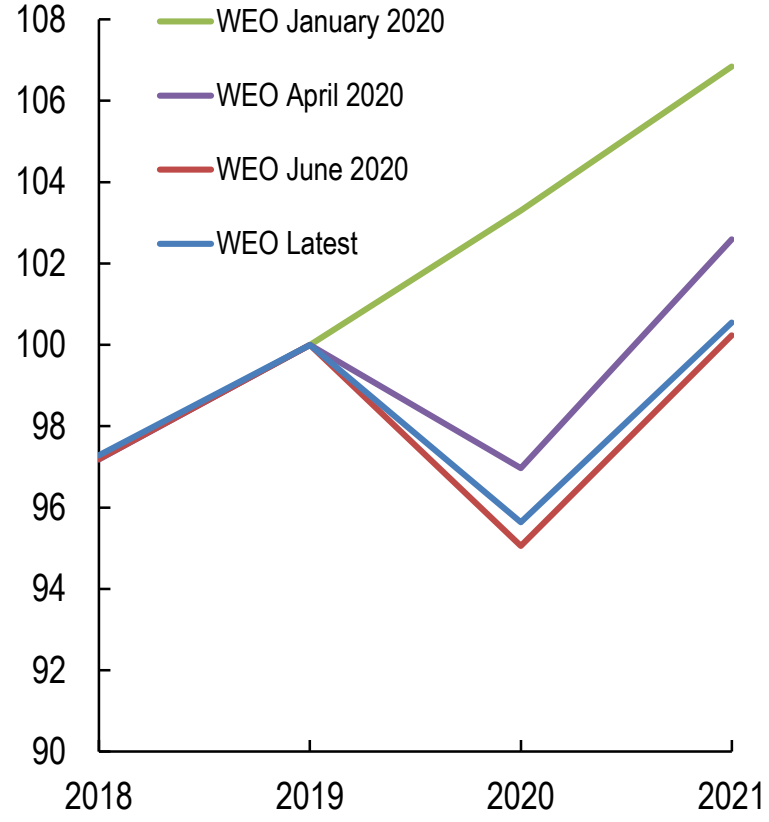
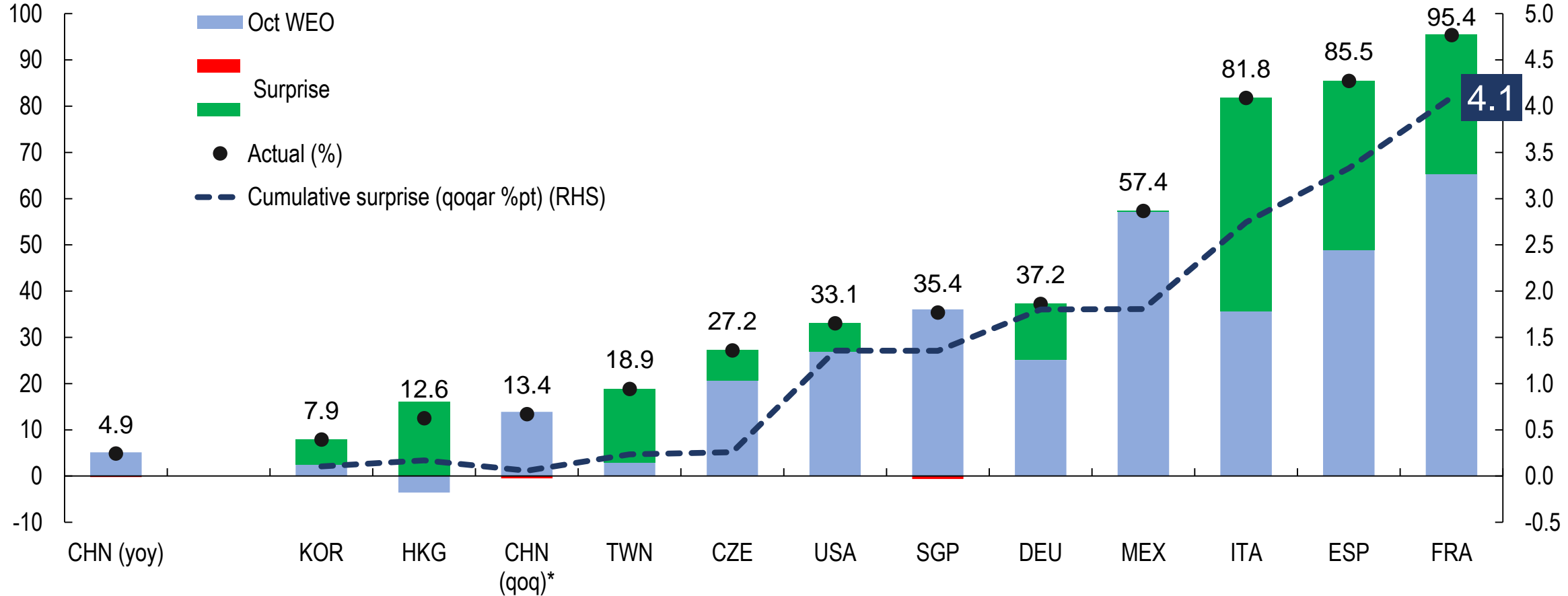Sources: World Economic Outlook, and IMF staff calculations.

Sectoral Average Value-Added Growth, 2020:H1[1]
(year-over-year percent change)

Sources: EU KLEMS; Organisation for Economic Co-operation and Development; US Bureau of Economic Analysis; and IMF staff calculations.
Note: Sectors are ISIC rev.4: A = agriculture, forestry, and fishing; B = mining and quarrying; C = manufacturing; D&E = utilities; F = construction; G = wholesale and retail trade; H = transportation; I = accommodation and food services; J = information and communication; K = financial and insurance activities; L = real estate; M&N = professional and administrative services; O = public administration and defense; P = education; Q = human health and social work; R&S = arts, entertainment, recreation, and other services; T = activities of households as employers and undifferentiated goods-and-services-producing activities of households for own use; U = activities of extraterritorial organizations and bodies.
[1]Excludes Japan due to lack of sectoral detail. 2020:Q1 year-over-year growth is used for the United States due to lack of data on 2020:Q2.

Latest Q3 GDP have had positive surprises

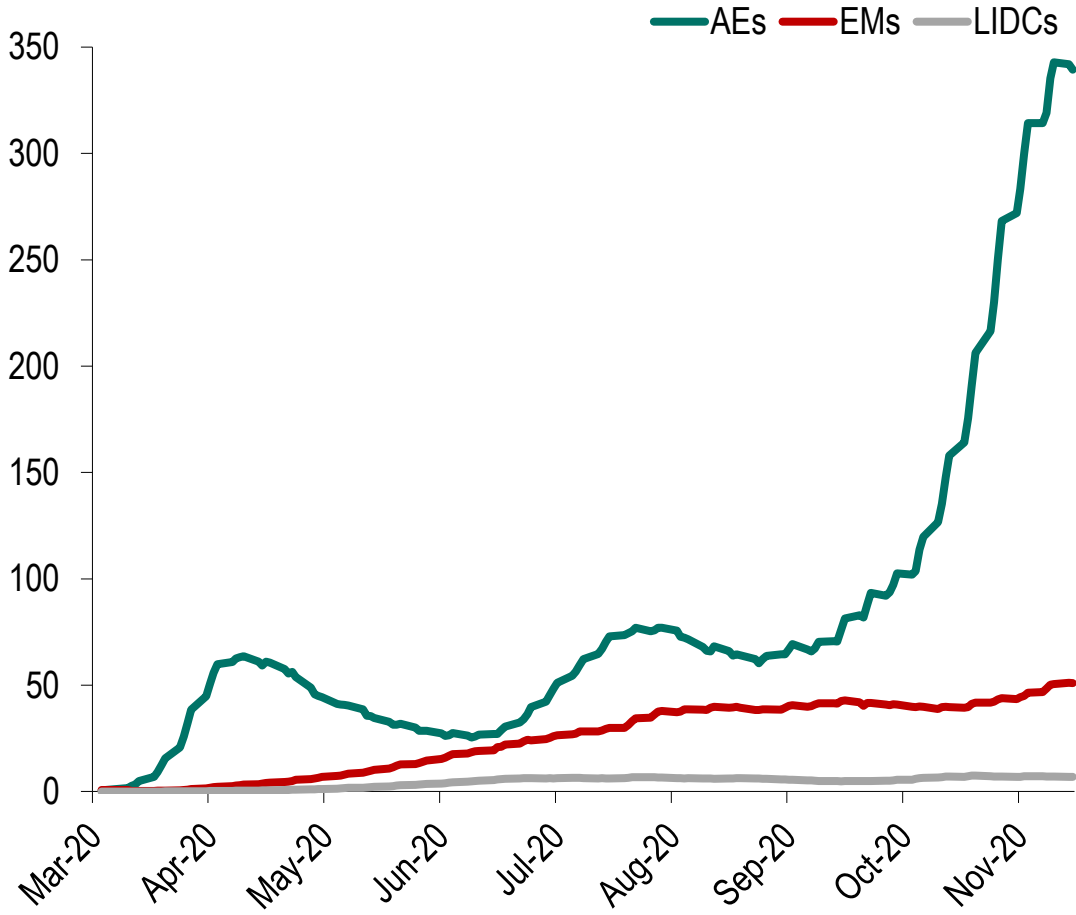**2020Q3 GDP Growth Surprises[1]**

(percentage points; annualized)

Legend:
- Oct WEO
- Surprise
- Actual (%)
- Cumulative surprise (qoqar %pt) (RHS)

Data labels (Actual %): CHN (yoy) 4.9; KOR 7.9; HKG 12.6; CHN (qoq)* 13.4; TWN 18.9; CZE 27.2; USA 33.1; SGP 35.4; DEU 37.2; MEX 57.4; ITA 81.8; ESP 85.5; FRA 95.4

RHS callout: 4.1

Source: Haver Analytics, June WEO, and IMF Staff calculations.
Note: [1]Covers about 48 percent of WEO World; *Haver Analytics estimate

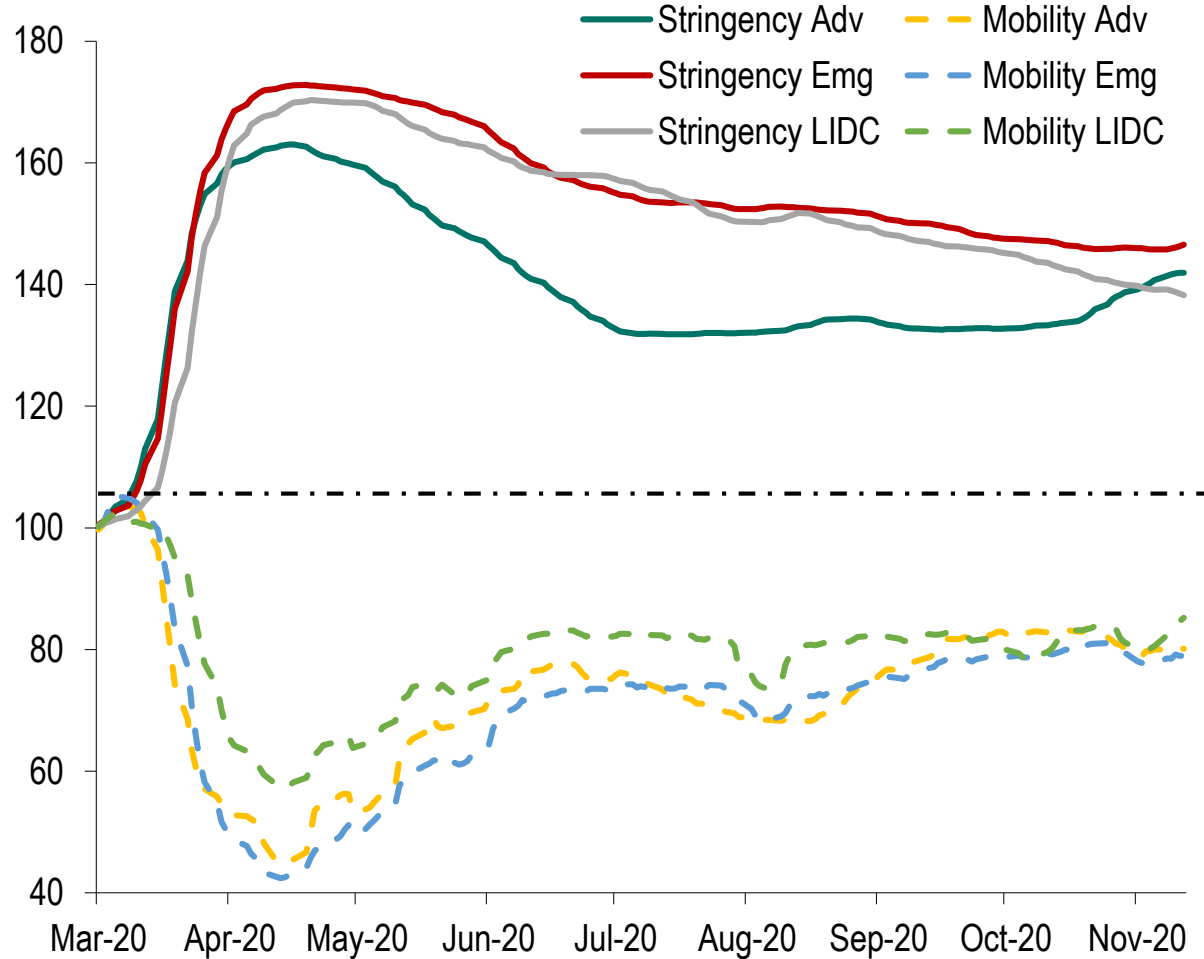# However, the pandemic rages on and reopening has stalled

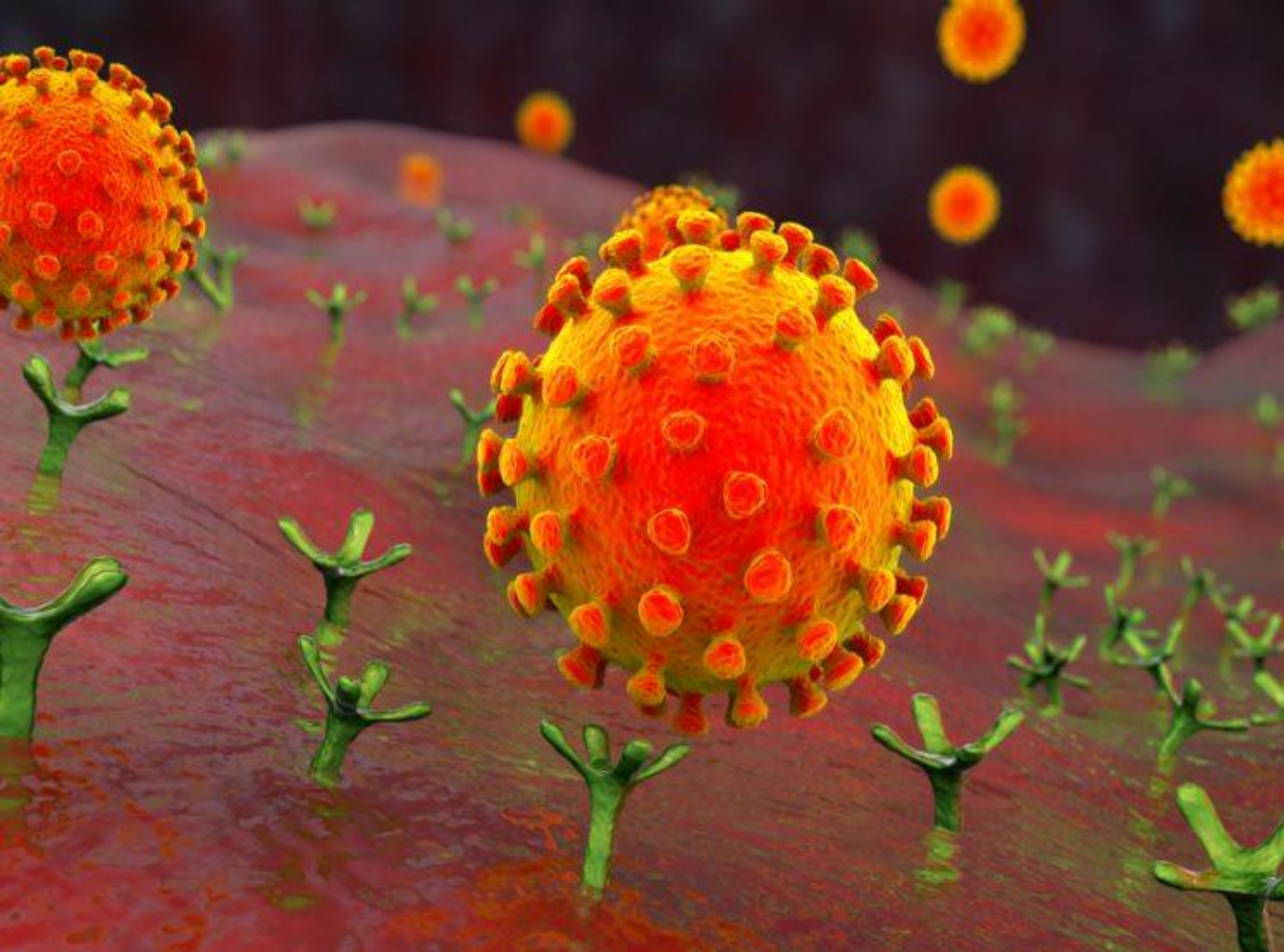## New COVID-19 Cases
(per million population)

Legend: AEs, EMs, LIDCs

Sources: JHU Coronavirus Database.

Strictness of Containment Policy and Mobility
(index; March 1=100, 7-day moving average)

Legend: Stringency Adv, Mobility Adv, Stringency Emg, Mobility Emg, Stringency LIDC, Mobility LIDC

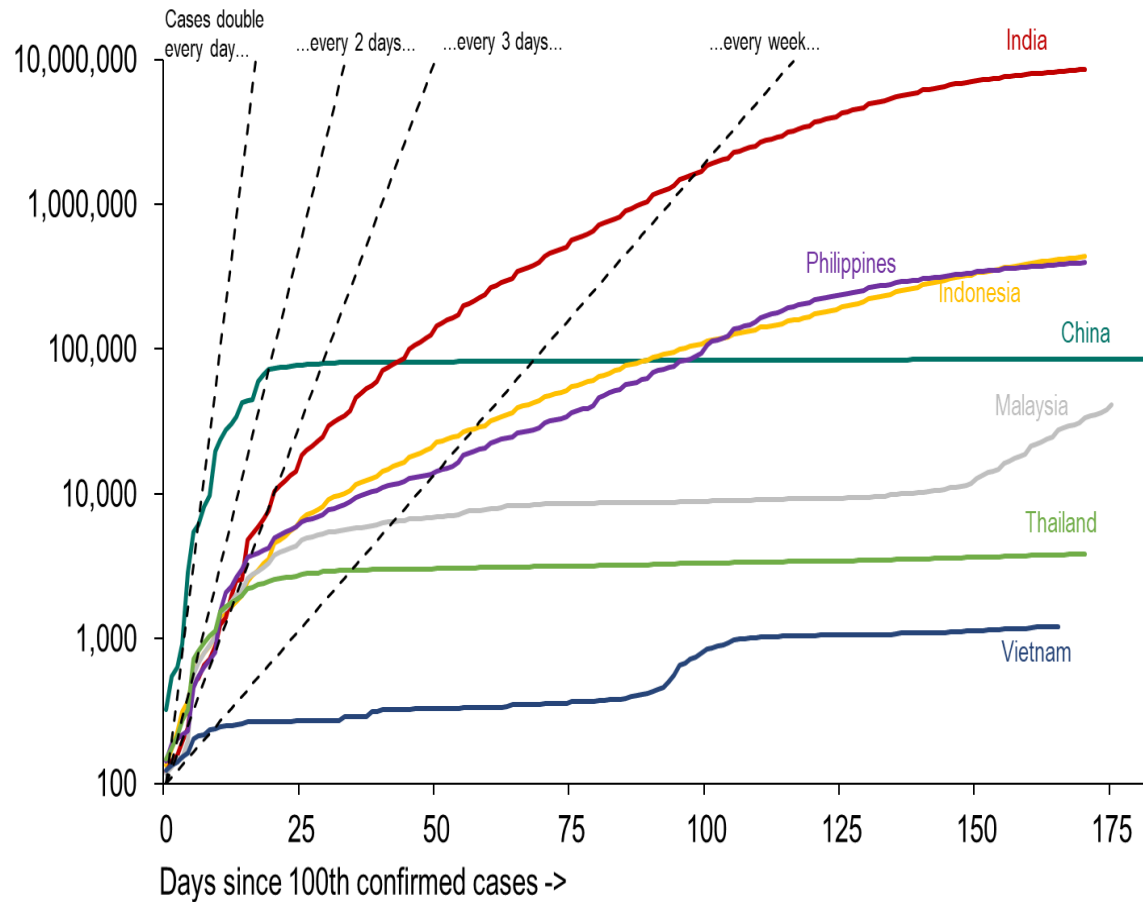Sources: Google Mobility Index and OxCGRT.

Zooming in on Asia—Patches of Green Shoots

Pandemic at various stages in Asia

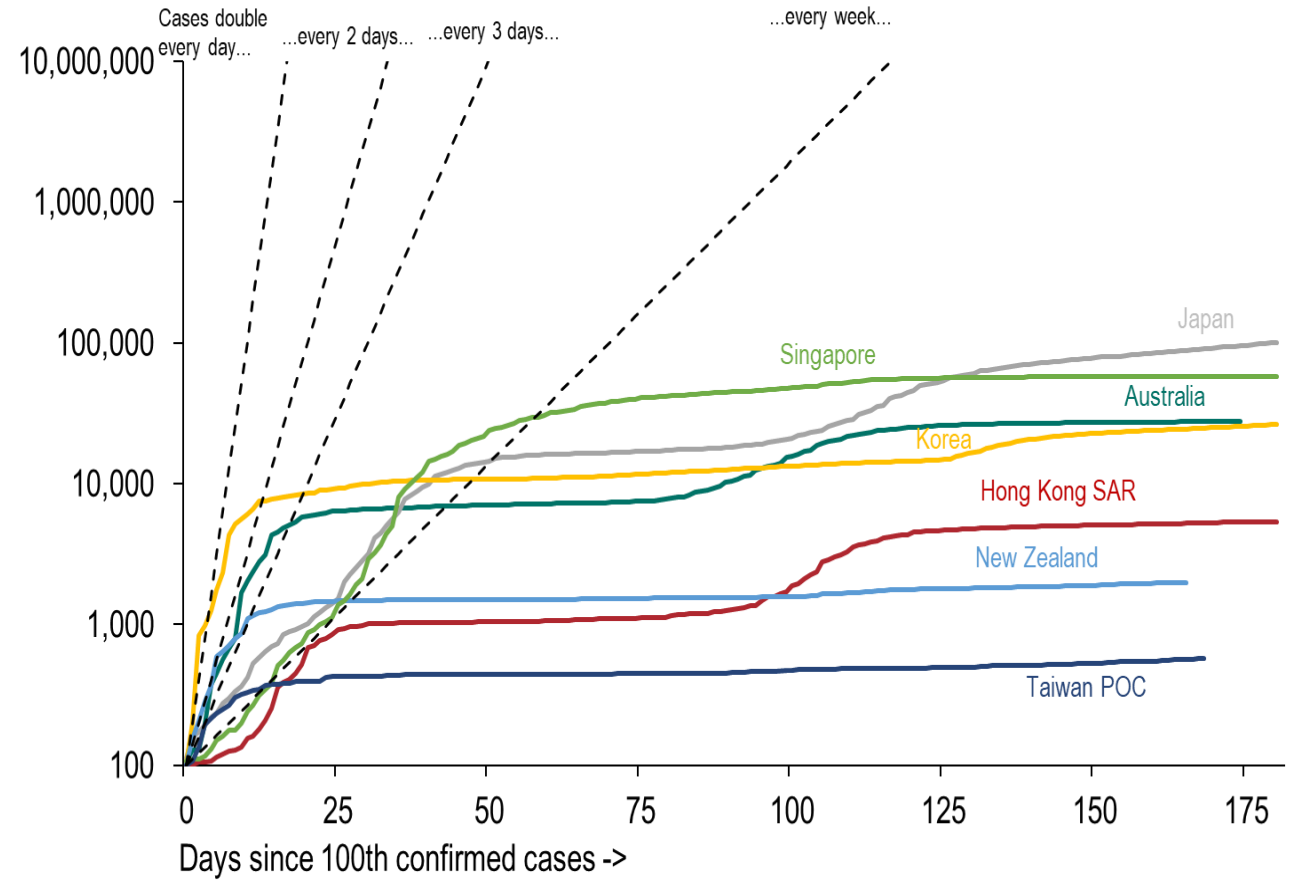**Cumulative Confirmed Cases, Emerging Markets**
(Log scale)

Cases double every day...   ...every 2 days...   ...every 3 days...   ...every week...

India
Philippines
Indonesia
China
Malaysia
Thailand
Vietnam

Days since 100th confirmed cases ->

Sources: Johns Hopkins University, and IMF staff calculations.
Note: Data as of November 10, 2020.

Cumulative Confirmed Cases, Advanced Economies
(Log scale)

Cases double every day...   ...every 2 days...   ...every 3 days...   ...every week...

Japan
Singapore
Australia
Korea
Hong Kong SAR
New Zealand
Taiwan POC

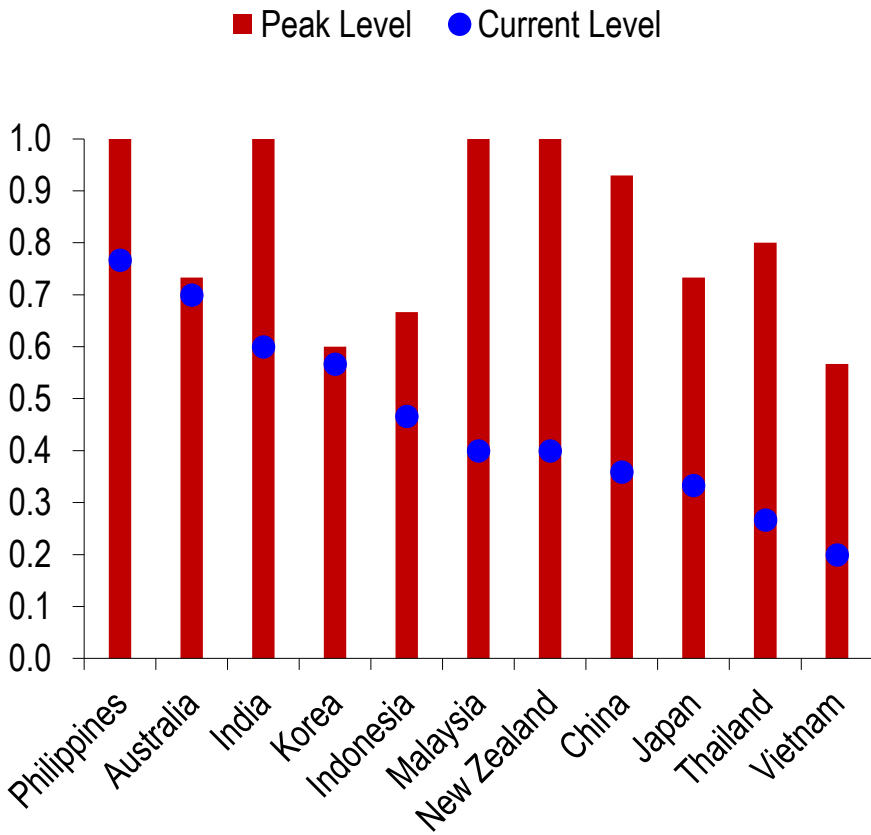Days since 100th confirmed cases ->

Sources: Johns Hopkins University, and IMF staff calculations.
Note: Data as of November 10, 2020.

Containment measures being eased at different speeds

Domestic Containment Stringency
(index, 0-1, 1=strictest)

■ Peak Level ● Current Level

Status of Containment Measures

Country	Travel	School	Retail	Services	Industry	Gathering
AUS						
CHN						
IDN						
IND						
JPN						
KOR						
MYS						
NZL						
PHL						
THA						
VNM						

Scale of opening: Fully open | Open with restrictions | Partially closed | Closed

External Containment Stringency
(index, 0-1, 1=strictest)
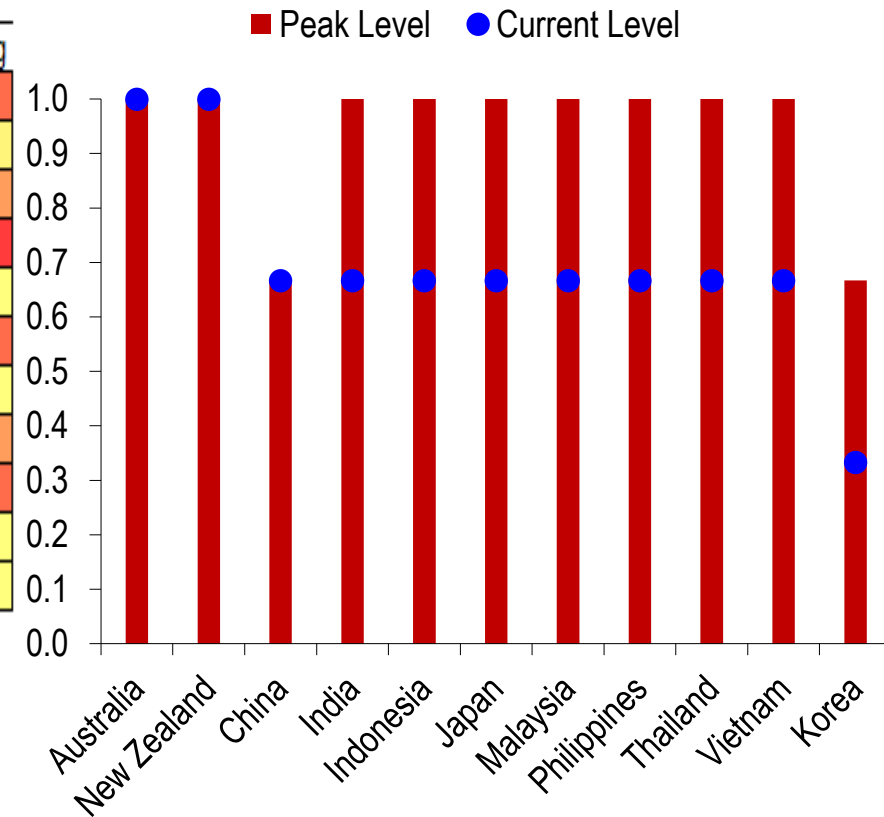
■ Peak Level ● Current Level

Sources: IMF staff estimations.
Note: Data as of 09/08/2020. For some country's restriction have been eased further since 09/08/2020 (e.g. Australia, New Zealand).

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Sources: IMF staff estimations.
Note: Data as of 09/08/2020. For some country's restriction have been eased further since 09/08/2020 (e.g. Australia, New Zealand).

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Economic activity is picking up

Real GDP Growth
(percent change, y-o-y)

Q1 Q2 Q3

China   Asia   Asia ex China
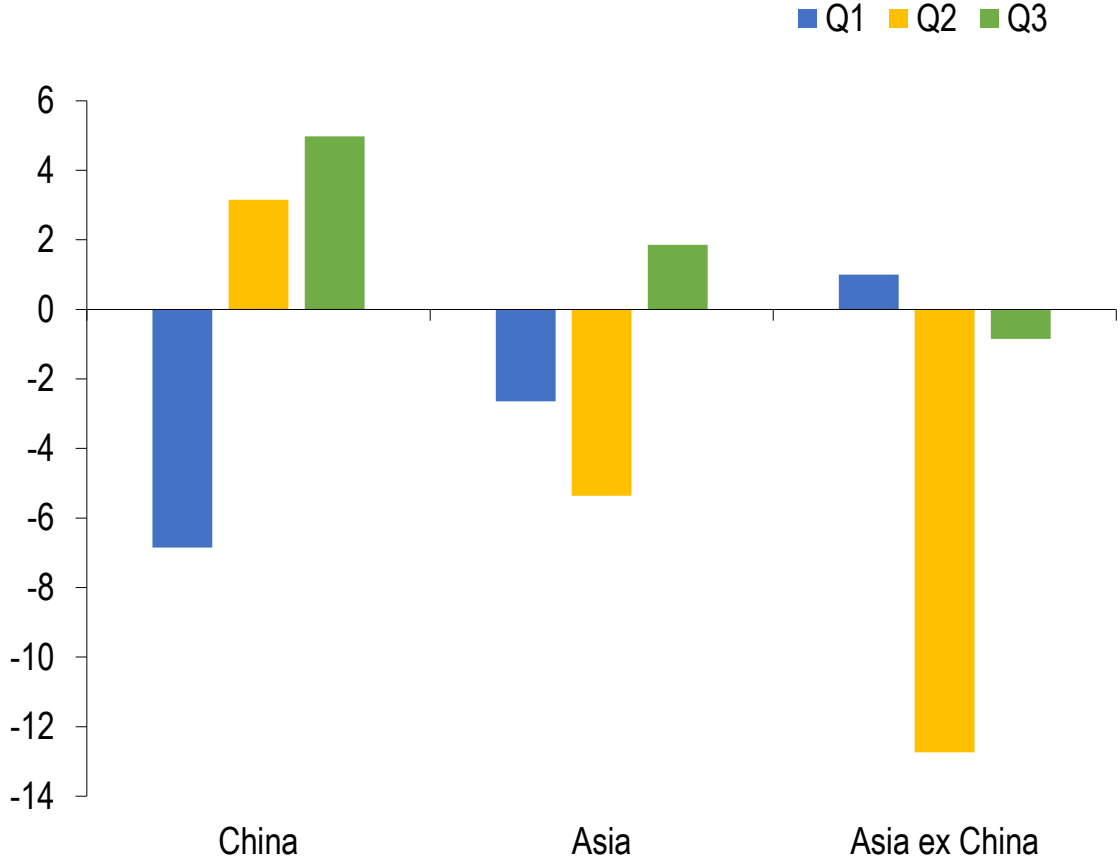
Source: Haver Analytics, and IMF staff calculations.
Note: Q3 data for growth not available for all countries. Data as of November 10, 2020.

Manufacturing and Services Purchasing Manager Index
(index, 50+ = expansion)

Q1 Q2 Q3 Oct

MFR SVCs MFR SVCs MFR SVCs
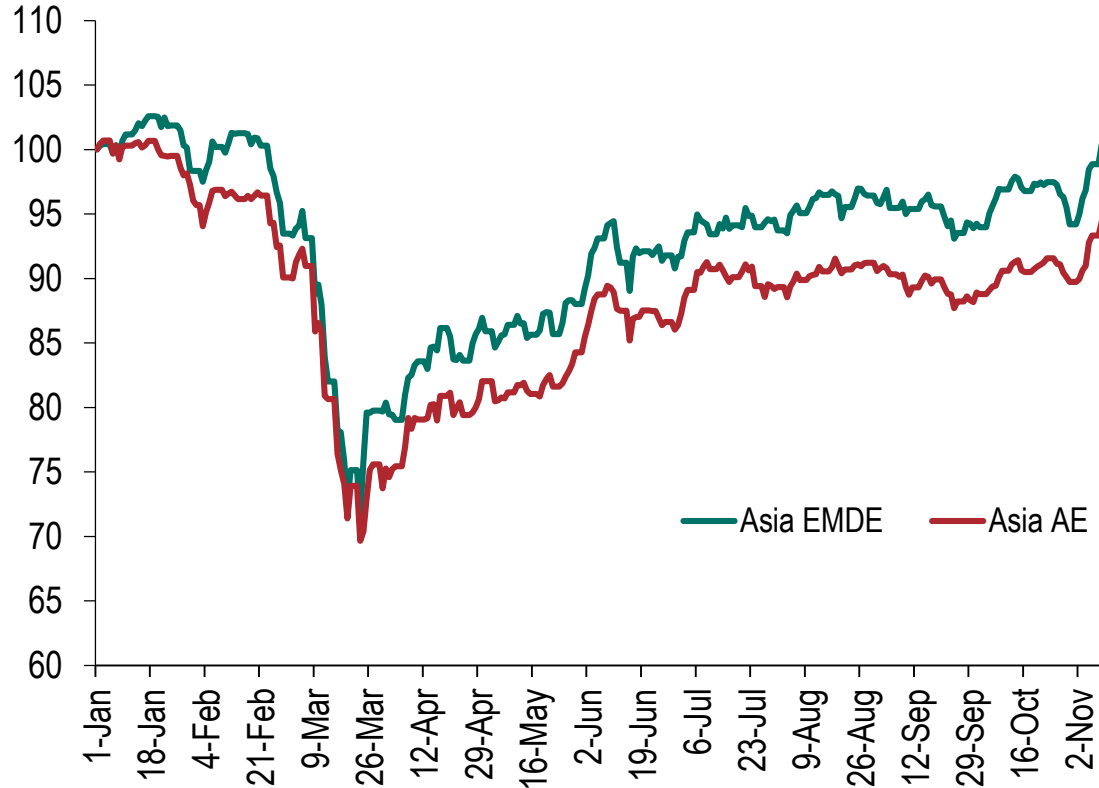China   Asia   Asia ex China
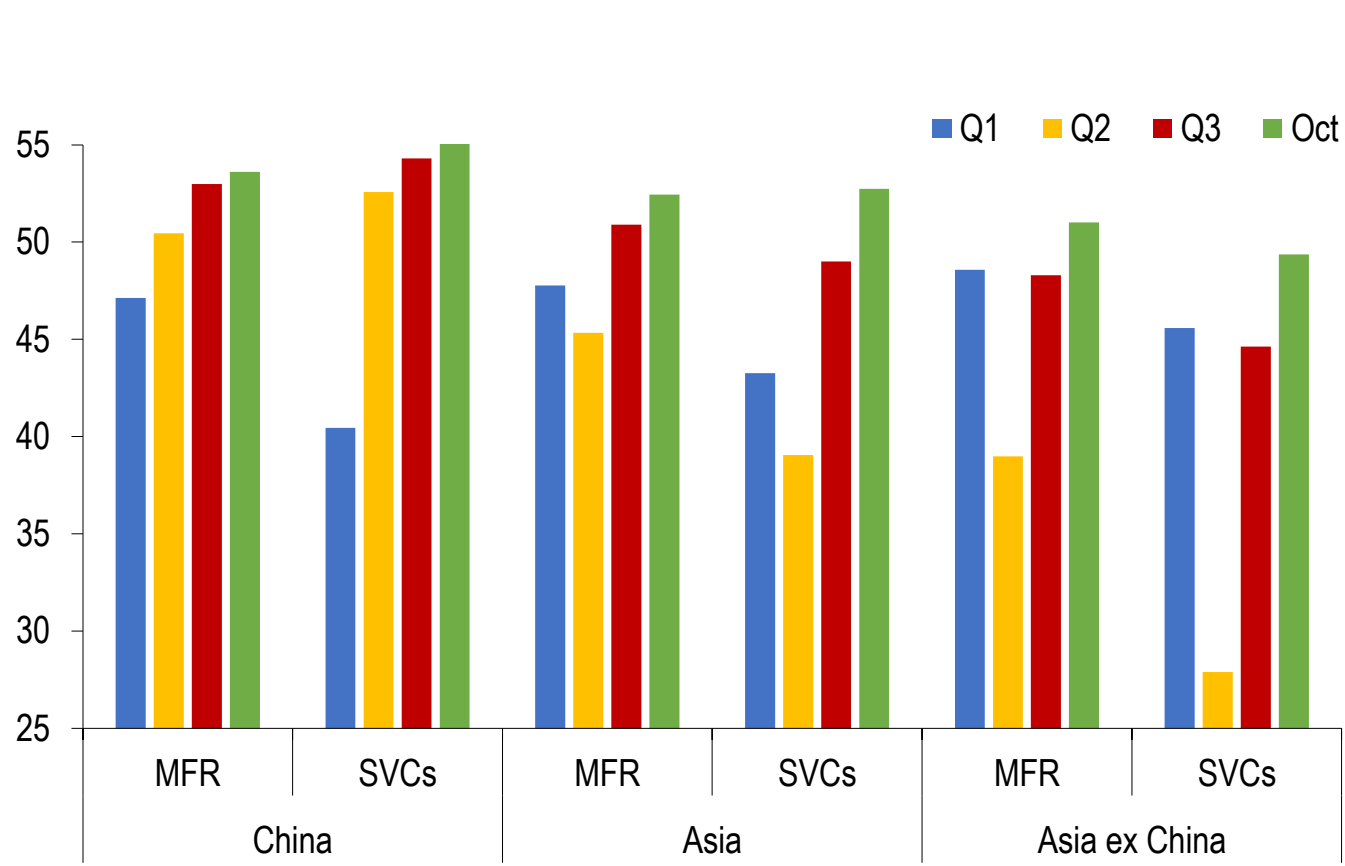
Source: Haver Analytics, and IMF staff calculations.
Note: Data as of November 10, 2020.

Financial conditions have eased but downside risks remain
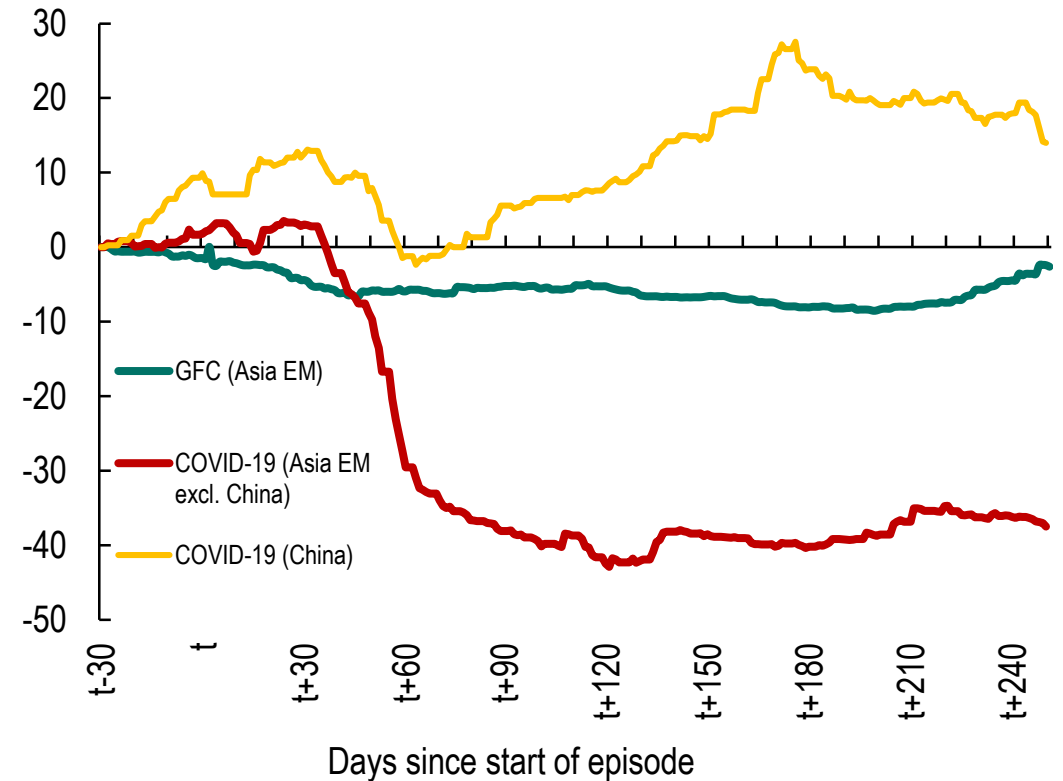
Stock Market Performance
(Index, Jan-01-2020=100)

Legend: Asia EMDE, Asia AE

Sources: Bloomberg, and IMF staff calculations. For USA we use SP500 Index. For EuroArea FTEF80 Index

Asia EM Cumulative Portfolio Flows
(billions of USD)

Legend: GFC (Asia EM), COVID-19 (Asia EM excl. China), COVID-19 (China)
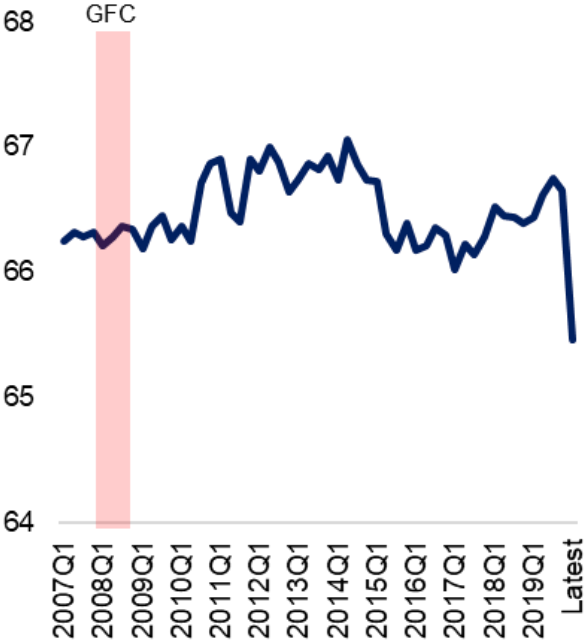
Days since start of episode

Sources: IIF and IMF staff calculations.
Note: t=0 for GFC is August 15th, 2008. t=0 for COVID-19 is December 21st, 2019 when first case reported. Data as of September 30, 2020.

Weak labor markets show signs of scarring

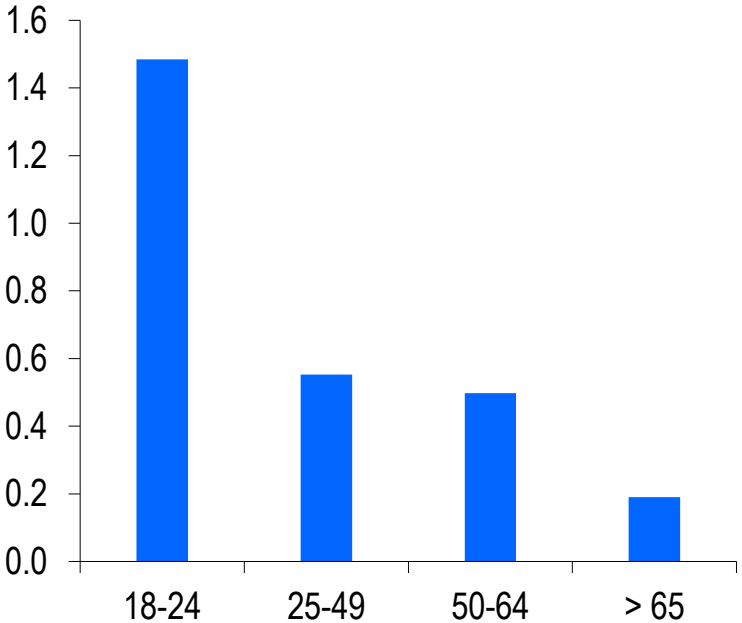## Labor Force Participation Rate
(in percent)

Source: Haver Analytics, IMF staff calculations.
Note: Labor force participation rate for Asia refers to REO14, where available. Data available as of September 30, 2020.

## Asia: Change in Unemployment Rate by Age Cohort, Latest versus Pre-COVID
(median; in percentage points)

Source: Haver Analytics and IMF staff calculations.
Note: Pre-COVID is 2019Q4 where quarterly data is available and Dec 2019 where monthly is available. Latest is the latest data point available post Feb 2020. Asia refers to Korea, Japan, Australia, New Zealand, Taiwan POC, Thailand.

Asia: Change in Labor Force Participation Rate by Gender during Crises
(in percentage points)
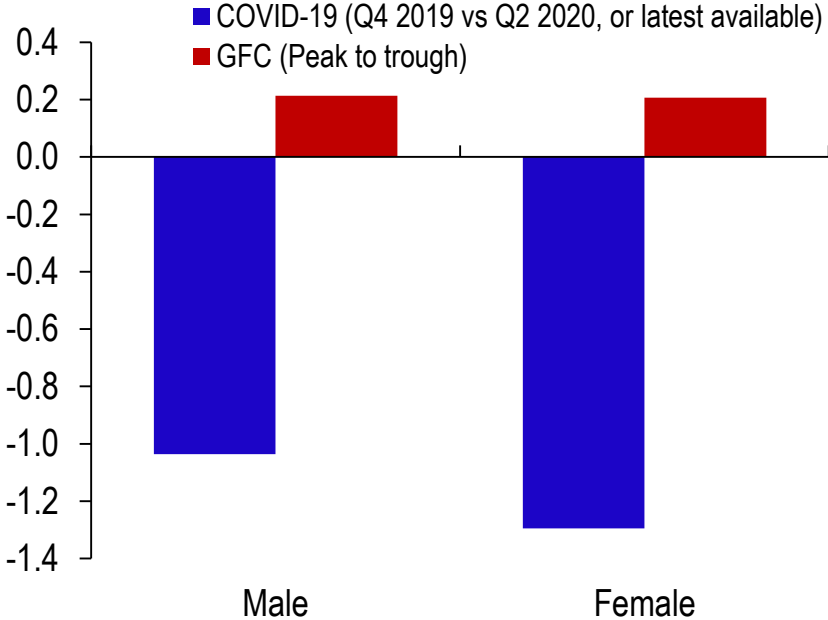
Source: Haver Analytics and IMF staff calculations.
Notes: Asia refers to Australia, Japan, Korea, Singapore, Thailand and Philippines. Data are seasonally adjusted. For COVID-19, data are up to June 2020.
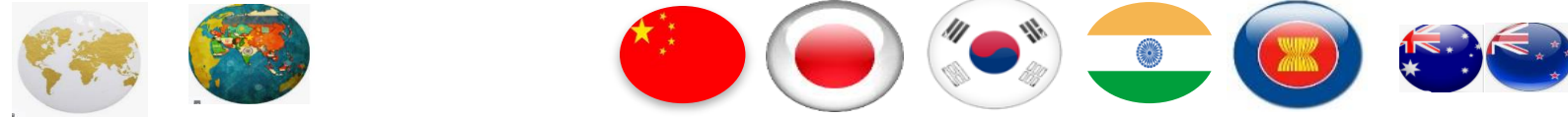
Our Forecast: Uncertain, Multi-speed Recovery

Forecasts reflect a multi-speed recovery

Growth Projections: Asia-Pacific Region
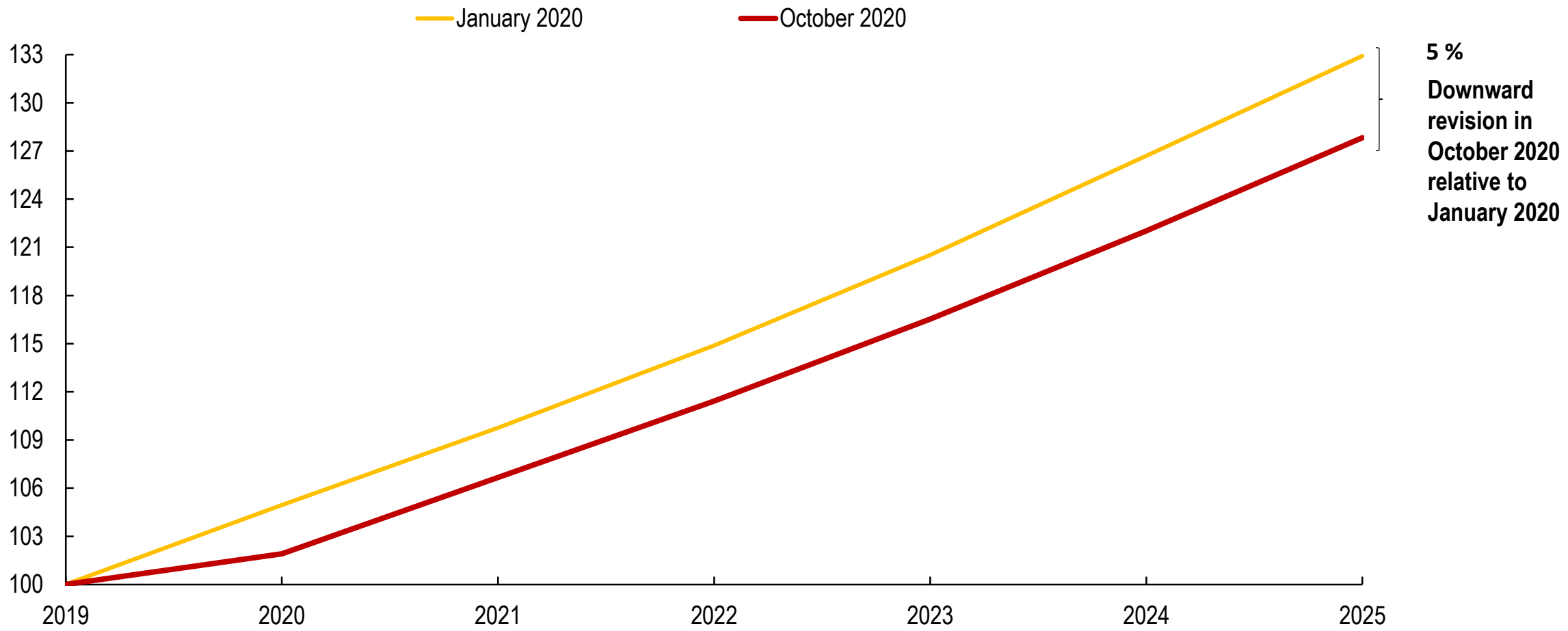
(percentage change from a year earlier)

	World	Asia	Asia AE	Asia EMDE	CHN	JPN	KOR	IND	ASEAN	AUS-NZ
2019	2.8	4.6	1.3	5.5	6.1	0.7	2.0	4.2	4.7	1.9
2020	-4.4	-2.2	-4.0	-1.6	1.9	-5.3	-1.9	-10.3	-3.4	-4.4
Revisions from June 2020	0.8	-0.6	0.8	-0.8	0.9	0.5	0.2	-5.8	-1.4	0.4
2021	5.2	6.9	2.8	7.9	8.2	2.3	2.9	8.8	6.1	3.1
Revisions from June 2020	-0.2	0.3	-0.3	0.5	0.0	-0.1	-0.1	2.8	0.0	-1.1

Source: World Economic Outlook and IMF staff calculations.

Persistent drop in potential output

Asia Potential Output Forecast (2019=100)
(index)

——— January 2020   ——— October 2020

5 %

Downward revision in October 2020 relative to January 2020

Sources: World Economic Outlook, and IMF staff calculations.
Note: Asia aggregate includes Australia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan Province of China, and Thailand.
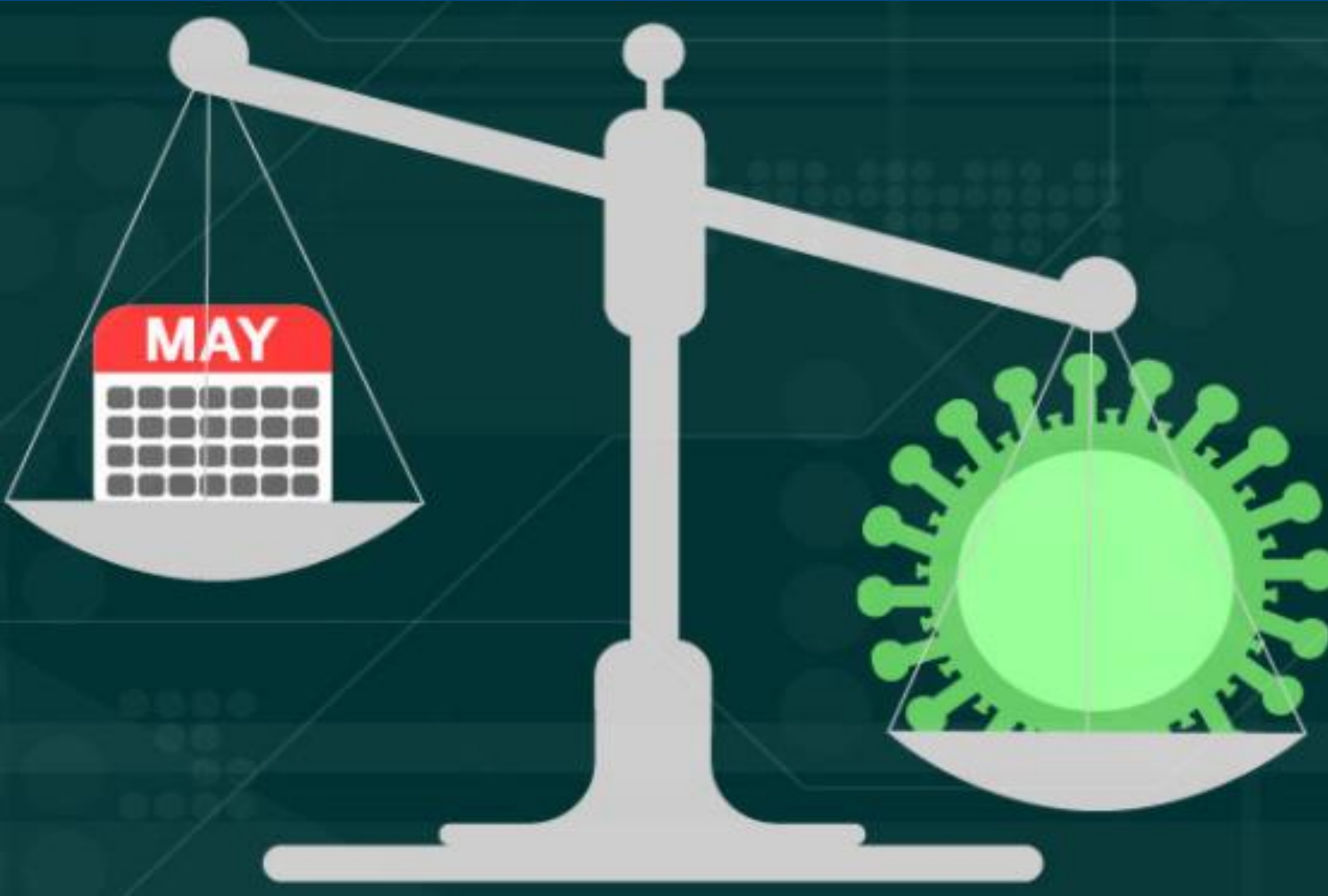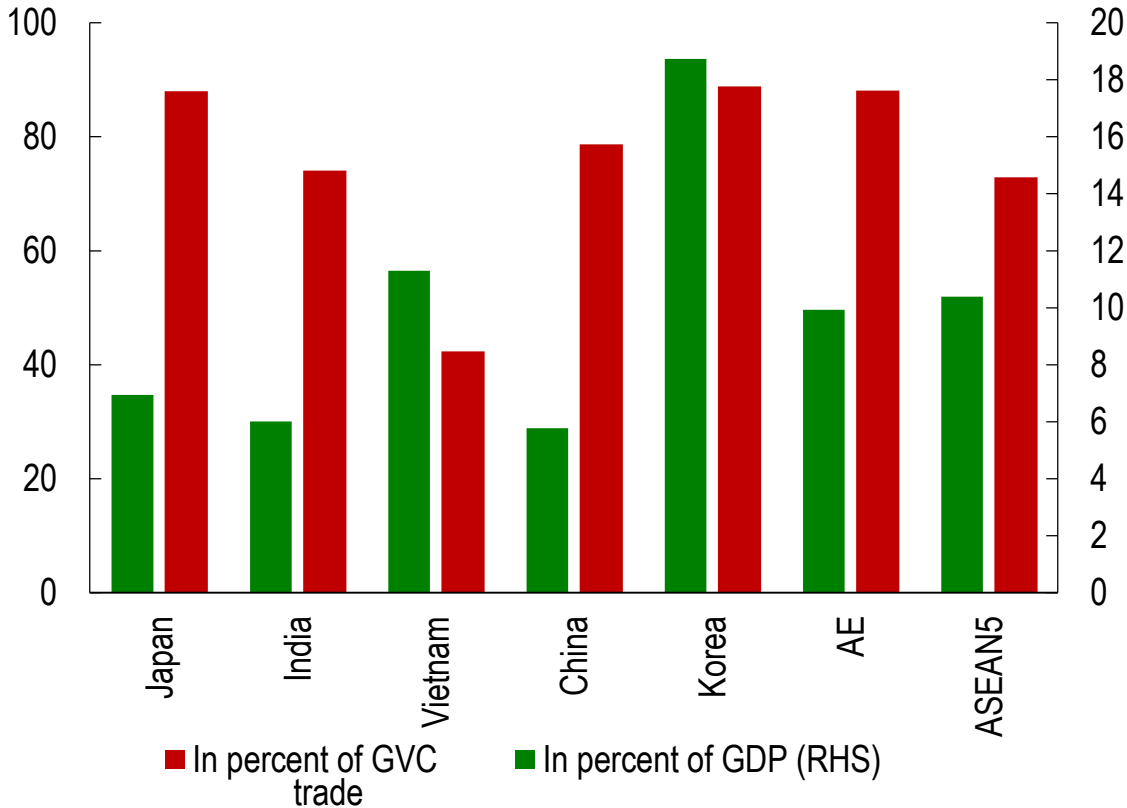
Risks

China-US tensions pose downside risks

High-Tech GVC Participation, 2017
*(percent)*

- ■ In percent of GVC trade
- ■ In percent of GDP (RHS)

Source: Asian Development Bank database.
Note: High-tech industries include aircraft and spacecraft, pharmaceuticals, office machinery, telecommunications equipment, and medical and precision instruments. Red bars plot the share of GVC related trade that is in the high-tech sectors. Green bars show high-tech related GVC trade as a share of GDP.

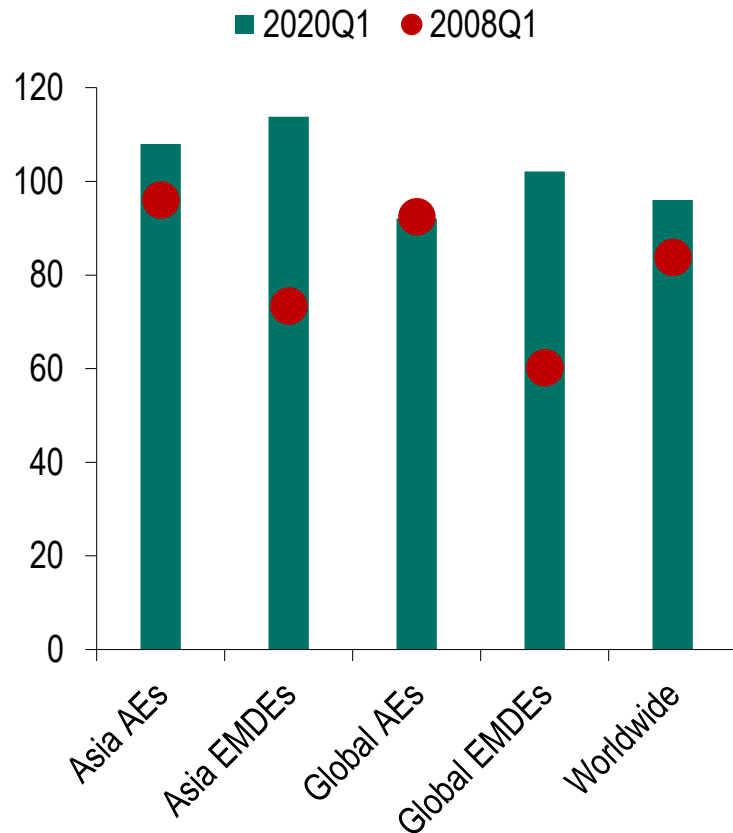## China-US: Technological Dislocation Scenario, Impact on GDP
(percent deviation from baseline in 10 years)

- ■ Trade disruption
- ■ Direct productivity effects
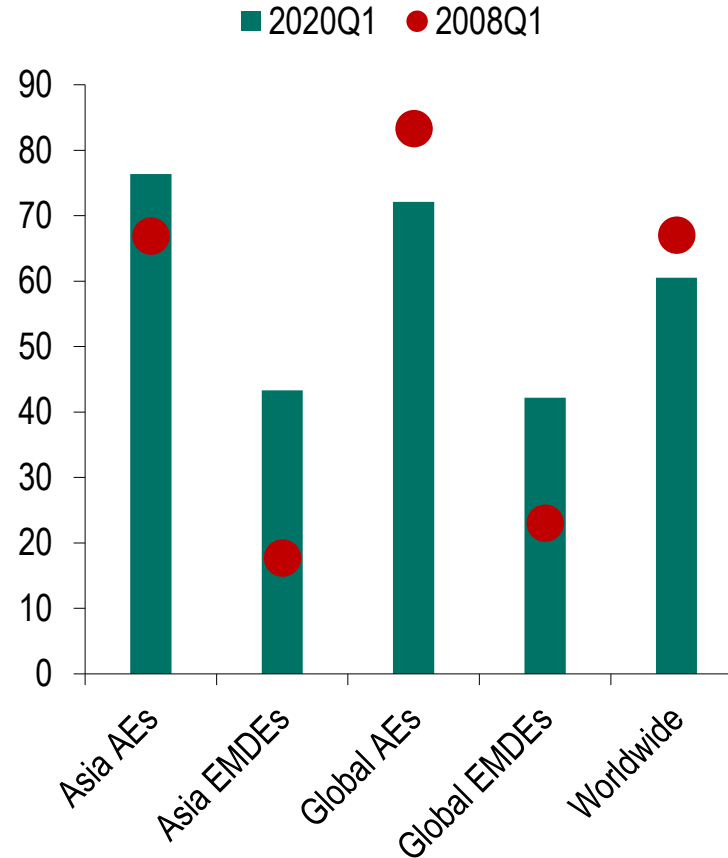- ■ Technological diffusion effects
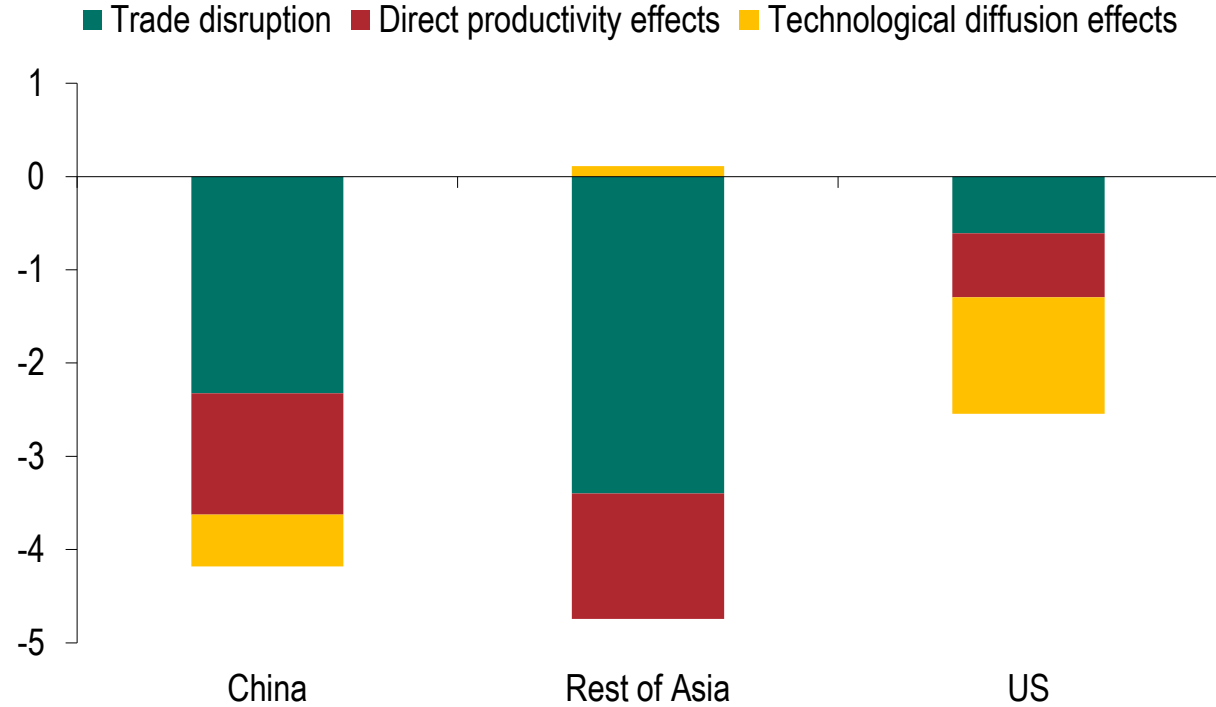
Source: IMF staff estimations.
Note: Simulations based on IMF Global Integrated Monetary and Fiscal Model (GIMF) to estimate real GDP impact of a new steady state with lower China-OECD high-tech trade. Three channels: loss of trade, lower productivity due to resource misallocation, and forgone productivity gains due to lack of technology spillovers (diffusion channel).

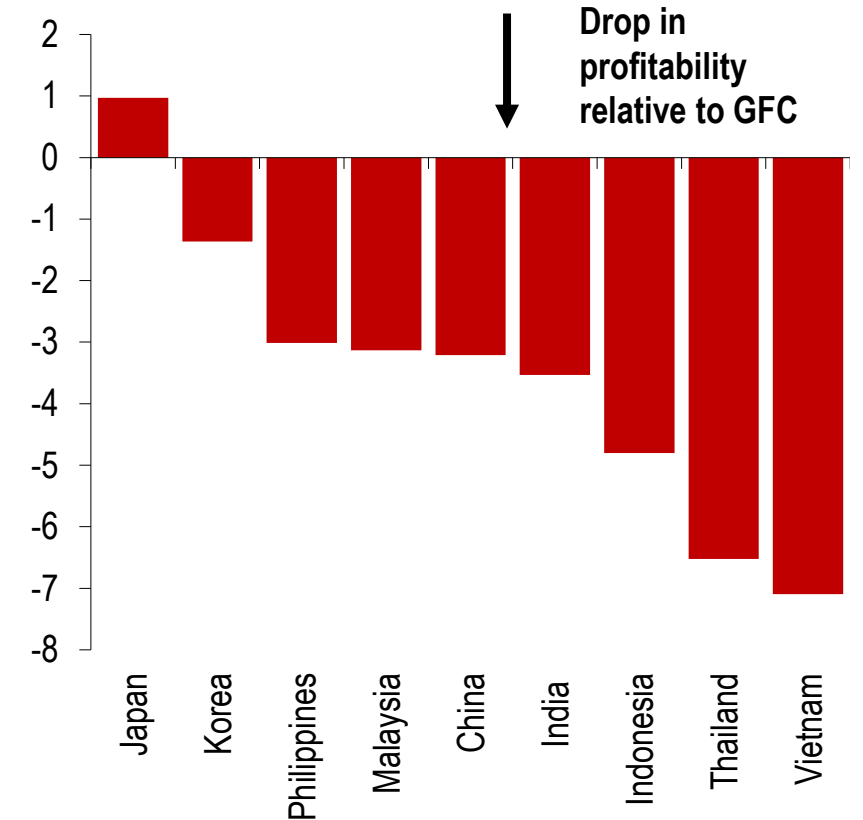# Household and corporate balance sheets are leveraged

Corporate Debt
(percent of GDP)

■ 2020Q1 ● 2008Q1

Sources: BIS and IMF staff calculations.
Note: Asia includes China, India, Indonesia, Malaysia, Thailand, Australia, Hong Kong SAR, Japan, Korea, New Zealand and Singapore. Data available as of November 10, 2020.

Household Debt
(percent of GDP)

■ 2020Q1 ● 2008Q1

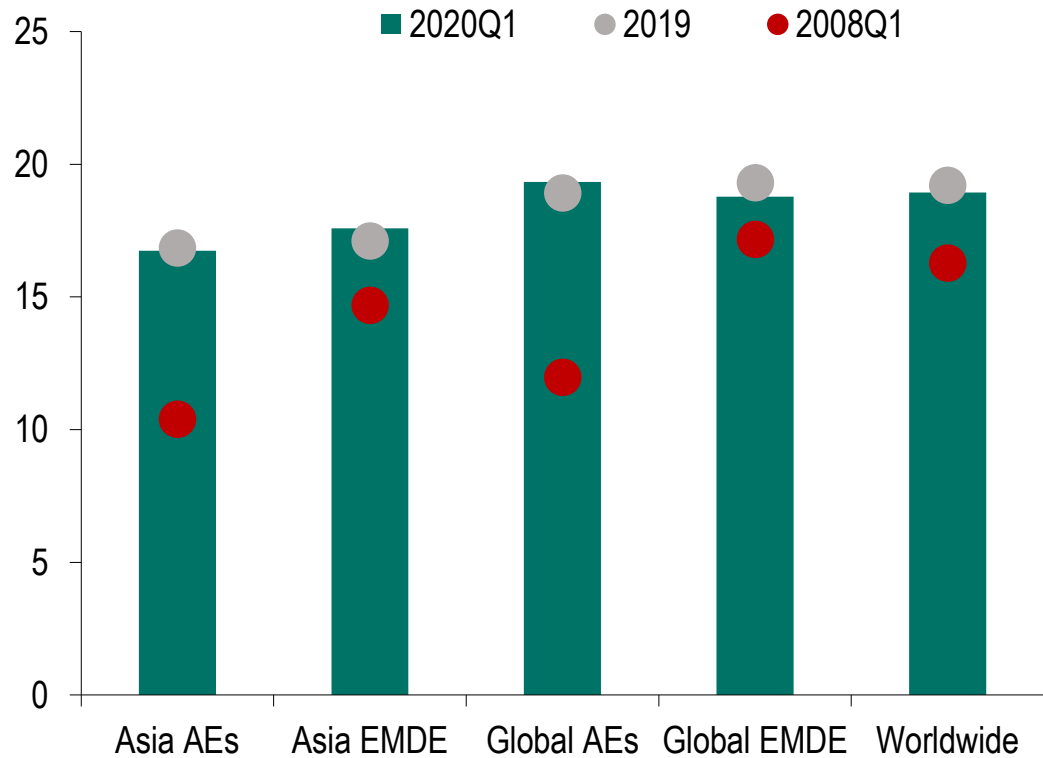Sources: BIS and IMF staff calculations.
Note: Asia includes China, India, Indonesia, Malaysia, Thailand, Australia, Hong Kong SAR, Japan, Korea, New Zealand and Singapore. Data available as of November 10, 2020.

Profitability: Global Financial Crisis (GFC) a
(percent, EBIT/Total Asset, weighted average)

Drop in profitability relative to GFC

Sources: Bauer, A. et. al, forthcoming.

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Financial sector vulnerabilities are also rising

Capital Adequacy Ratio
(percent)

Legend: ■ 2020Q1 ● 2019 ● 2008Q1
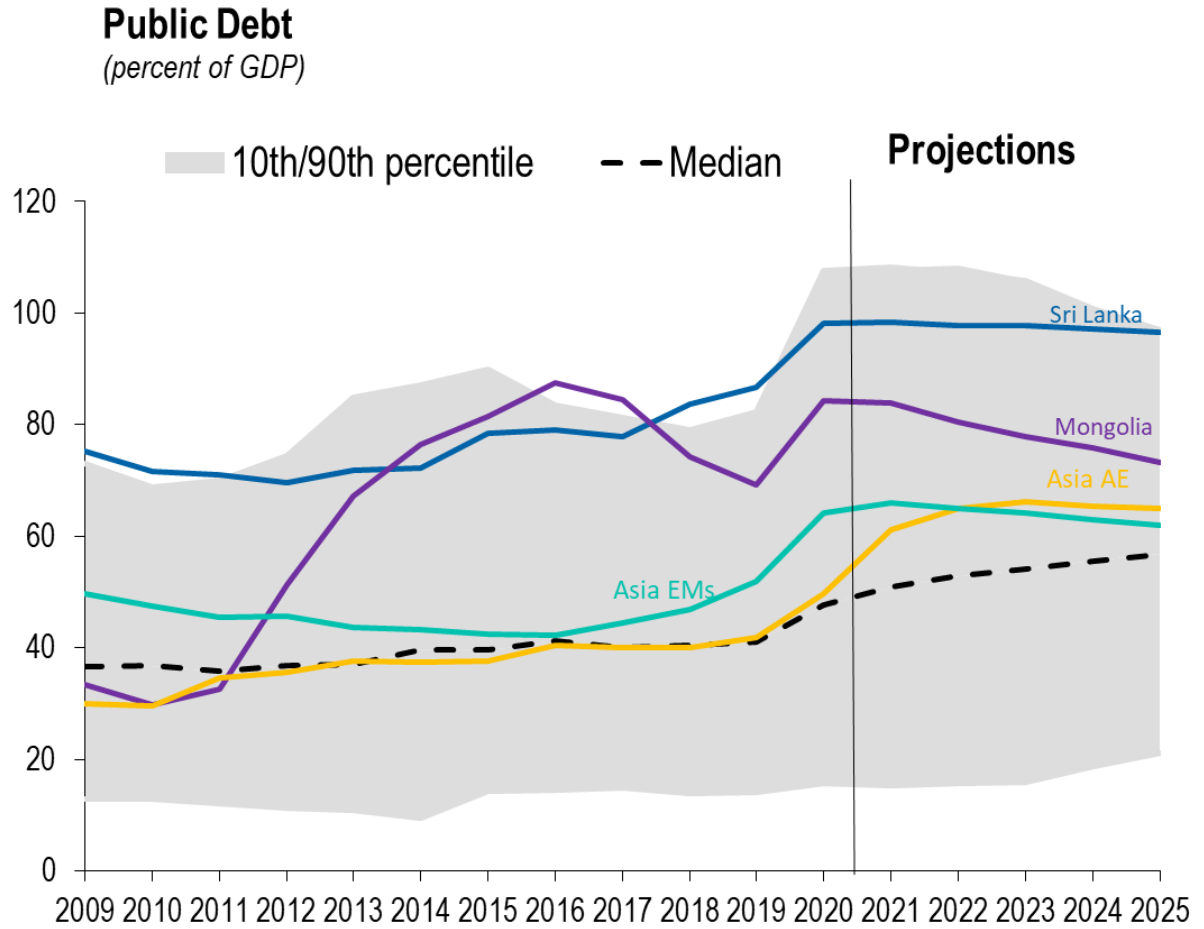
Categories: Asia AEs, Asia EMDE, Global AEs, Global EMDE, Worldwide

Source: Financial Soundness Indicators, IMF.
Note: Data available as of November 10, 2020.

Non-performing Loans *(percent)*

Legend: ■ 2020Q1 ● 2019

Categories: Asia AEs, Asia EMDE, Global AEs, Global EMDE, Worldwide
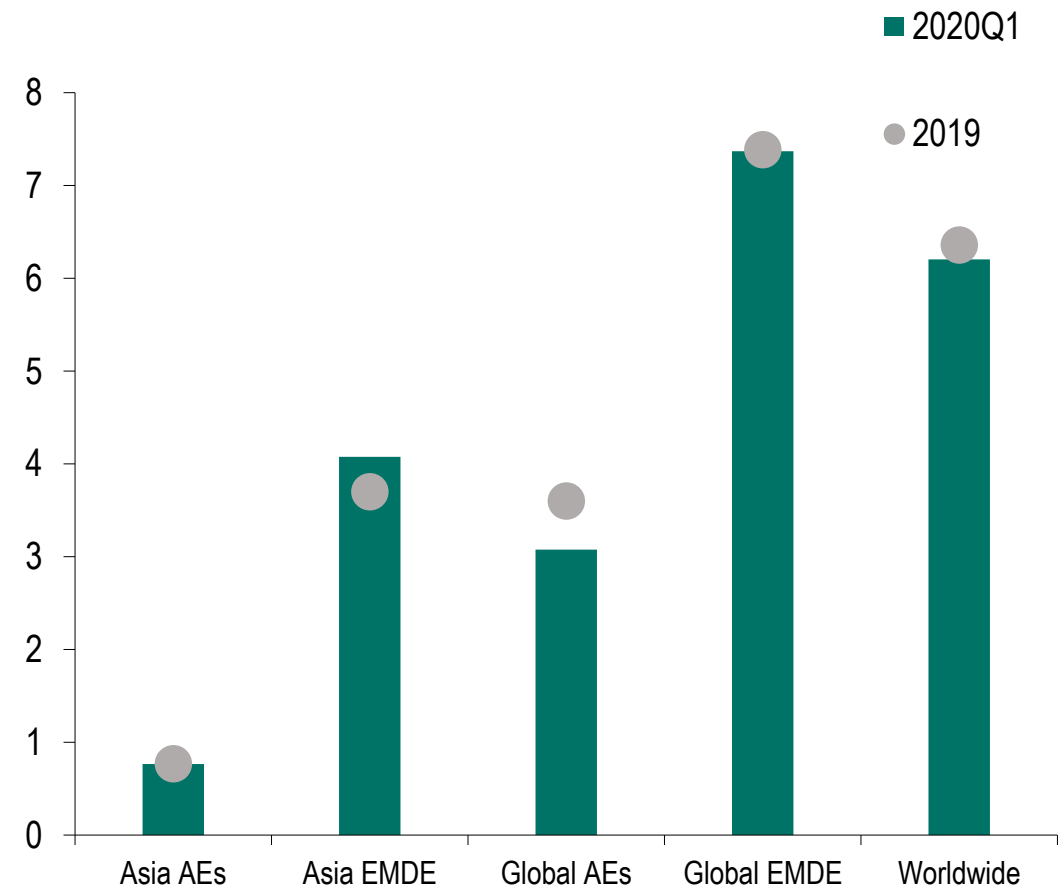
Source: Financial Soundness Indicators, IMF.
Note: Data available as of November 20, 2020.

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Public debt sustainability is deteriorating

Public Debt
(percent of GDP)

Legend: 10th/90th percentile — Median — Projections

Lines: Sri Lanka, Mongolia, Asia AE, Asia EMs

Sources: World Economic Outlook, and IMF staff calculations.
Note: The regional aggregates are calculated as median for a given year.

## Downgrade in Sovereign Ratings or Outlook
(number of countries)

Legend: Rating (red), Outlook (yellow)

Categories: Asia AE's, Asia EM's
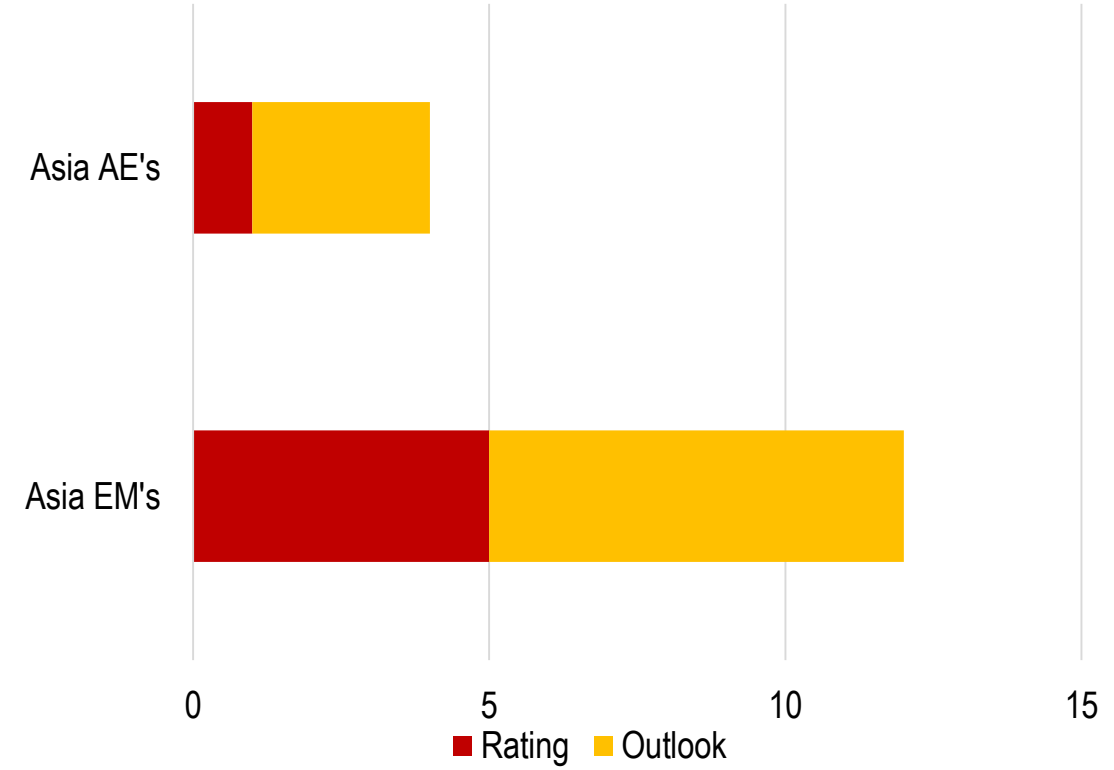
Sources: S&P, Moody's, and Fitch.
Note: Includes downgrades in 2020. Data as of September 30, 2020.
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Rising inequality increases risk of social unrest

Average response net Gini to a pandemic for 175 countries, 1961-2017
(with 90 percent CI; change in gini net; percent)

Marginal Effect of Net Gini on Civil Disorder
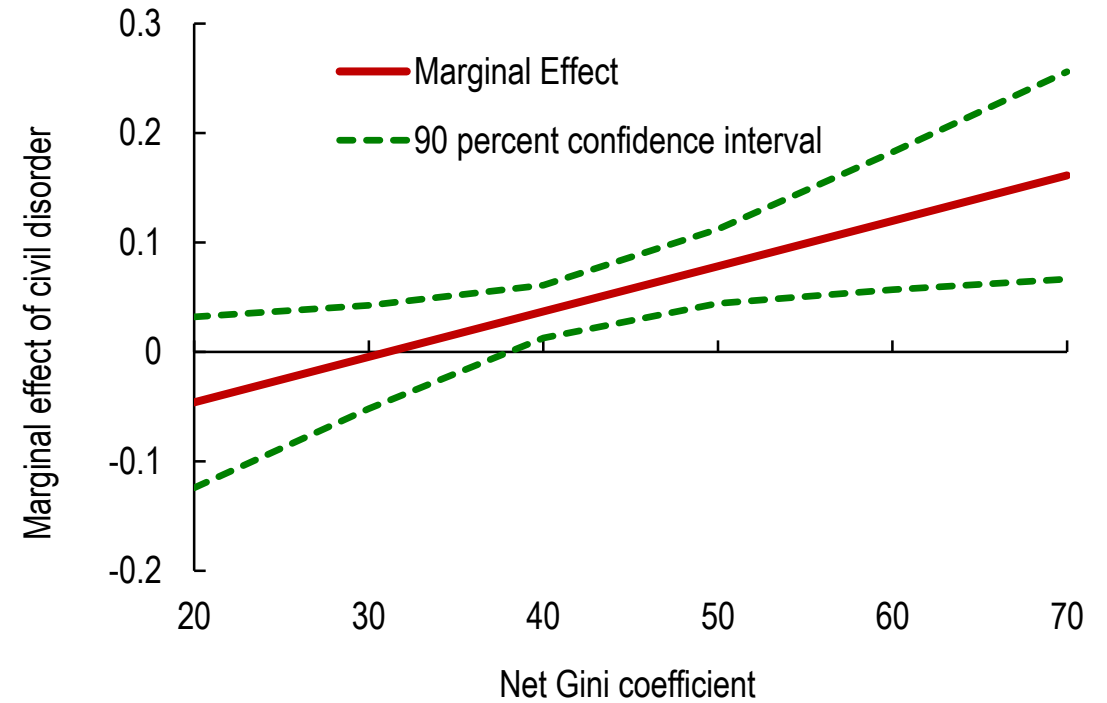*(with 90 percent CI; ICRG sign inverted)*
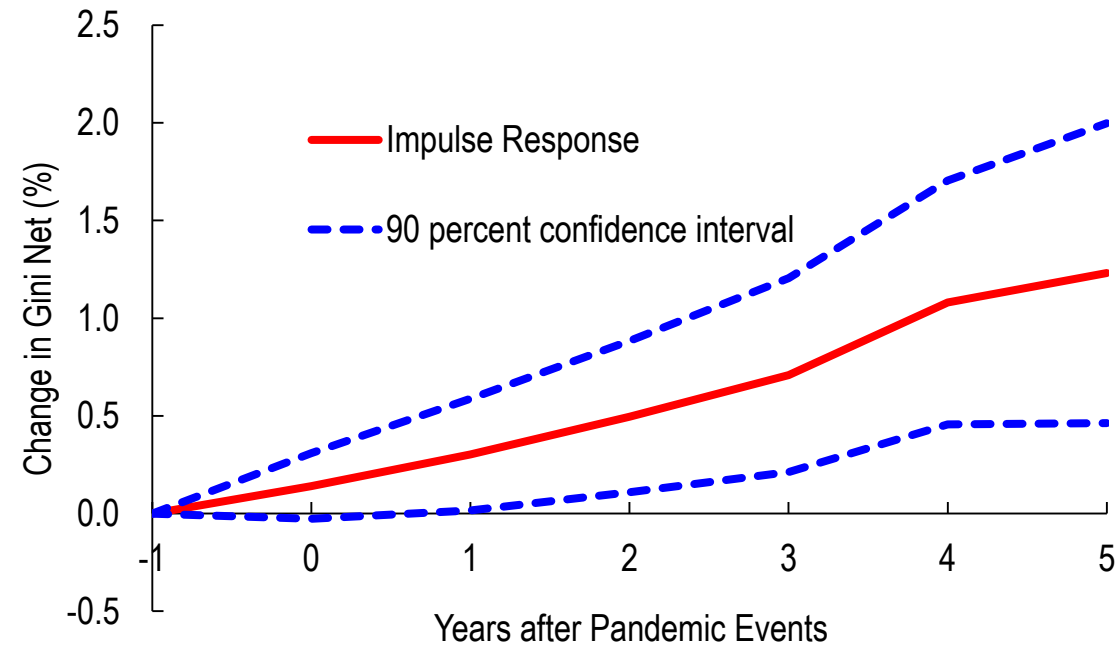
Source: Furceri, Loungani, Ostry and Pizzuto (2020).
Note: The chart estimates the average change in net Gini associated with a pandemic (impulse response functions and 90 percent confidence bands estimated using a sample of 175 countries over 1961-2017).

Source: ICRG and IMF staff calculations.
Note: Civil Disorder measures the potential risk to governance or investment from mass protest, such as anti-government demonstrations, strikes, etc. The score ranges from 0-4, where higher score means lower disorder. Given a non-linear relationship, the marginal effect of a 1-point (out of 100) increase in net Gini on Civil Disorder varies with the level with net Gini. Figure shows marginal effect of an increase in net Gini and 90 percent confidence intervals around the point estimates.
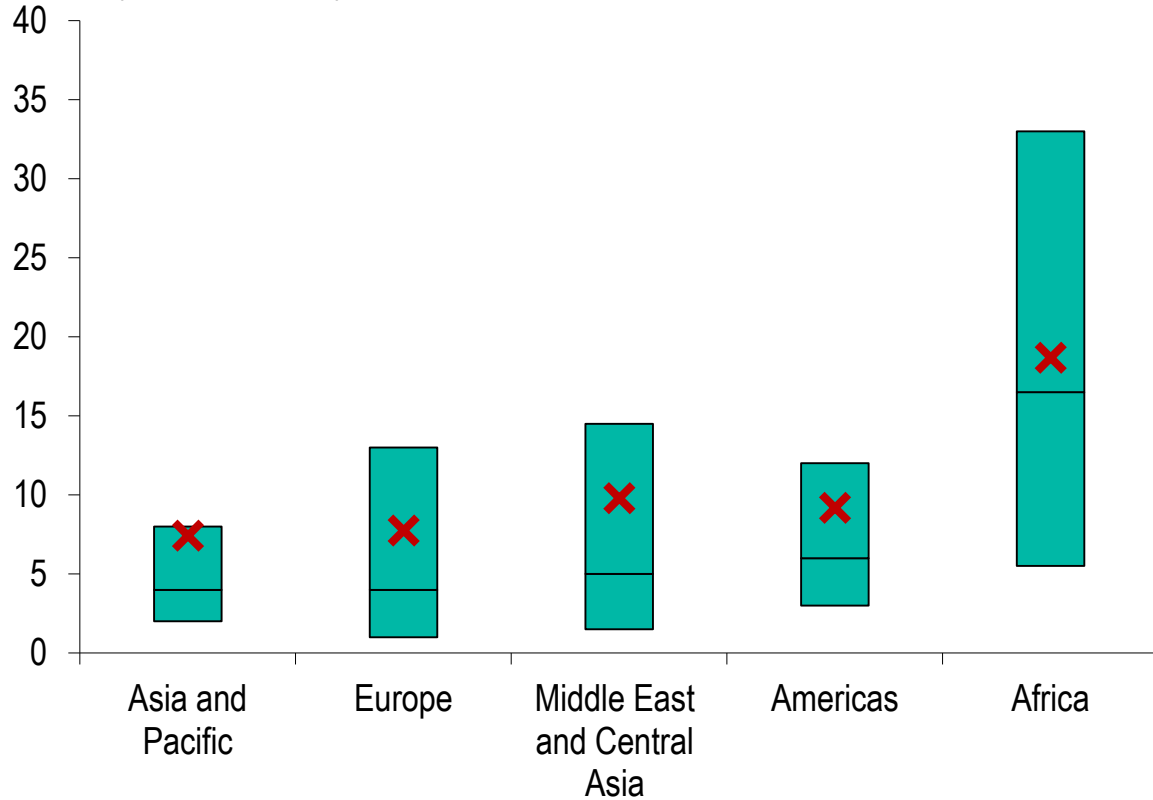
Early Lessons and Policy Recommendations

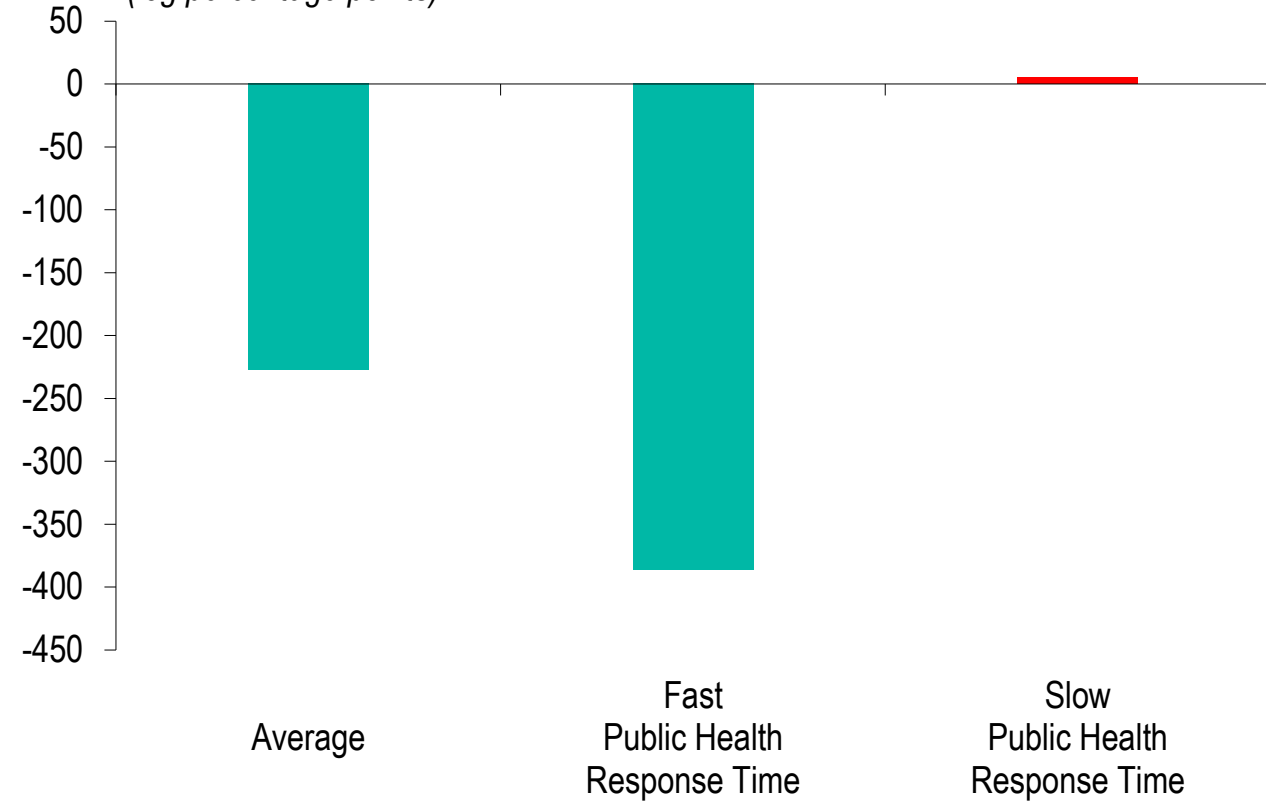# Better outcomes with faster public health response...

Public Health Response Time
(number of days)

Confirmed Cases, Deviation from Baseline
(log percentage points)

Source Deb, Furceri, Ostry and Tawk (2020a).
Note: Public Health Response Time (PHRT) is measured as the number of days it took a country to implement containment measures (excluding restrictions on international travel) after a significant outbreak. The horizontal line inside each box represents the median; the upper and lower edges of each box show the top and bottom quartiles, respectively. X is the mean.
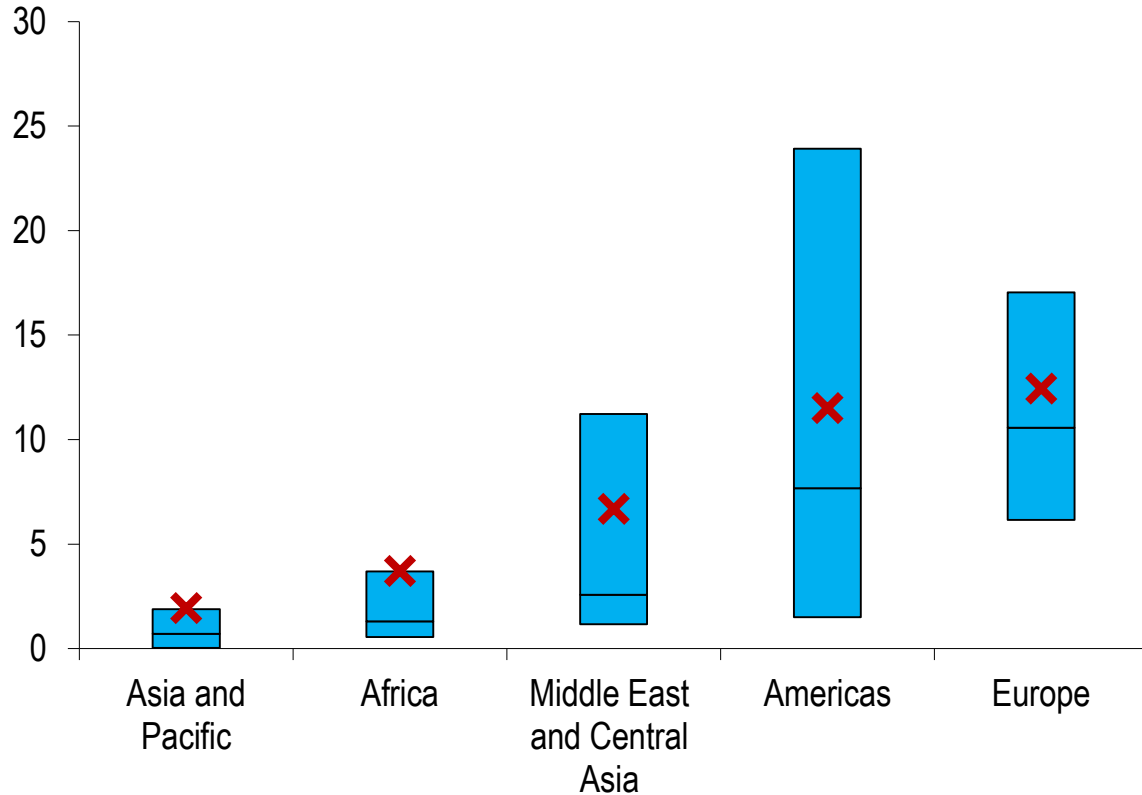
Source: Deb, Furceri, Ostry and Tawk (2020a).
Note: The bars show the cumulative impact after 30 days on the number of coronavirus disease infections to a unitary tightening of containment measures relative to a baseline of no containment.

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...and well-timed exits

New Cases at Time of Exit
(per million people, 7-day moving average)

Industrial Production, Deviation from Baseline
(implied impact on industrial production 30 days after reopening, percent)
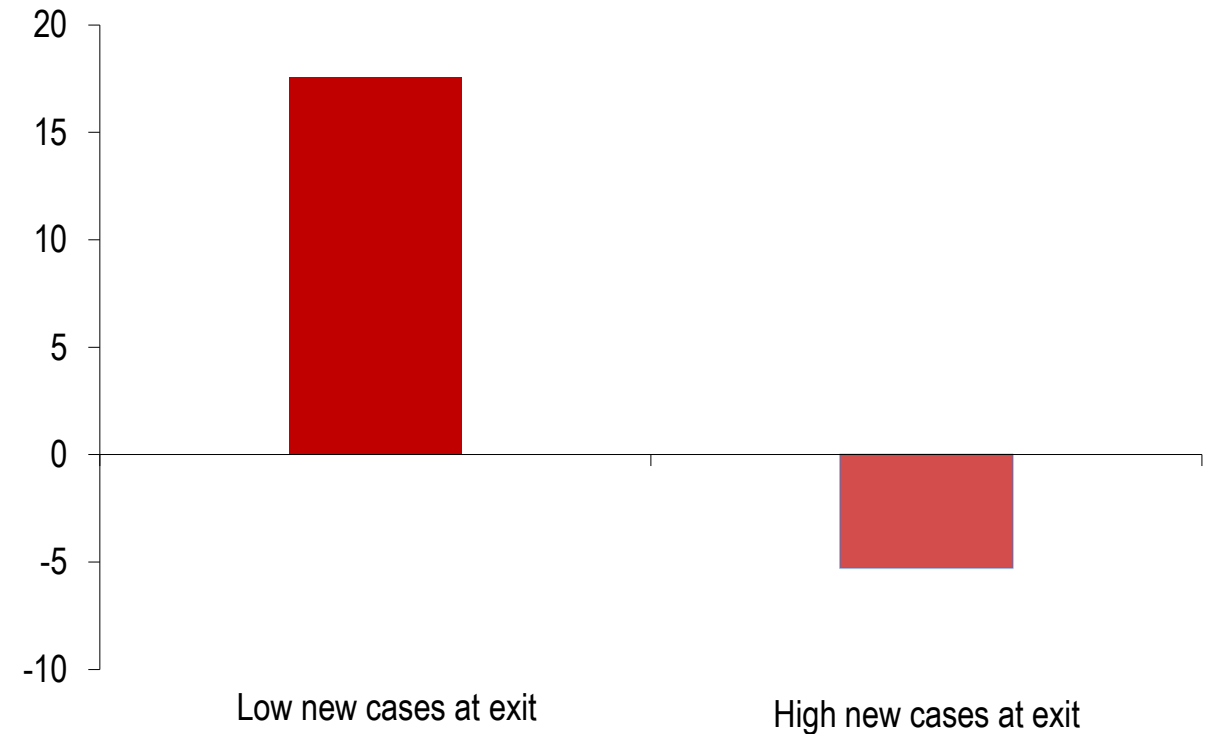

Source: Deb, Furceri, Ostry and Tawk (2020b).
Note: The horizontal line inside each box represents the median; the upper and lower edges of each box show the top and bottom quartiles, respectively. X is the mean.

Source: Source: Deb, Furceri, Ostry and Tawk (2020b).
Note: The bars show the impact after 30 days on industrial production (implied by changes in NO2 emissions) to a unitary easing of containment measures relative to a baseline of no change. Lighter shade indicates effects not statistically significant at 95% level.

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Effective containment, testing/tracing, healthcare are vital

Confirmed Cases, Deviation from Baseline
(30 days after relaxation of containment measures, log percentage points)

Testing and Tracing Policies at the time of exit

Policy recommendations

- ❖ **Strong containment (social distancing, enforceable self-quarantines)**
- ❖ **Increased capacity for accurate testing and timely and effective contact tracing**
- ❖ **Better healthcare systems: hospital capacity, medical equipment and service providers**
- ❖ **Vaccine distribution strategy**

Source: Deb, Furceri, Ostry and Tawk (2020a).

Note: The bars show the impact after 30 days on the number of COVID-19 coronavirus disease infections to a unitary easing in the containment measures relative to a baseline of no change. The first bar shows the average effect, and the other two bars highlight the impact under strong and weak testing and tracing policies at the time of easing of lockdowns. The figure is displayed in log percentage points.

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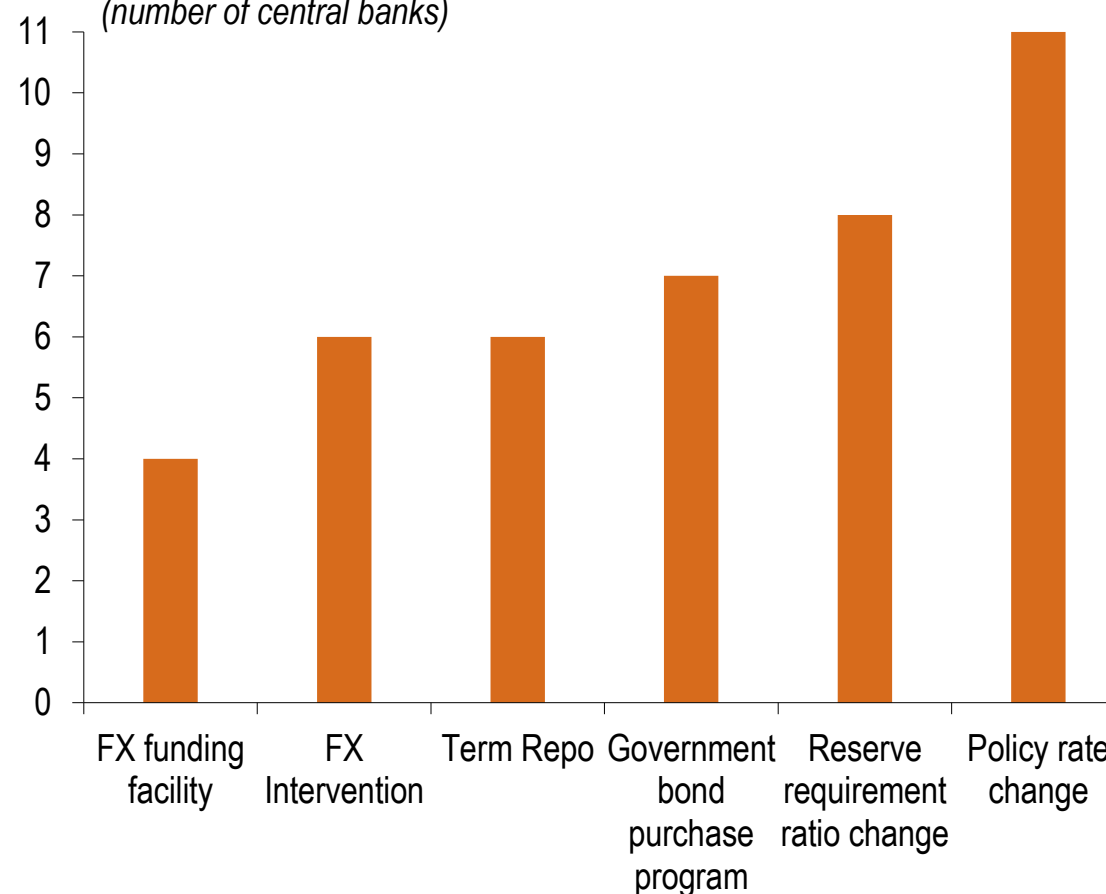# Large policy support provided, partly based on lessons from GFC

Fiscal Measures
(weighted average; percent of GDP)

Legend: above the line, below the line
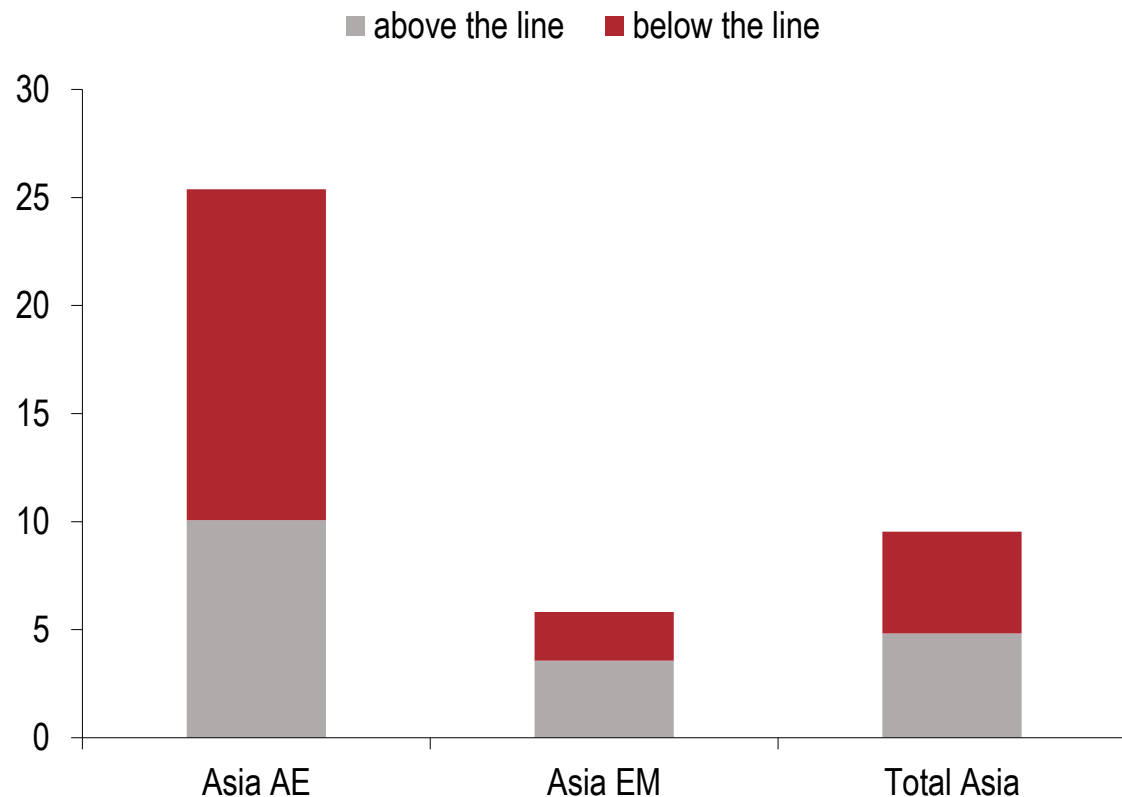
Central Bank Policy Actions, Selected Asia
(number of central banks)

Timely support has helped mitigate economic losses

Impact of Containment Policy on Industrial Production
(implied impact on industrial production after 30 days, percent)
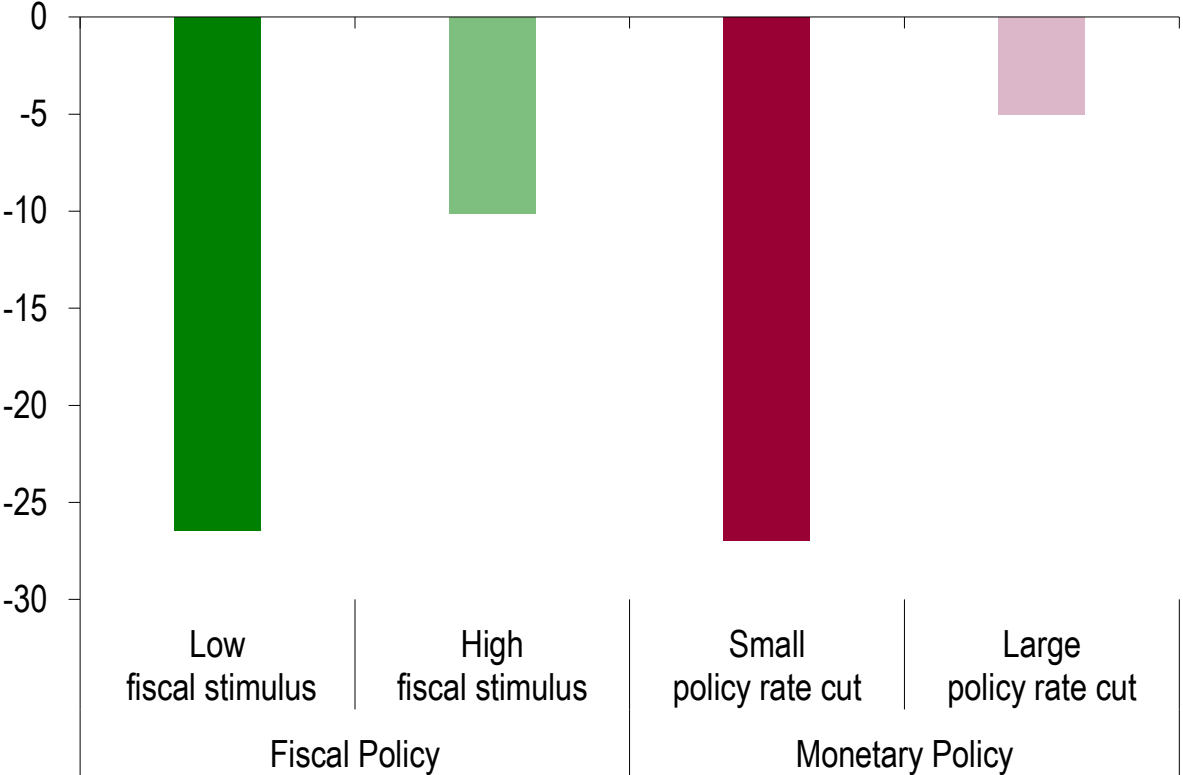
Low fiscal stimulus | High fiscal stimulus | Small policy rate cut | Large policy rate cut

Fiscal Policy | Monetary Policy

Impact of Fiscal Shocks on Industrial Production
(betas, percent)

Baseline | Low Mobility | Low Containment (Controlling for Mobility)

Source: Deb, Furceri, Ostry and Tawk (2020b).
Note: The bars show the impact after 30 days on industrial production (implied by changes in NO2 emissions) to a unitary tightening of containment measures relative to a baseline of no change.
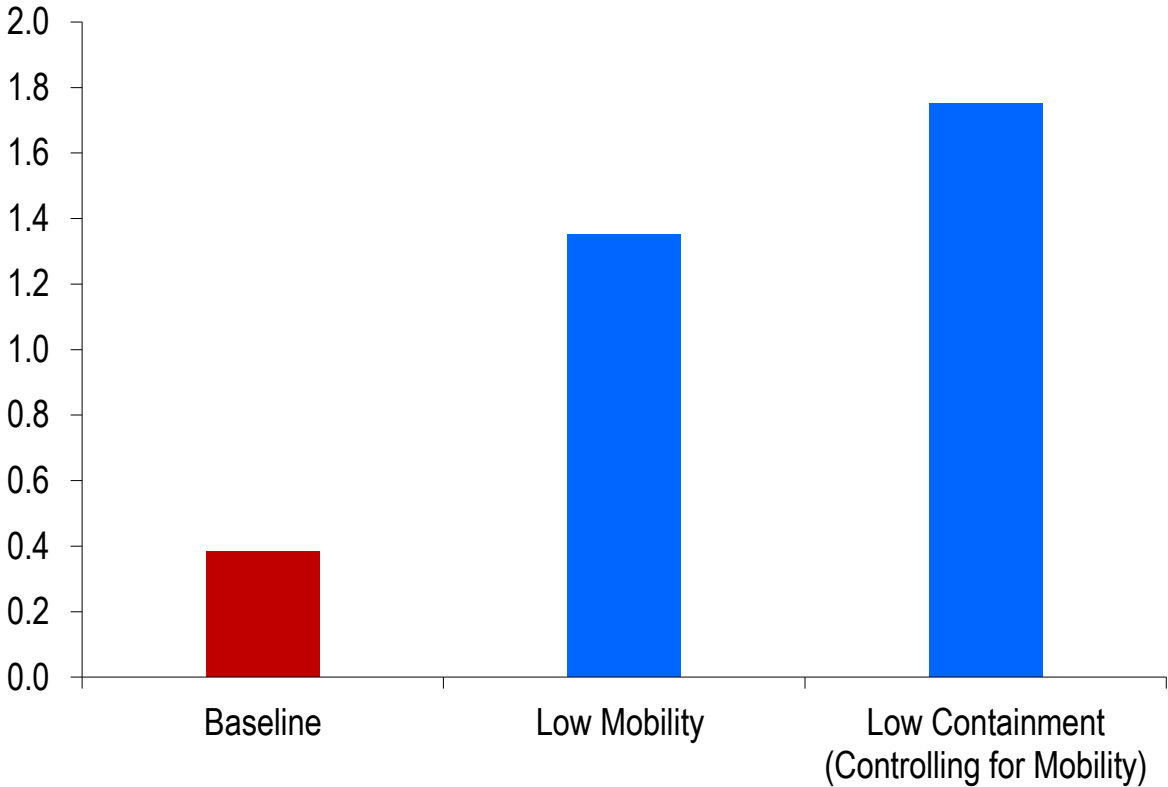
Source: Deb, Furceri, Ostry, Tawk and Yang (2020).
Note: Bars denote the impact (coefficients) of fiscal shocks on industrial production obtained from a panel regression of 39 countries from January 2020 to July 2020.

Macroeconomic policy priorities

Too much support is better than too little

Target fiscal support to the most vulnerable

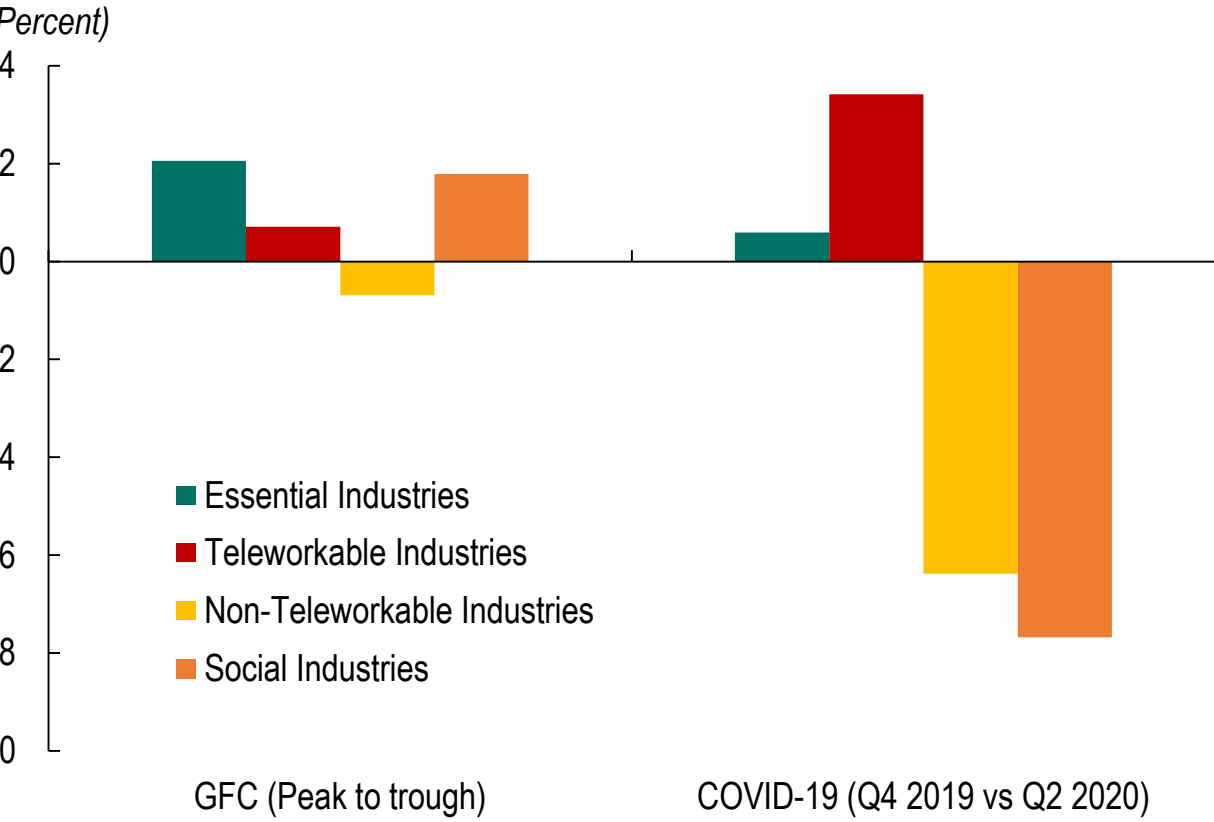Monetary policy, conventional and unconventional, remain supportive

Preempt debt problems early

Strategy to address corporate sector vulnerabilities

Strategy to reduce scarring, support resource reallocation

**Asia: Change in Employment by Industry Classification During Crises**
(Percent)

Legend:
- Essential Industries
- Teleworkable Industries
- Non-Teleworkable Industries
- Social Industries

X-axis: GFC (Peak to trough), COVID-19 (Q4 2019 vs Q2 2020)

❖ **Active labor market policies to encourage participation, reduce skill mismatch**

❖ **Upgrade insolvency frameworks to support corporate restructuring**

❖ **Prioritize green investment and technological infrastructure**

Source: Haver Analytics and IMF Staff Calculations.
Note: Data available as of September 30, 2020.

International cooperation

Pre-ordered vaccines by country
(per capita)
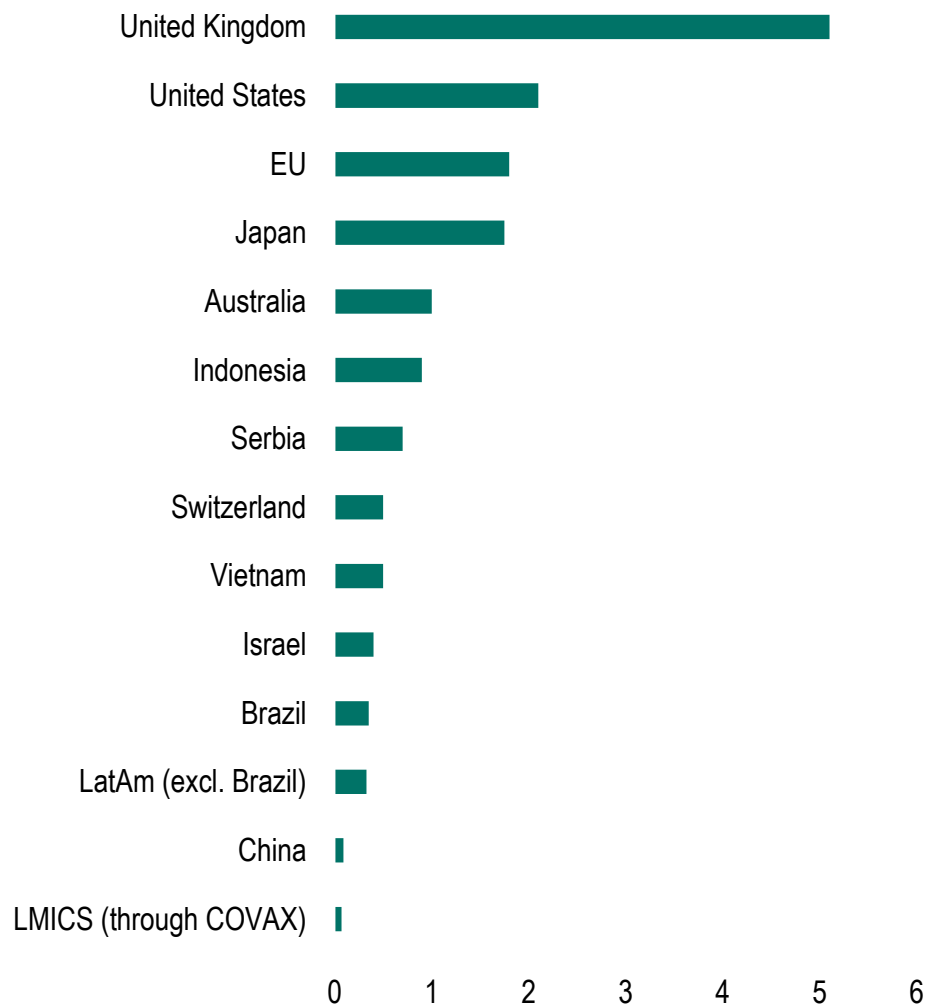
❖ **Make vaccines and treatment available**

❖ **For countries with limited healthcare capacity, provide assistance with medical equipment and knowhow**

❖ **Financial assistance for the most vulnerable countries, notably the Pacific islands in the Asia-Pacific region**

❖ **Defuse trade tensions**

Main Conclusions

A multi-speed recovery but the pandemic is far from over. Downside risks are large.

Policy support needed until recovery entrenched: strong healthcare and containment; targeted, sustainable public spending; supportive monetary policy.

Important to monitor elevated credit risks and tighten macroprudential policies in line with recovery.

Imperative to reduce scarring by facilitating resource reallocation and promote green and inclusive growth.

Thank you