REGIONAL ECONOMIC OUTLOOK

ASIA AND PACIFIC

ASIA AND PACIFIC DEPARTMENT

A YEAR OF DIFFICULT TRADE-OFFS

SINGAPORE TRAINING INSTITUTE

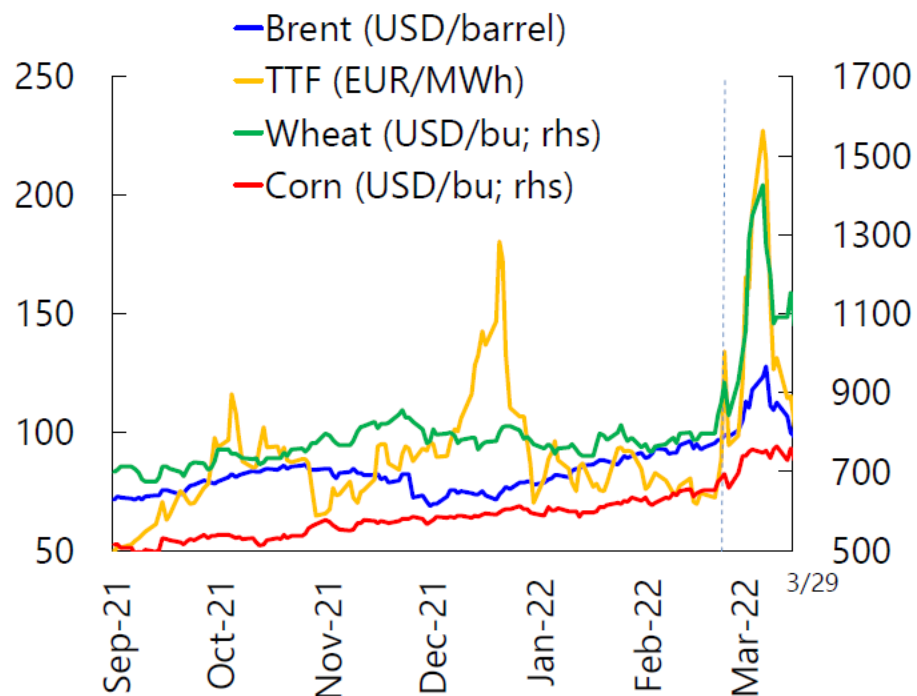## APRIL 27, 2022

Recent Developments

The Ukraine war: an "economic earthquake"

Epicenter: Russia and Ukraine

(Real GDP 2022 revision, in percentage points; April 2022 WEO vs Jan 2022 WEO)

Seismic waves

- **Commodities prices surge and volatility**

- **Trade flows, supply disruptions, remittances and refugee crisis**
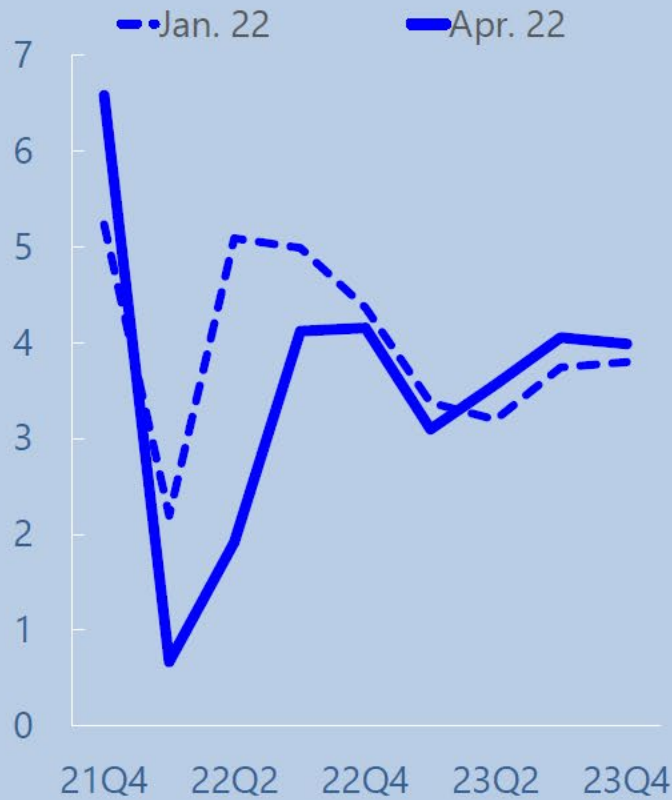
- **Financial conditions tightening**

Legend:
- Brent (USD/barrel)
- TTF (EUR/MWh)
- Wheat (USD/bu; rhs)
- Corn (USD/bu; rhs)

Shift in tectonic plates

- **Challenges to the geopolitical order and possible emergence of economic and geopolitical blocks**

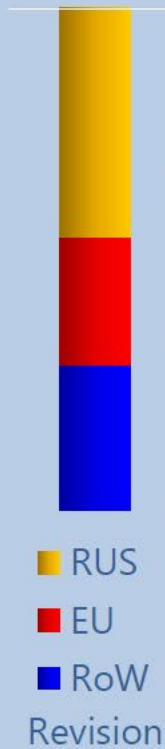Sources: IMF, *World Economic Outlook*; Bloomberg, L.P.; Haver Analytics; IMF, *Primary Commodity Price System;* and IMF staff calculations.

A global recovery shaken by war

Supply shock: Slowing growth and higher inflation

2022 Growth path
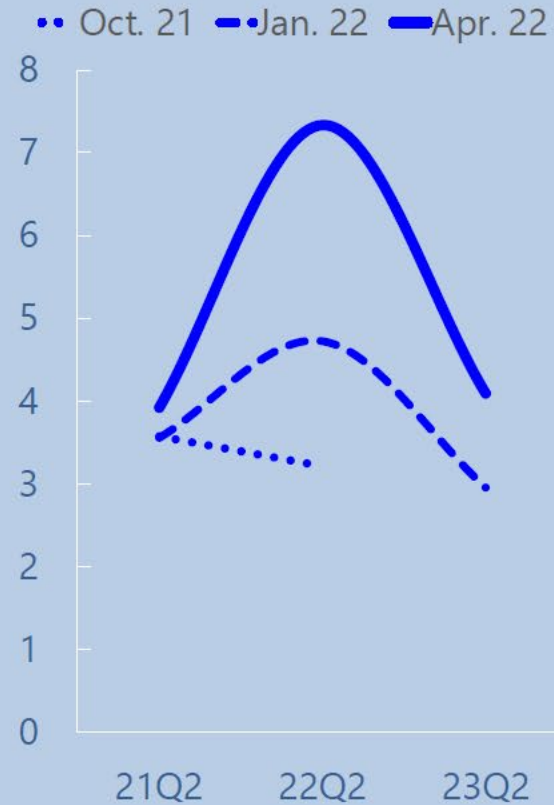(percentage points; qoq annualized)
- - - Jan. 22   —— Apr. 22

2022 Total revision

Projected inflation path
(percent; yoy)
···· Oct. 21   - - Jan. 22   —— Apr. 22

Legend for Total revision chart:
- RUS (yellow)
- EU (red)
- RoW (blue)

Risks to the downside

- War escalation: disruptions to commodity markets, supply chains, refugee crisis. Possible social unrest.
- More lethal COVID variants, worsening slowdown in China.
- De-anchored inflation expectations: higher interest rates and debt distress

Policies

- Calibrate monetary policy to fight inflation while safeguarding recovery.
- Act decisively to prevent inflation expectations from de-anchoring.
- Prioritize fiscal support to the most vulnerable while maintaining fiscal soundness.
- Multilateral co-operation critical

Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

Growth projections: Advanced economies
(percent change from a year earlier)

|	World	Advanced Economies	U.S.	Euro Area	Japan	U.K.	Canada	Other Advanced Asia
2021	**6.1**	**5.2**	**5.7**	**5.3**	**1.6**	**7.4**	**4.6**	**5.2**
Revision from Jan. 2022	0.2	0.2	0.1	0.1	0.0	0.2	-0.1	0.3
2022	**3.6**	**3.3**	**3.7**	**2.8**	**2.4**	**3.7**	**3.9**	**3.0**
Revision from Jan. 2022	-0.8	-0.6	-0.3	-1.1	-0.9	-1.0	-0.2	-0.3
2023	**3.6**	**2.4**	**2.3**	**2.3**	**2.3**	**1.2**	**2.8**	**2.9**
Revision from Jan. 2022	-0.2	-0.2	-0.3	-0.2	0.5	-1.1	0.0	0.2

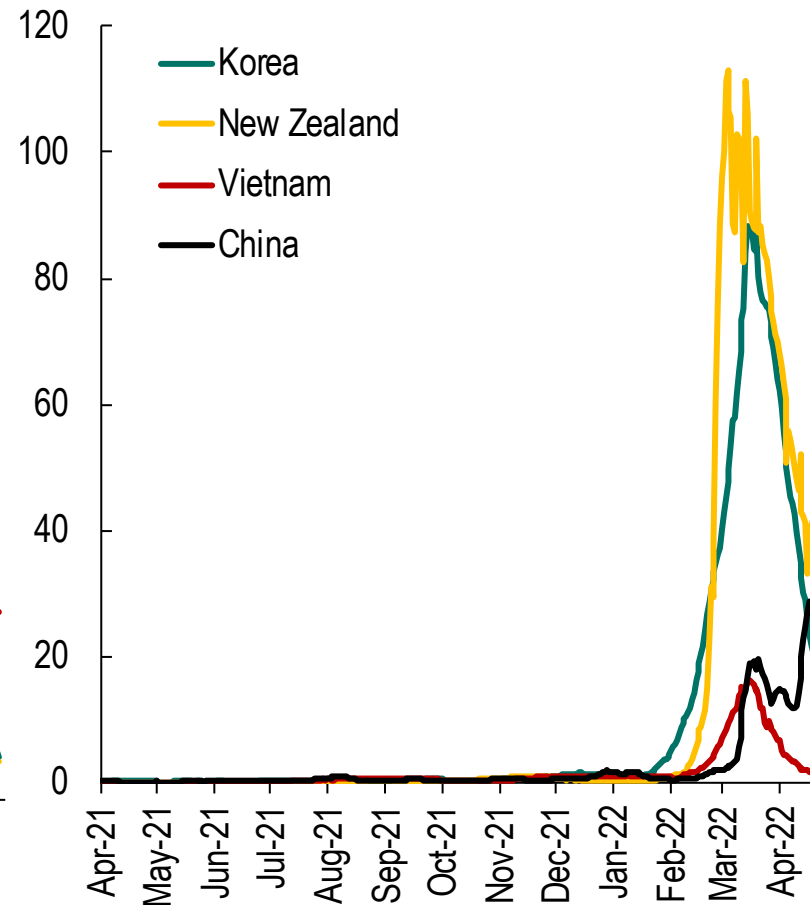Source: IMF, April 2022 *World Economic Outlook.*

Omicron wave has hit Asia, but limited impact on mobility amid high vaccination rates

Covid-19 cases per 100,000 inhabitants
(7-day moving average)
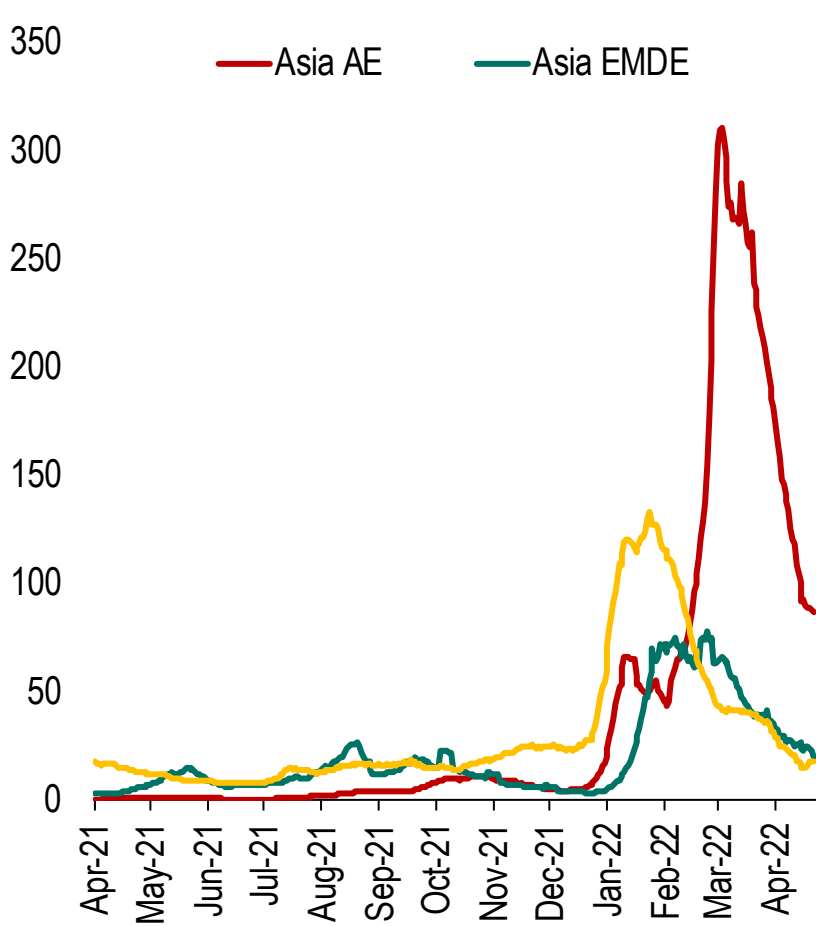
Sources: Johns Hopkins University and IMF staff calculations.
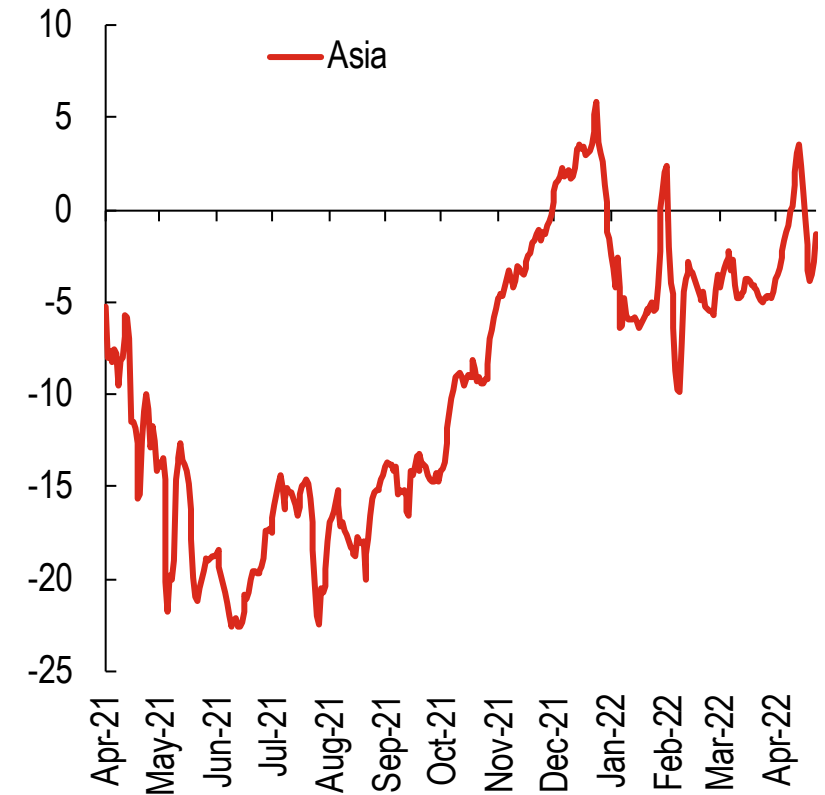Note: Data as of April 25, 2022.

Covid-19 cases relative to 2021 peaks
(7-day moving average; 2021 peak=1)

Sources: Johns Hopkins University, CEIC and IMF staff calculations.
Note: Data as of April 25, 2022.

Mobility in Asia
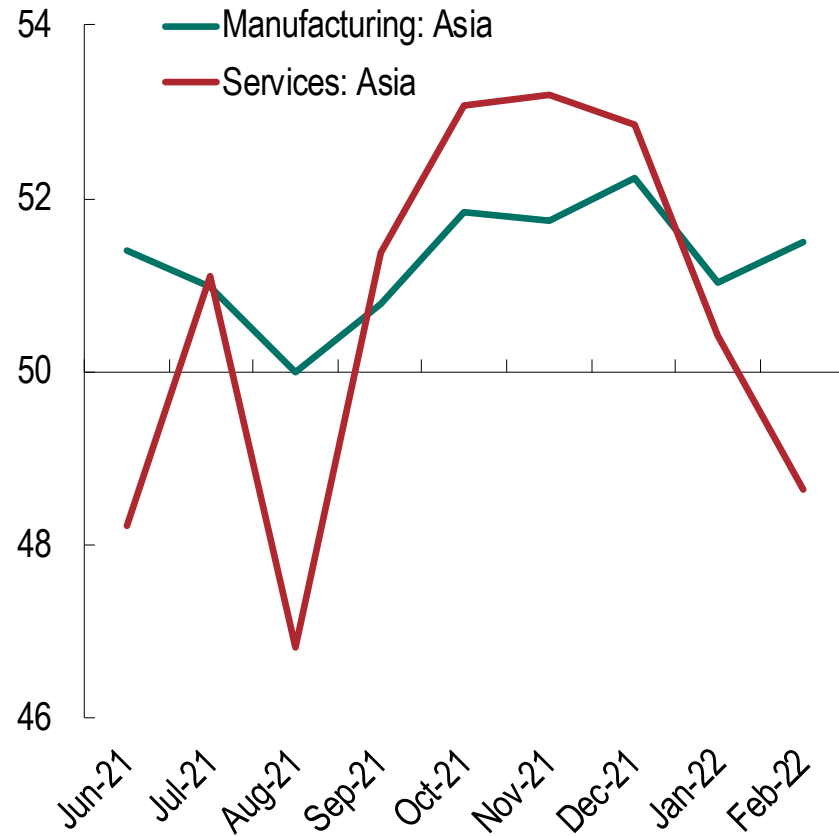*(Percent deviation from baseline during Jan 3 - Feb 6 2020, 7-day MA)*

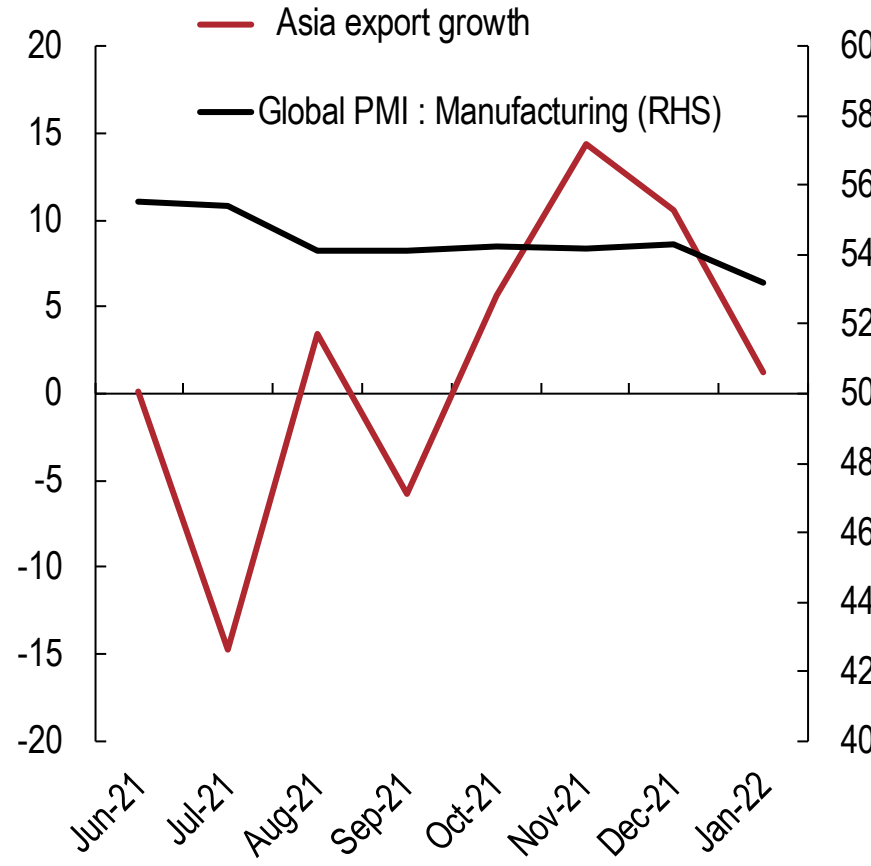Source: Google COVID-19 Community Mobility Report and IMF staff calculations.
Note: The figure display the 7-day moving average of overall mobility, defined as percentage change from pre-pandemic baselines. Computed as the mean of the following categories: retail, grocery and pharmacy, transit and workplaces. Median within Asia. Data as of April 25, 2022.

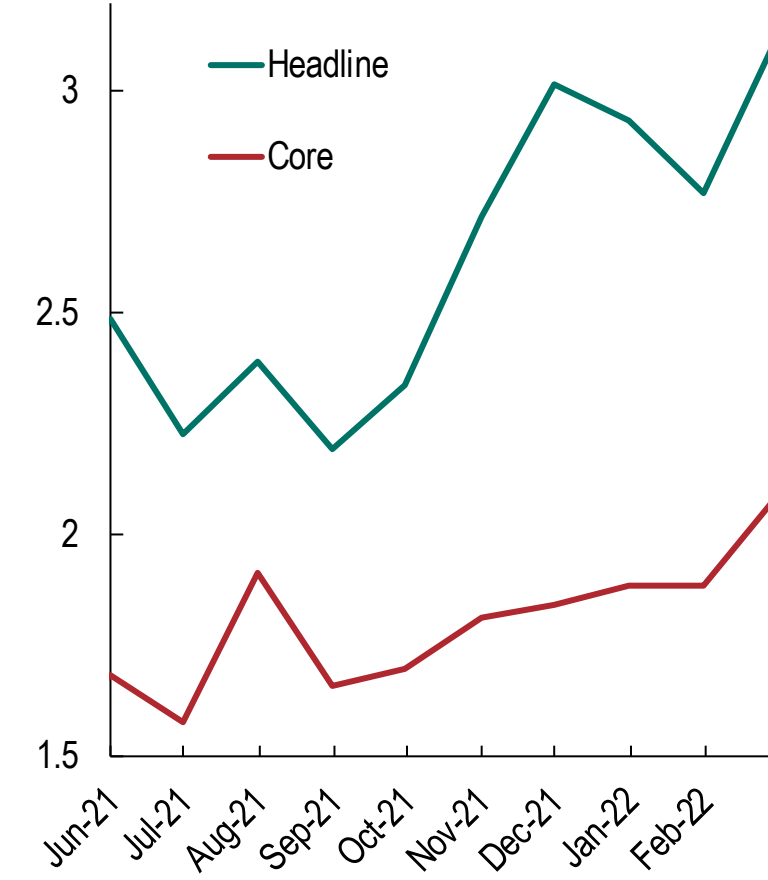# Growth in Asia has been strong despite omicron driven by strong external demand, and inflation is rising

Asian PMI
(50+ = expansion)

Source: Haver and IMF staff calculations.
Note: Asia aggregates Australia, China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Taiwan Province of China, and Vietnam.

Global PMI and Asia export growth
*(LHS M-o-M export volumes growth; RHS, 50+=expansion)*

Source: Haver Analytics and IMF staff calculations.
Note: Asia exports volume growth, 3-month moving average annualized. Global PMI Manufacturing Index from JP Morgan. Asian exports include: China, Hong Kong SAR, Indonesia, Japan, Korea, Malaysia, Singapore, Taiwan Province of China, and Thailand.

Inflation in Asia
(Percent, CPI inflation; year-on-year)

Sources: Haver Analytics and IMF staff calculations.
Note: Data as of March 31, 2022.

The war in Ukraine will impact the recovery

Commodity prices
(Index; April 2021=100)

Legend:
- Wheat
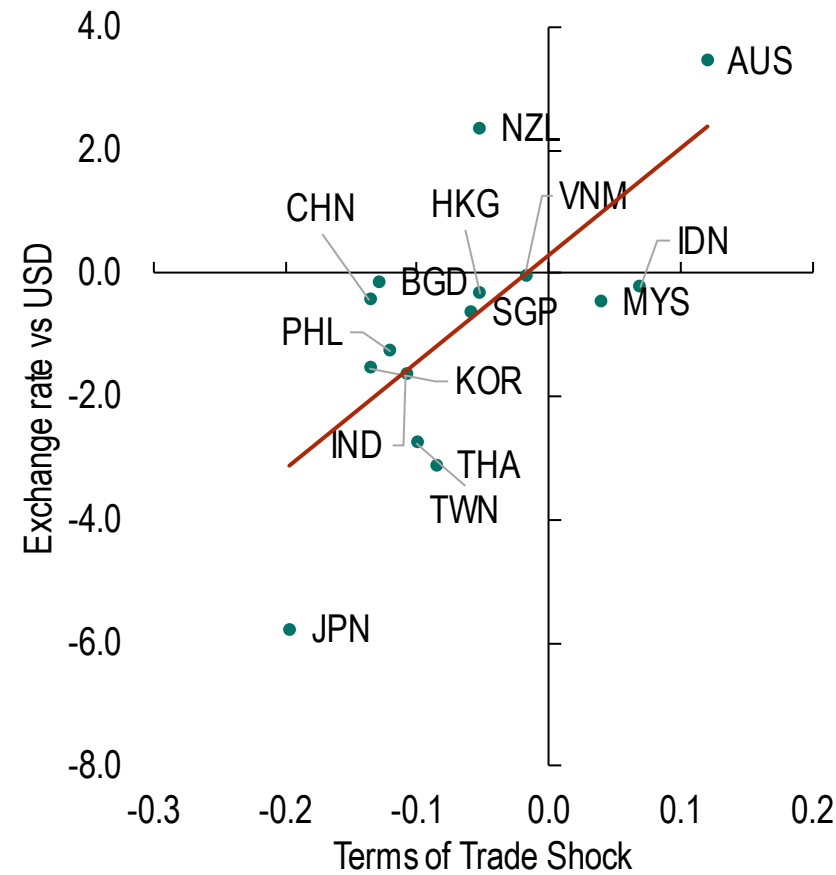- Metal
- WTI Crude
- Rice

Invasion of Ukraine
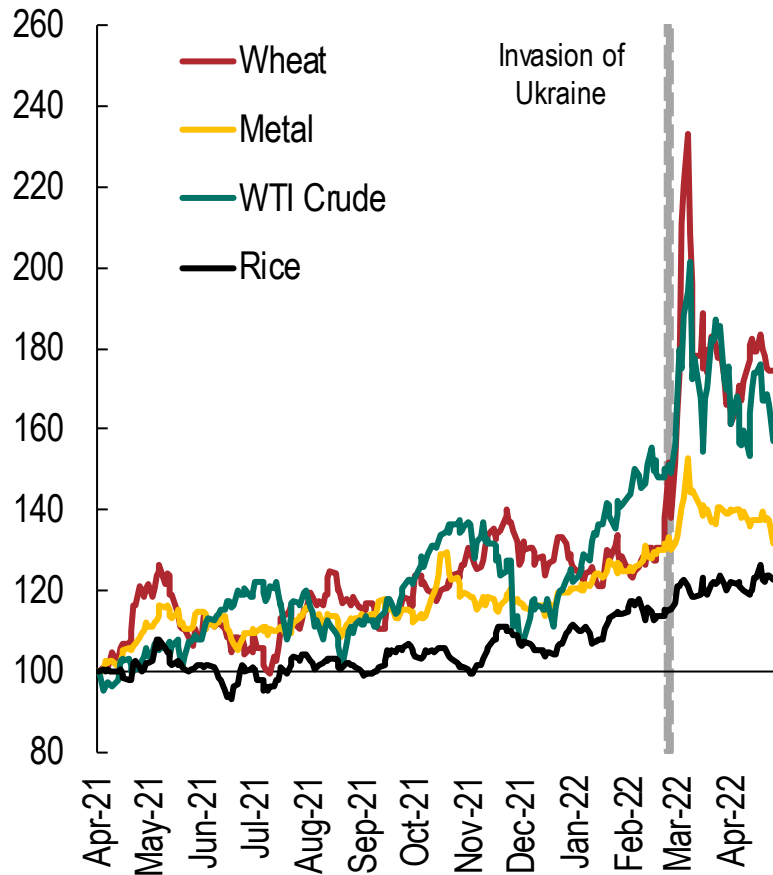
Source: Bloomberg LLP.
Note: Metals index based on Bloomberg Base Metals Spot Price Commodity Index with the following weights: Aluminum (45%), Copper (25%), Nickel (2%), Lead (12%), Zinc (15%), and Tin (1%). Data as of April 25, 2022.

## Exchange rate and commodity terms of trade
(Percent change)

Source: Gruss and Kebhaj (2019) and IMF staff calculations.
Note: Commodity Terms of Trade (ToT) based on international prices of 45 commodities which are weighted using commodity-level trade data for each country. ToT shock measured as projected change March-May 2022 compared to Dec 2021-February 2022. Exchange rates measured as of March 31 compared to February 23, 2022.

10-year yields and their long-term average
*(Percent)*

Legend:
- Latest
- Avg: 2010-2019
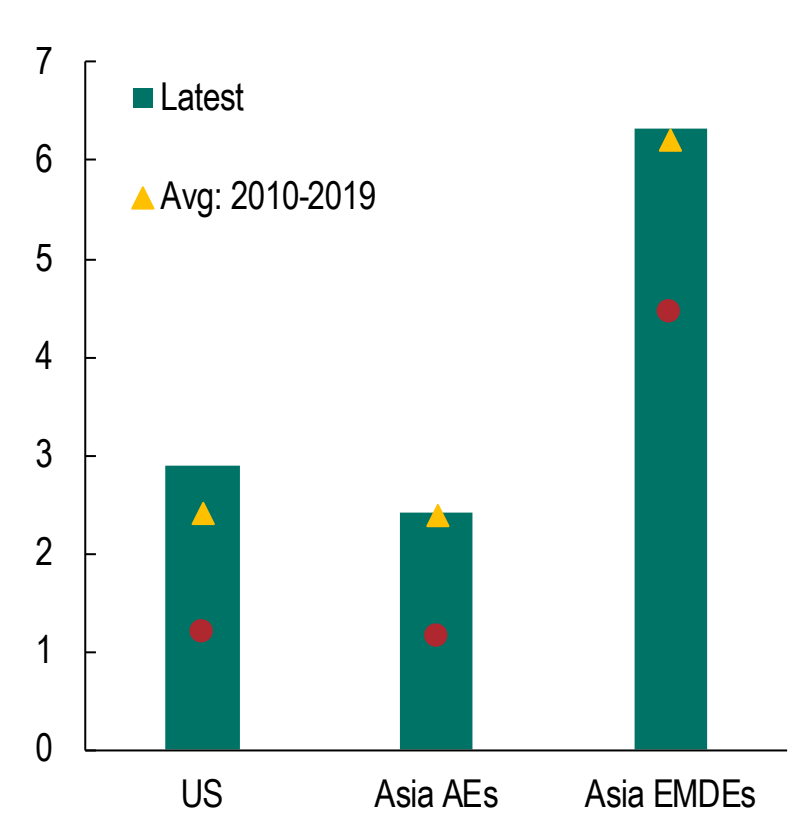
Source: Bloomberg LLP and IMF staff calculations.
Note: Simple average of 10-year yields. Asia EMDEs includes China, India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand and Vietnam. Asia AEs includes Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, and Taiwan Province of China. Data as of April 22, 2022.

Forecast

GDP growth forecasts
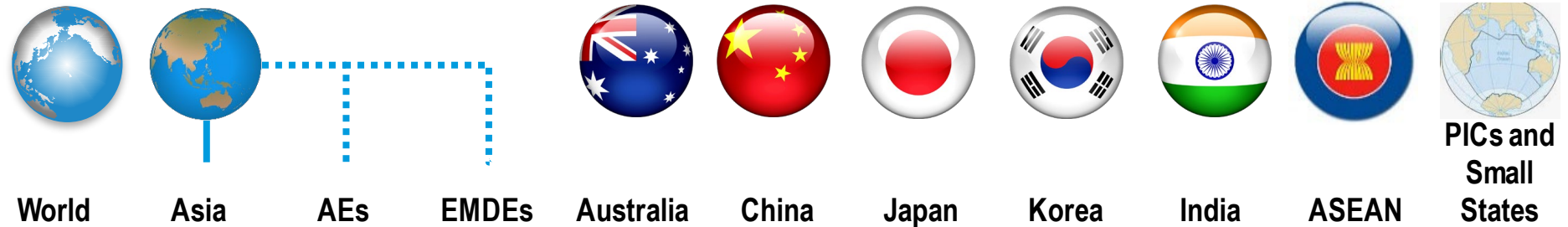
	World	Asia	AEs	EMDEs	Australia	China	Japan	Korea	India	ASEAN	PICs and Small States
2021	6.1	6.5	3.6	7.2	4.7	8.1	1.6	4.0	8.9	3.1	4.2
2022	3.6	4.9	2.7	5.4	4.2	4.4	2.4	2.5	8.2	5.1	4.7
Revision: Jan. 2022 to Apr. 2022	-0.8	-0.5	-0.6	-0.5	0.1	-0.4	-0.9	-0.5	-0.8	-0.2	-0.8
Revision: Oct. 2021 to Jan. 2022	-0.4	-0.3	-0.1	-0.4	0.0	-0.8	0.1	-0.3	0.5	-0.2	0.0
2023	3.6	5.1	2.7	5.6	2.5	5.1	2.3	2.9	6.9	5.6	5.4

Source: IMF World Economic Outlook, April 2022.

Asia, like much of the world, is seeing inflation surge even as growth weakens
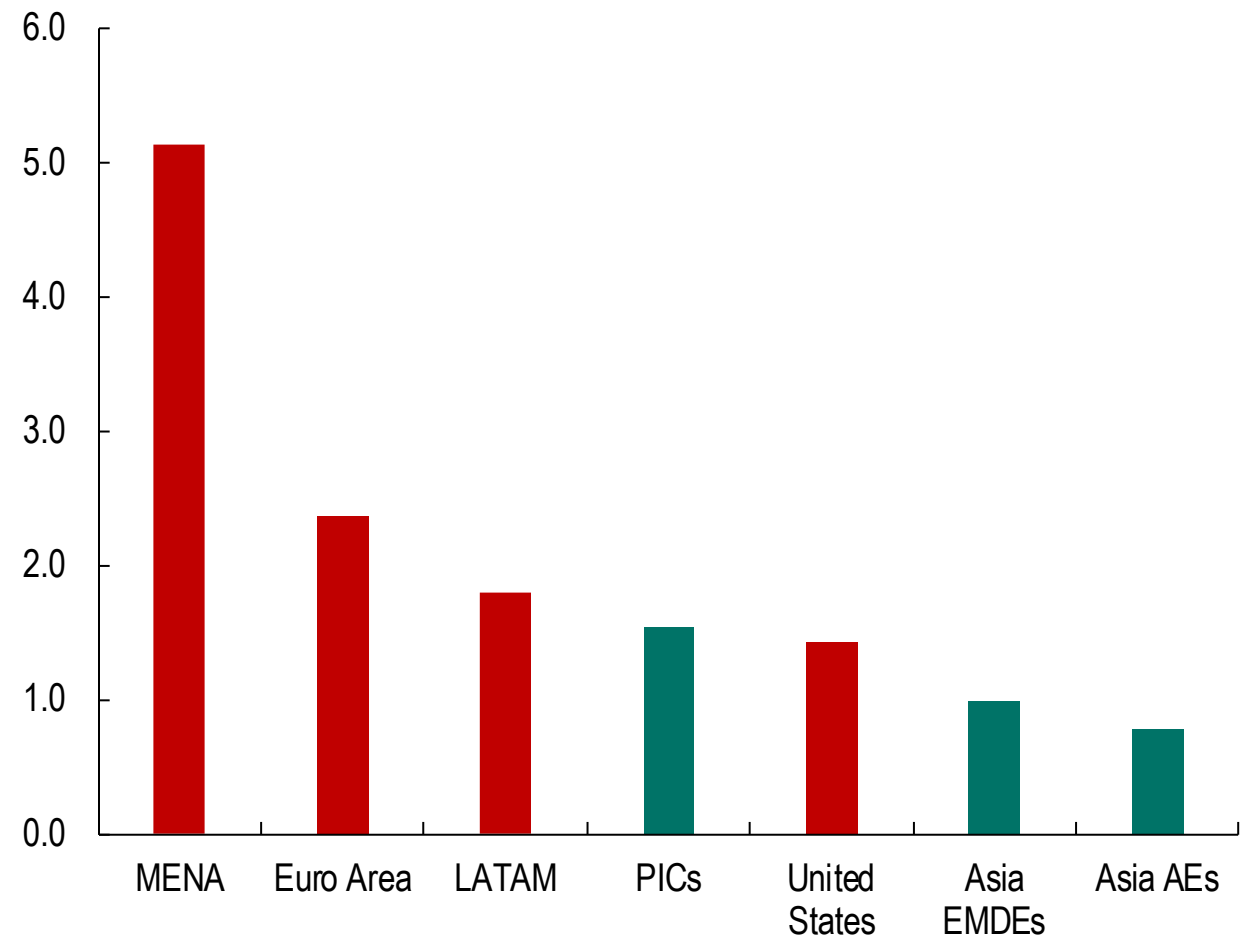
Growth revisions for 2022 relative to January WEO
(Percentage points; weighted average)
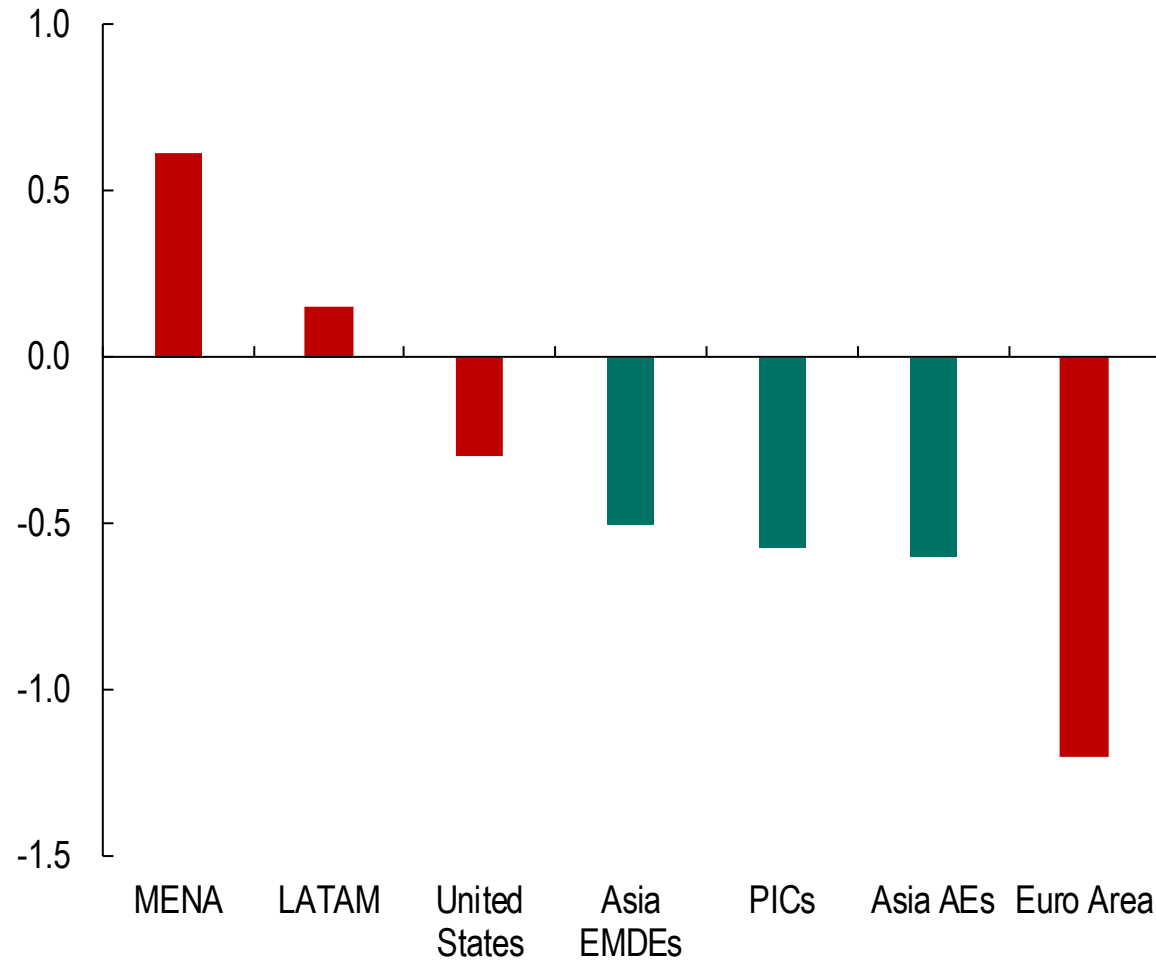
Source: IMF World Economic Outlook, April 2022.

Inflation revisions for 2022 relative to January WEO
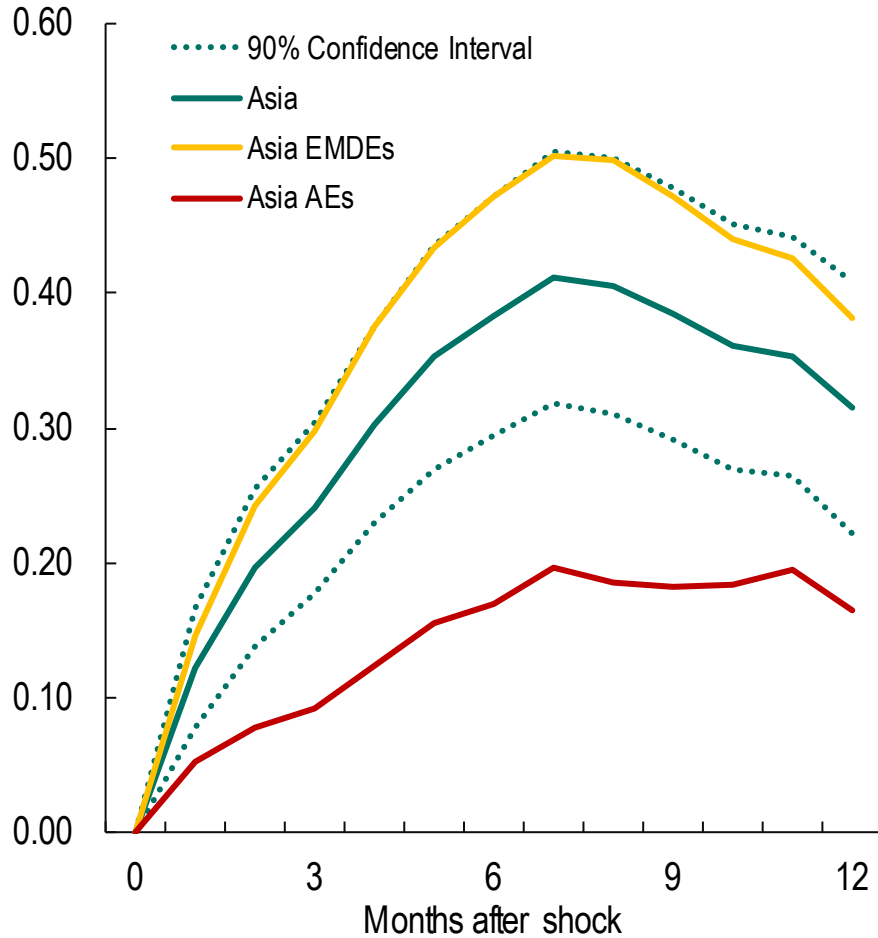*(Percentage points; weighted average; end-of-period inflation)*

Source: IMF World Economic Outlook, April 2022.

Russia-Ukraine War:

Channels of Transmission to Asia and Pacific

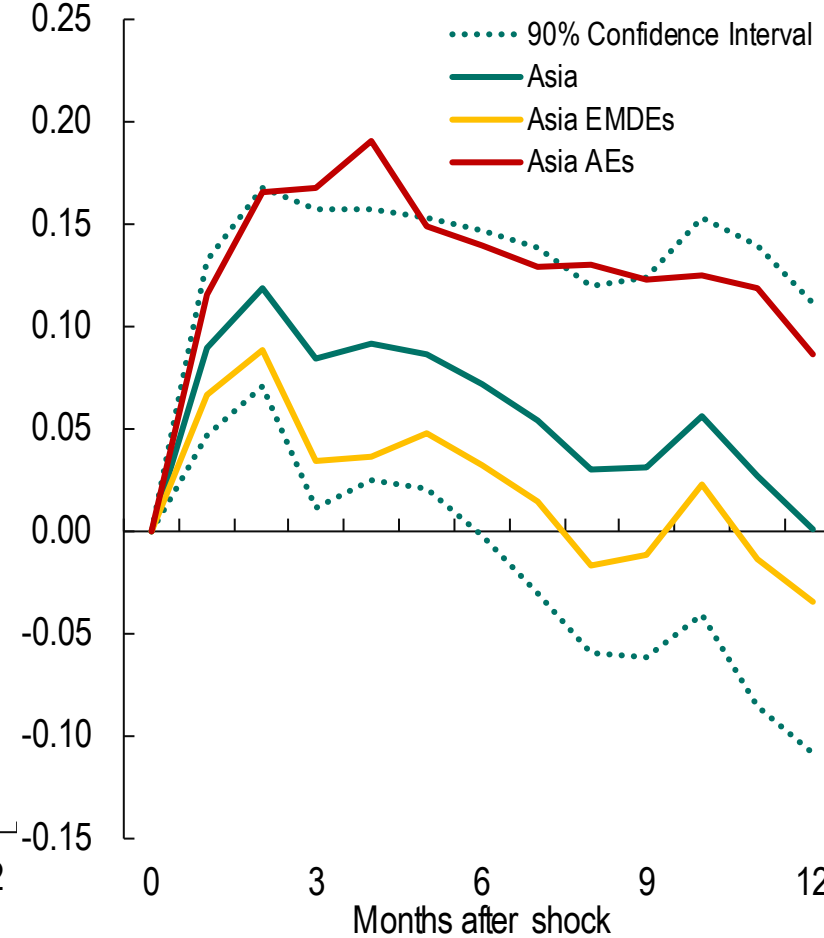# Spike in commodity and food prices will have inflationary impact

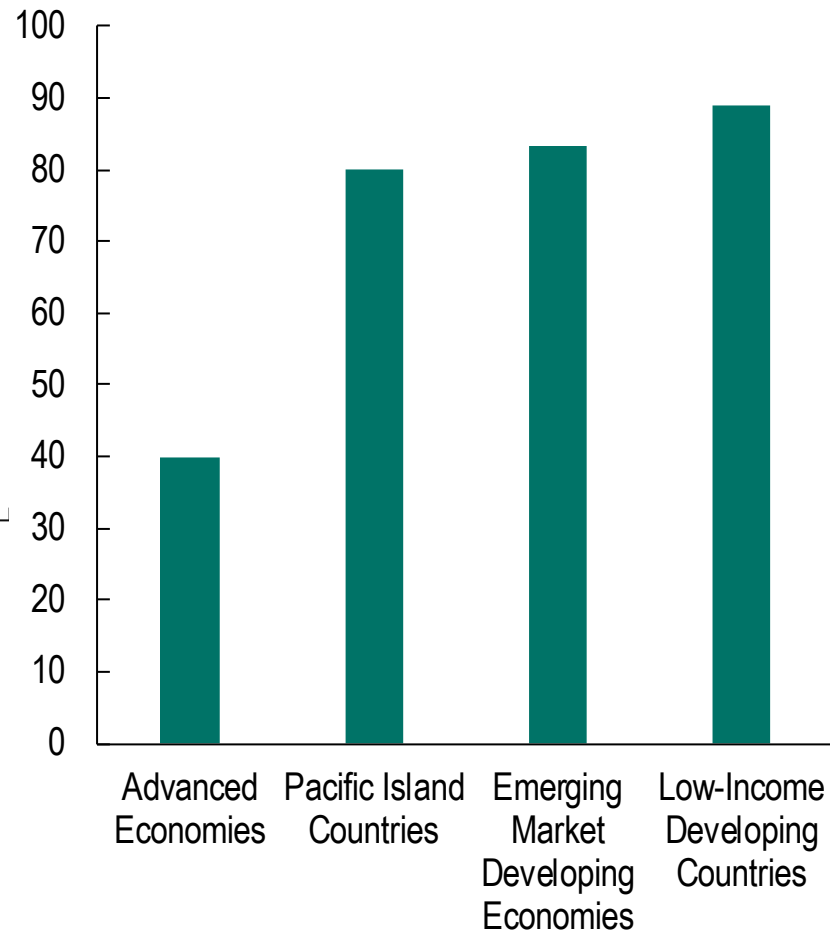## Food price shock effect on inflation
(Percentage points)

Legend:
- 90% Confidence Interval
- Asia
- Asia EMDEs
- Asia AEs

Months after shock

Oil price shock effect on inflation
(Percentage points)

Legend:
- 90% Confidence Interval
- Asia
- Asia EMDEs
- Asia AEs

Months after shock

Administered energy/fuel prices in Asia
(Percentage of countries in group)

Advanced Economies, Pacific Island Countries, Emerging Market Developing Economies, Low-Income Developing Countries
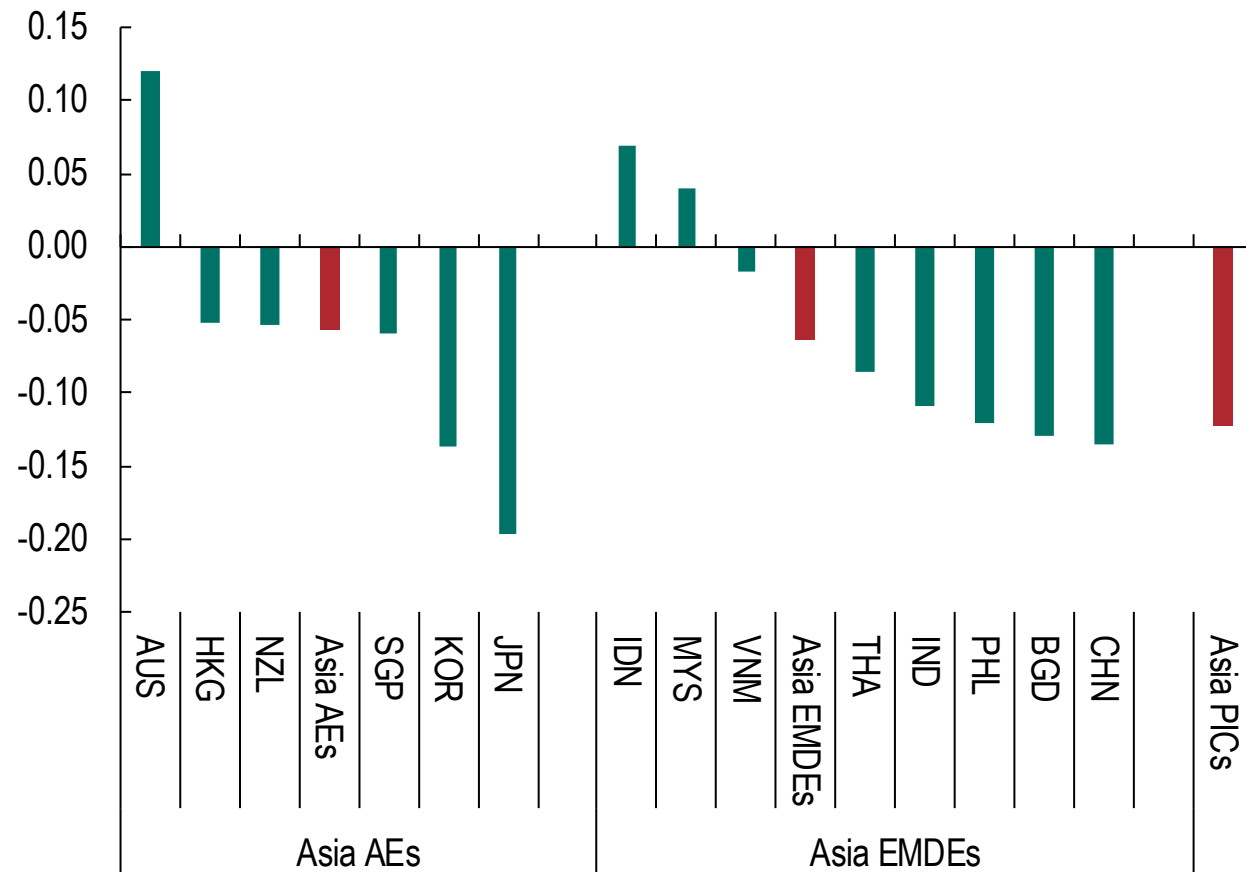
Source: IMF staff calculations based on Carrière-Swallow, Deb, Furceri, Jiménez, and Ostry (2022).

Note: Based on panel of 44 Asian economies using monthly data since 1992. Response to a one standard deviation shock to global oil prices (+10.3%) and global food prices (+3.0%). Dotted lines show 90 percent confidence intervals.

Sources: IMF country desk survey.

Projected change in commodity terms of trade following RUS-UKR war
(Percent change; March-May 2022 compared to Dec 2021-February 2022)

Asia: Impact of fall in commodity terms of trade on GDP
(Percent)

Source: Gruss and Kebhaj (2019) and IMF staff calculations.
Note: Aggregates show the median. Commodity terms of trade is computed based on international prices, including projections, of 45 commodities which are weighted using commodity-level trade data for each country. See Gruss and Kebhaj (2019) for details.
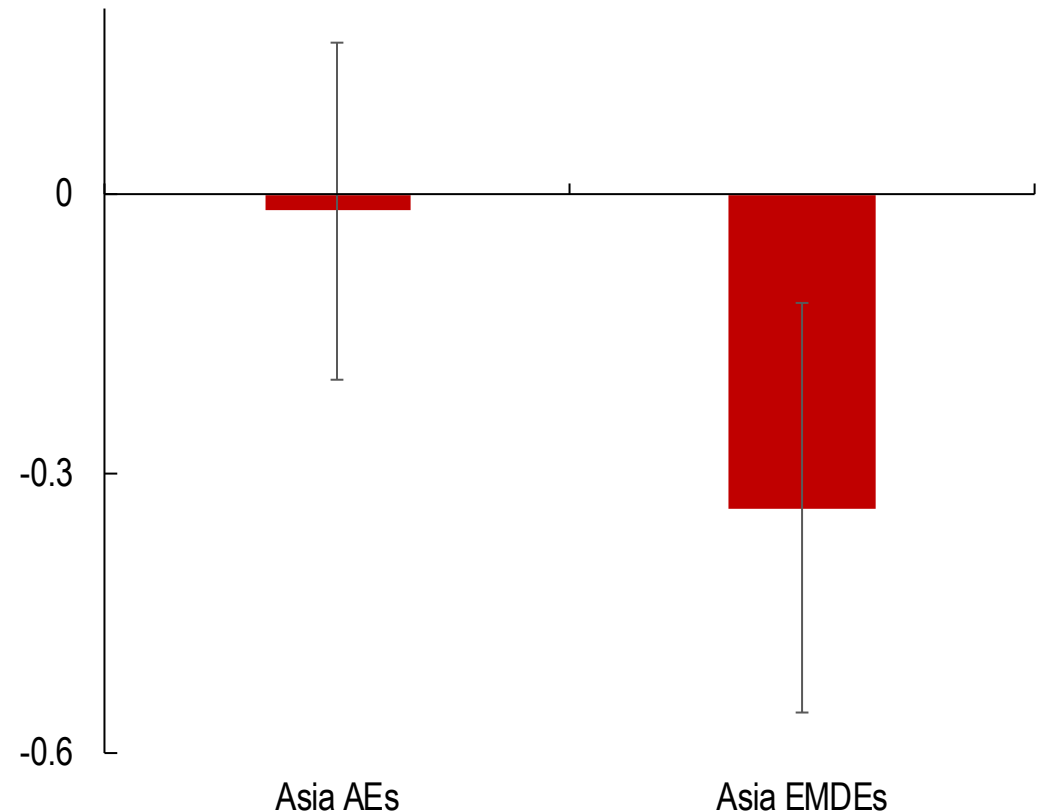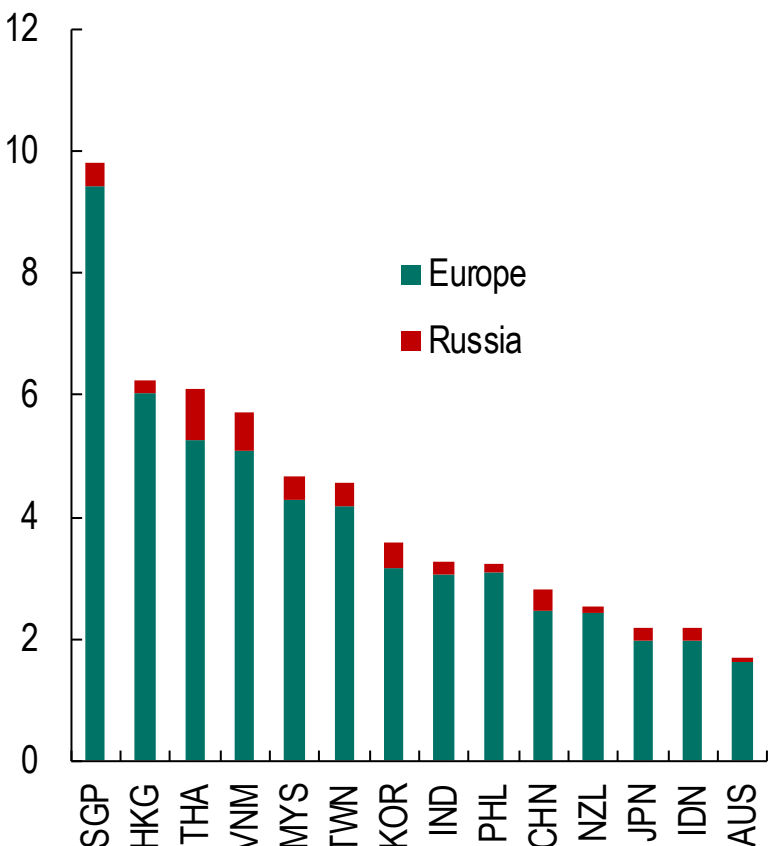
Source: World Economic Outlook and IMF staff calculations.
Note: Bars represent the effect of a 1 standard deviation decrease in commodity terms of trade at impact four quarters ahead. Lines around the bars represent +/- 1 std dev intervals around the coefficients.
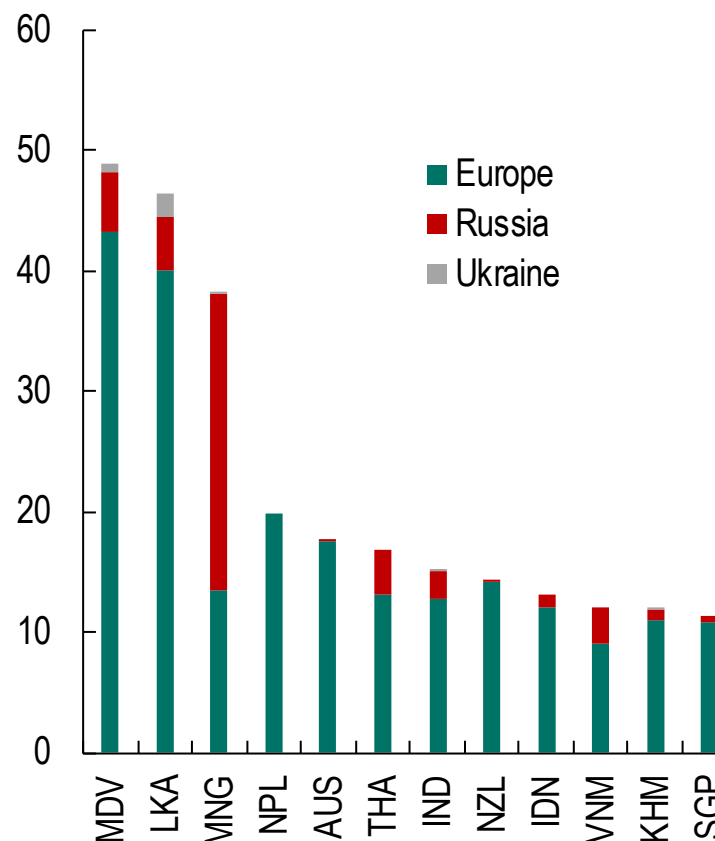
Value added exported to Russia and Europe
(Percent of GDP)

Legend: Europe, Russia

X-axis: SGP, HKG, THA, VNM, MYS, TWN, KOR, IND, PHL, CHN, NZL, JPN, IDN, AUS

Sources: OECD and IMF staff calculations.

Tourism arrivals
(Percent of total; 2019)

Legend: Europe, Russia, Ukraine

X-axis: MDV, LKA, MNG, NPL, AUS, THA, IND, NZL, IDN, VNM, KHM, SGP

Source: Survey of IMF desk economists and UNWTO.

GDP growth spillovers from Europe and other regions
(Percentage points; impact of 1 percentage point change in partner country growth)

Legend: AEs, EMDEs

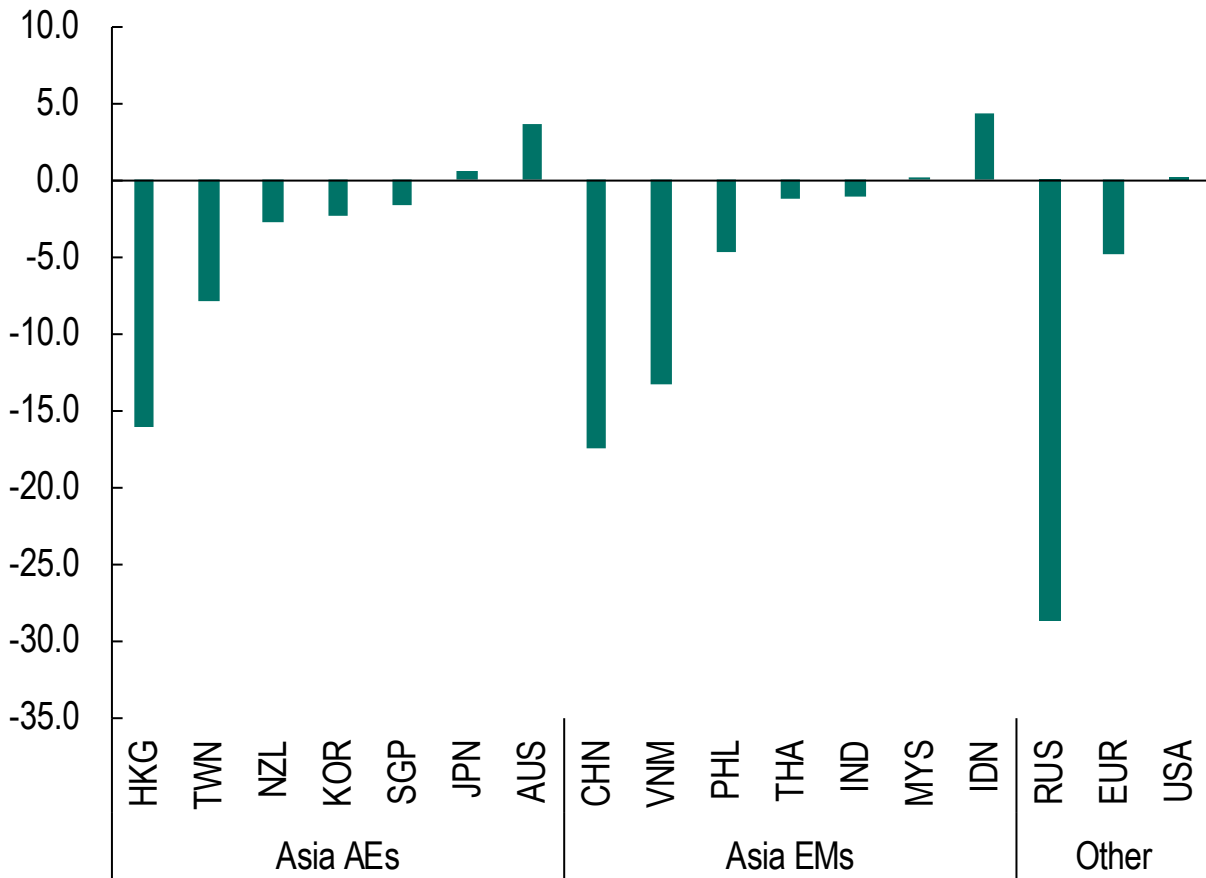X-axis: From within APD, From Europe, From Rest of World
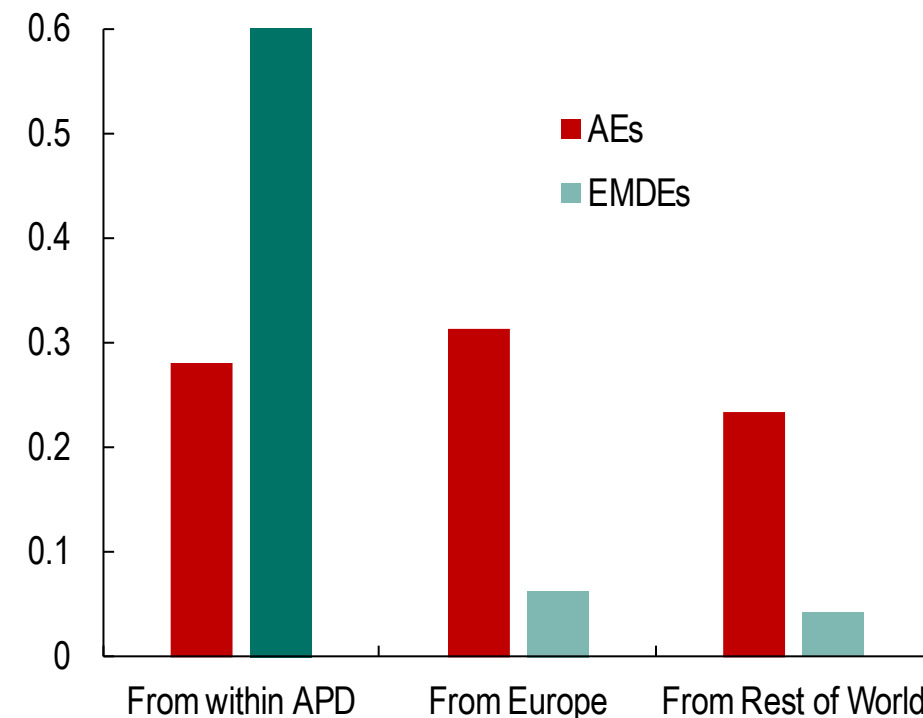
Sources: IMF WEO database and staff estimations.
Note: Based on panel regression of quarterly GDP growth on GDP growth of partner regions. All regressions control for four lags of own GDP growth, country fixed effects, and growth in three partner regions (rest of APD excluding own growth; European Union; rest of the world). Light bars reflect that the coefficients are not statistically significant.

The war has not had much impact on risk assets

Change in equity prices
(Percent; April 25 relative to February 23, 2022)

Asia AEs: HKG, TWN, NZL, KOR, SGP, JPN, AUS
Asia EMs: CHN, VNM, PHL, THA, IND, MYS, IDN
Other: RUS, EUR, USA

Source: Bloomberg LLP.

Change in EMBI spreads in Asia
(Basis points; April 25 relative to February 23, 2022)
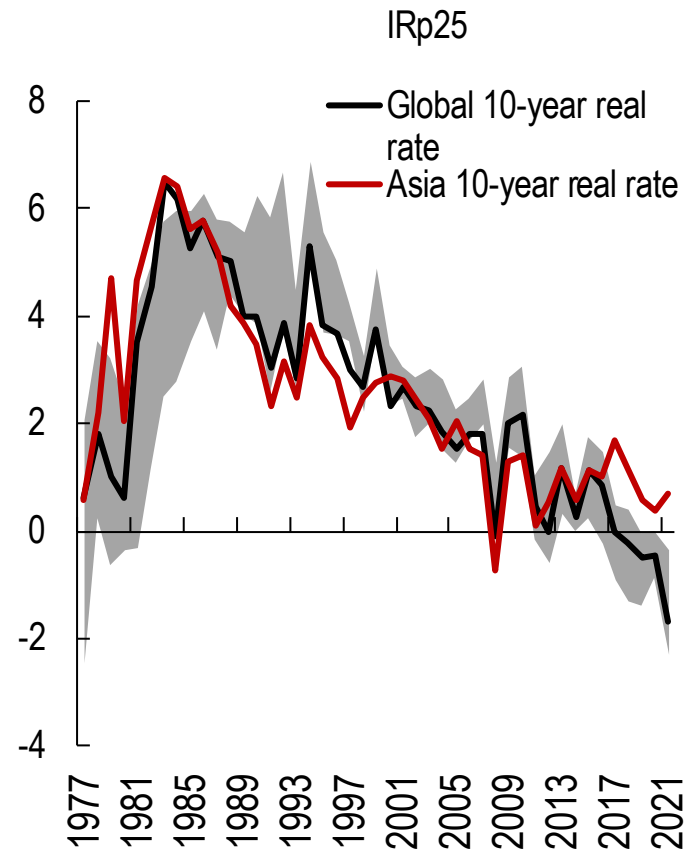

EMBI Spread

MYS, IDN, PHL, CHN, IND, MNG, LKA
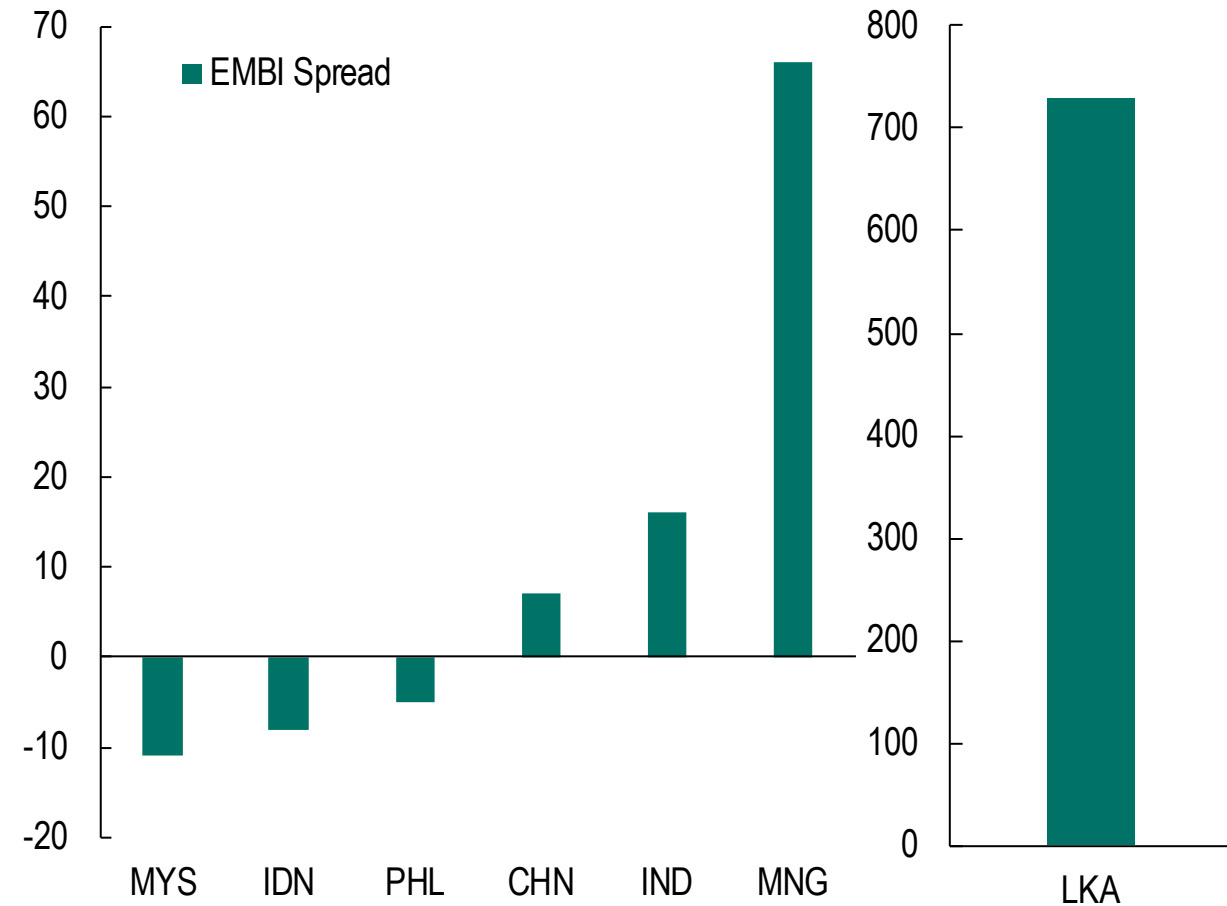
Source: Bloomberg LLP.

Risks

Real rates may rise due to faster than expected policy normalization

Real interest rates
(Percent)

IRp25
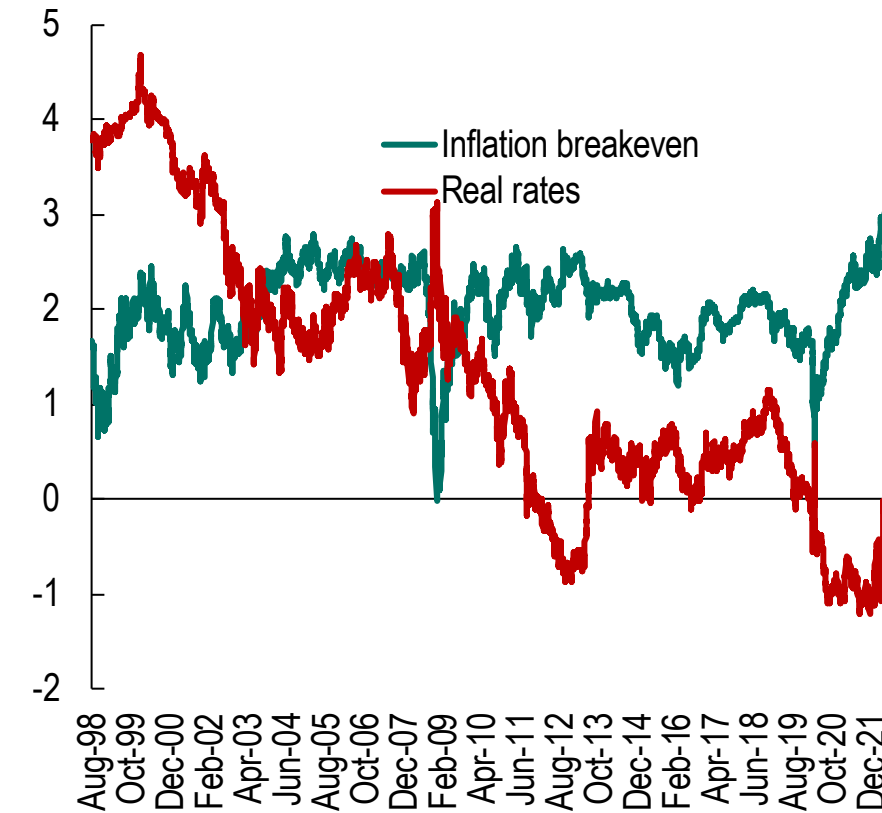
- Global 10-year real rate
- Asia 10-year real rate

Source: Furceri, González-Domínguez and Tawk, forthcoming.
Note: Aggregation is based on GDP weights. Shaded area depicts the interquartile range of the global sample.

US Treasuries: 10-year real rates and breakeven inflation
(Percent)

- Inflation breakeven
- Real rates

Source: Bloomberg LLP.
Note: Data as of April 25, 2022.

US Treasury yield curve
*(Percent)*

- WEO October 2021
- WEO January 2022
- Latest
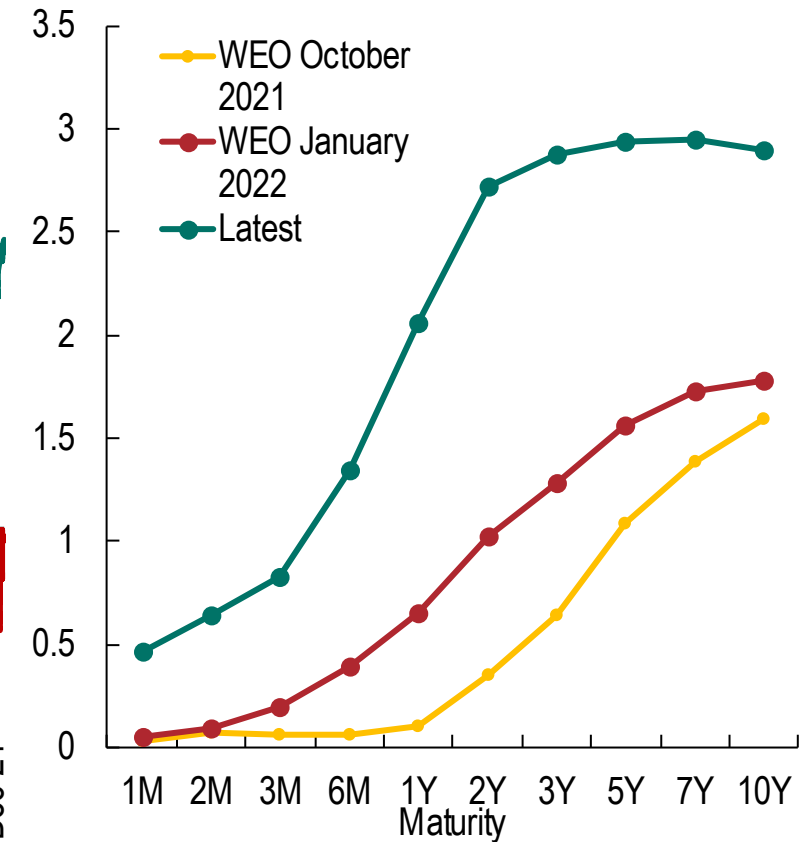
Source: US Department of the Treasury.
Note: Data from WEO vintages correspond with the publication date of WEO in October (10/12/2021) and January (1/25/2022). Latest as of April 25, 2022.

...weighing on growth and adding pressure on vulnerable countries

Impact of financial shock and uncertainty on GDP growth in Asia
*(Percent)*
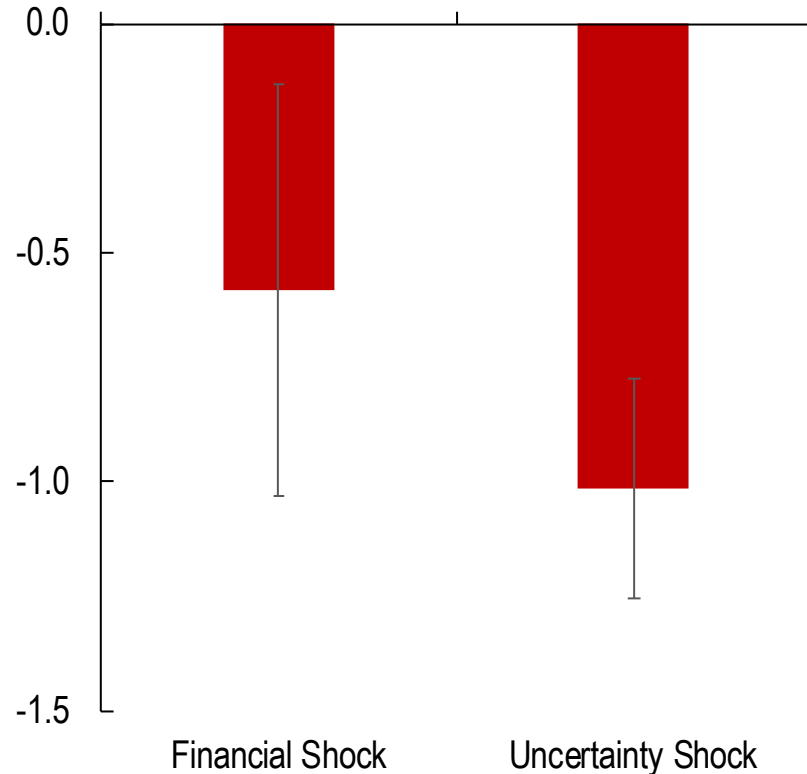
Source: World Economic Outlook, Gilchrist and Zakrajsek (2012), World Uncertainty Index (Ahir, Bloom, and Furceri 2022).
Note: Effect of 1 std dev increase in financial shocks/World Uncertainty Index four quarters/1-year ahead. Lines denote +/- 1 std dev intervals around the coefficients.

Real investment
(Percent)
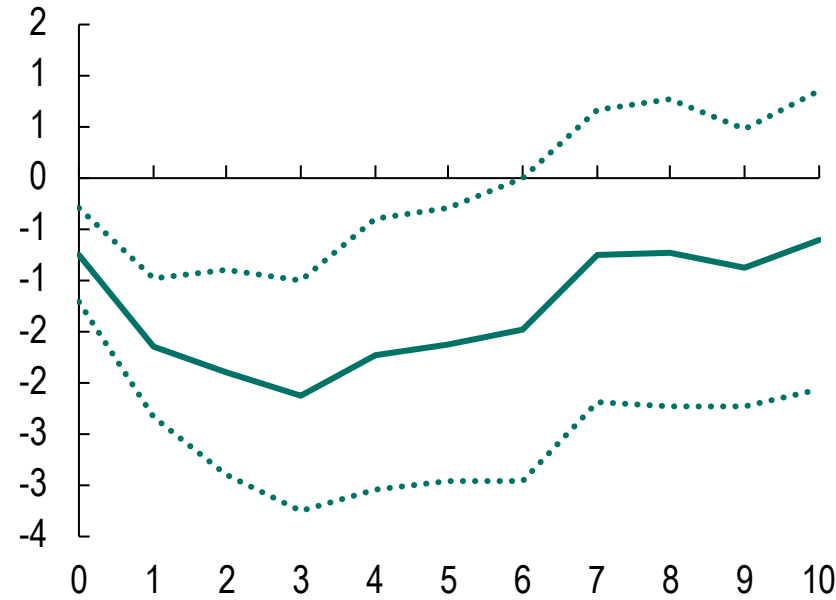
Source: Arbatli and others, forthcoming.
Notes: Figure shows the impact on investment ($y_{t,i}$) of a 100 basis points positive monetary policy shock in the US (s_t) using panel quantile regressions and local projections. The green lines show estimates of $\beta_{h,q}$ in the following equation: $y_{t+h,i} - y_{t-1,i} = \alpha_{i,h,q} + \beta_{h,q} s_t + \theta_{h,q} Z_{t,i} + \varepsilon_{t+h,i}$ for different horizons $h = 0 \ldots 10$ and for q=50th percentile. $Z_{t,i}$ include lags of the dependent variable. Dashed lines show 90 percent confidence intervals. Standard errors are calculated using block bootstrap methods.

Investment of high-leverage firms relative to low-leverage firms
(Percent)
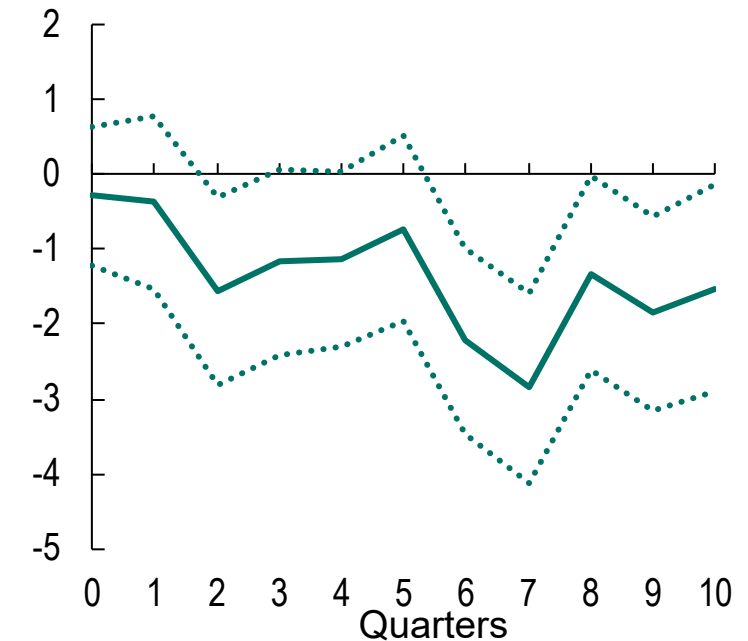
Source: Arbatli and others, forthcoming.
Note: Differential impulse response of firm investment for high leverage relative to low leverage firms in response to a 100 basis points positive monetary policy shock in the US. US monetary policy shocks are estimated using a proxy-SVAR, where high-frequency movements in U.S. interest rate futures around FOMC meetings are used as instruments for the 1-year bond yield. Standard errors are two-way clustered on firm and country-time.

China: Revisions to GDP growth for 2022
(Percentage points, April 2022 WEO minus Jan 2022 WEO update)
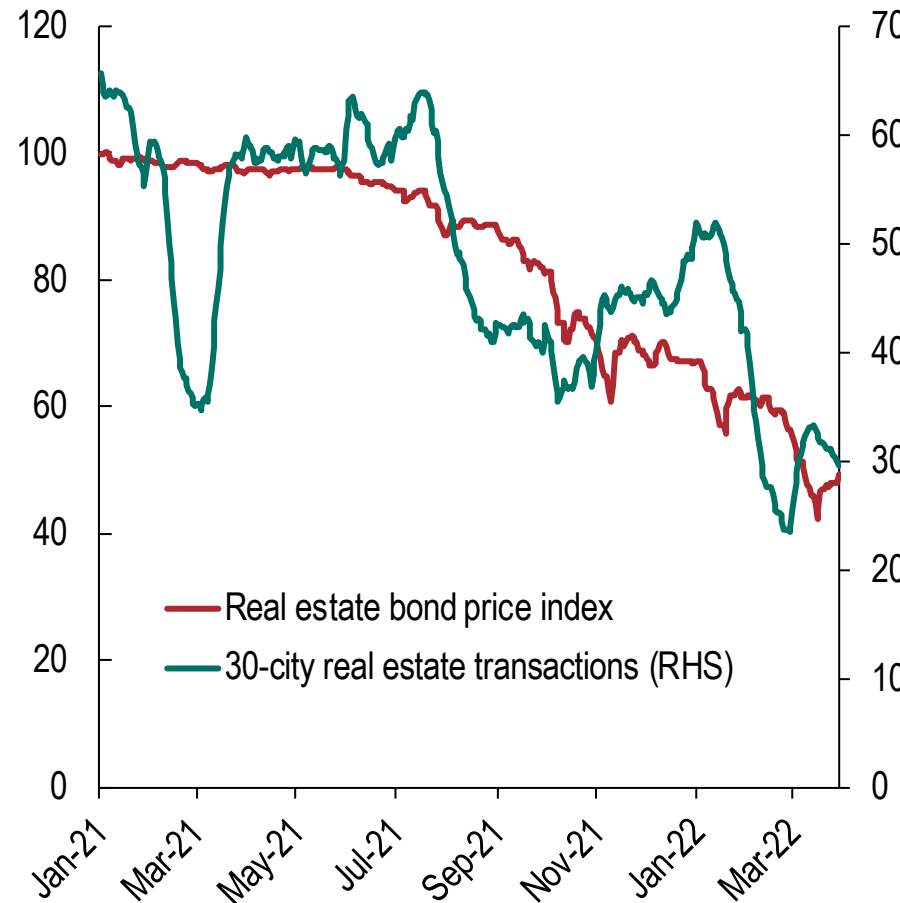

Legend:
- Others (yellow)
- Covid developments (teal)
- Total (green diamond)
- Fiscal policy (black)
- RUS-UKR war (red)
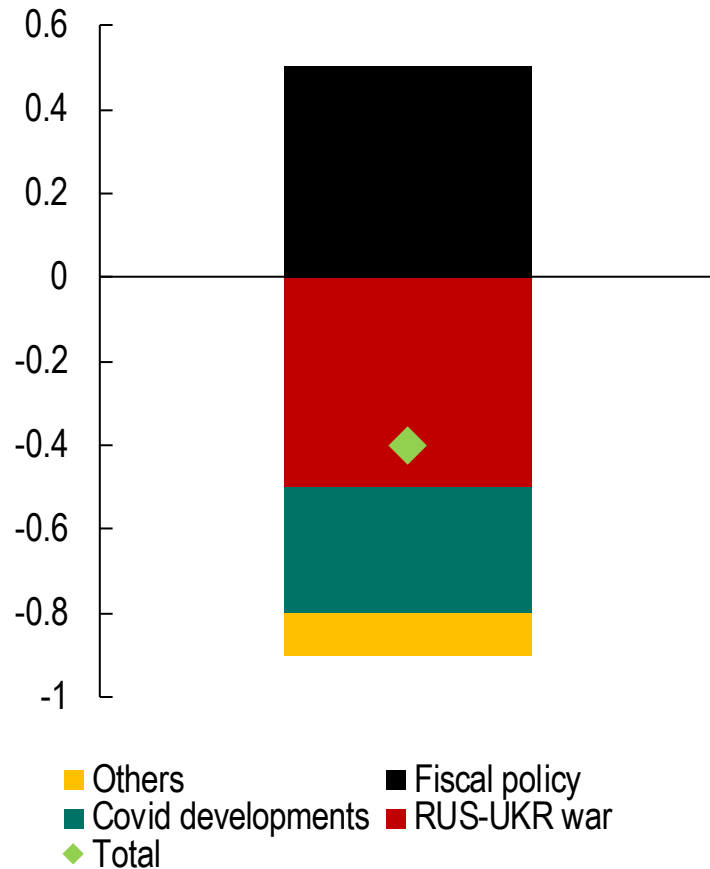
Source: IMF staff calculations.

Property transactions and developer bond prices
(LHS: Price Index; RHS: In 10,000 sq.m, 30 day moving average)

- Real estate bond price index
- 30-city real estate transactions (RHS)

Source: Bloomberg LLP, Wind and IMF staff calculations.
Note: Bond price series based on Markit iBoxx China Real Estate Composite Bond Price Index.

Covid-19 new cases
(7-day moving average)

- Beijing
- Guangdong
- Shanghai (RHS)
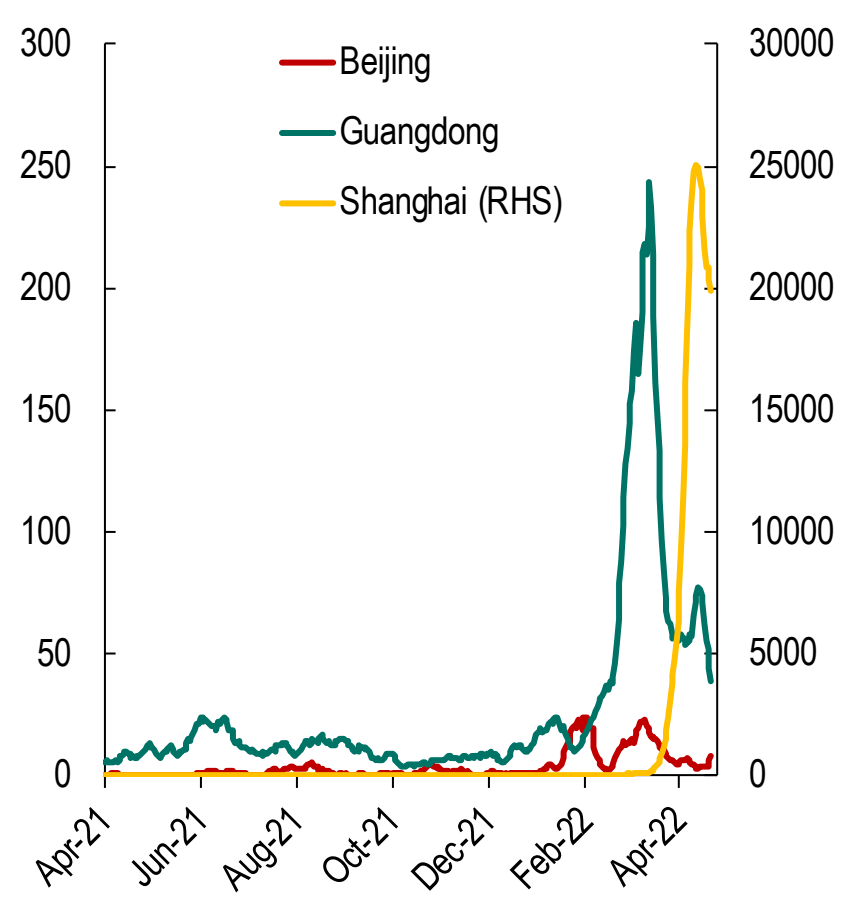
Sources: CEIC and IMF staff calculations.
Note: Data as of April 25, 2022.

Policy Trade-offs and Priorities

A difficult trade-off

Output gaps
(Percent of GDP)

— Asia AEs
— Asia EMDEs

Source: IMF World Economic Outlook.
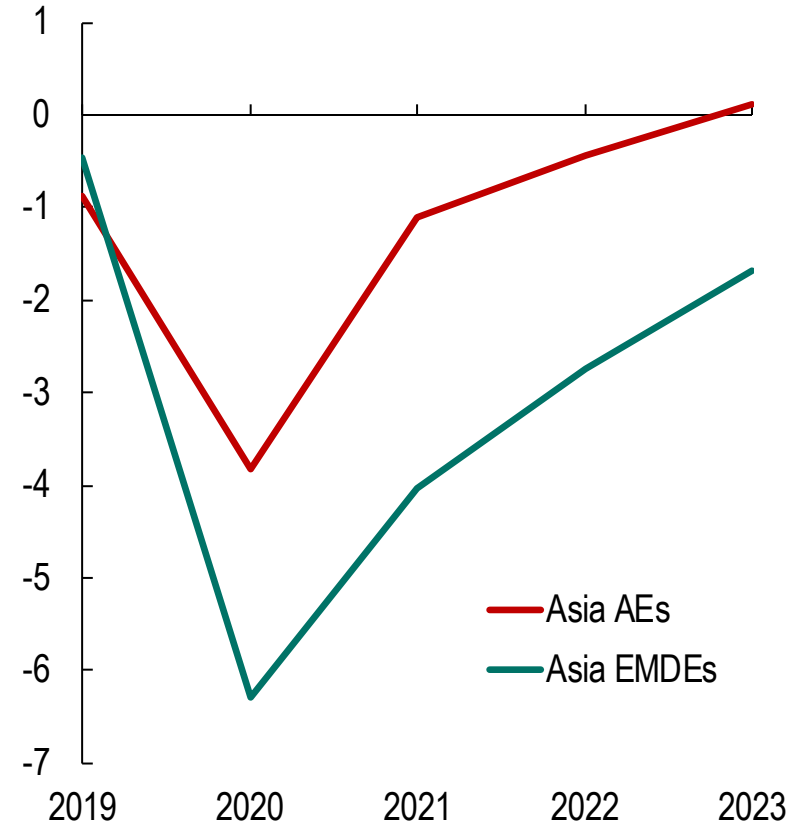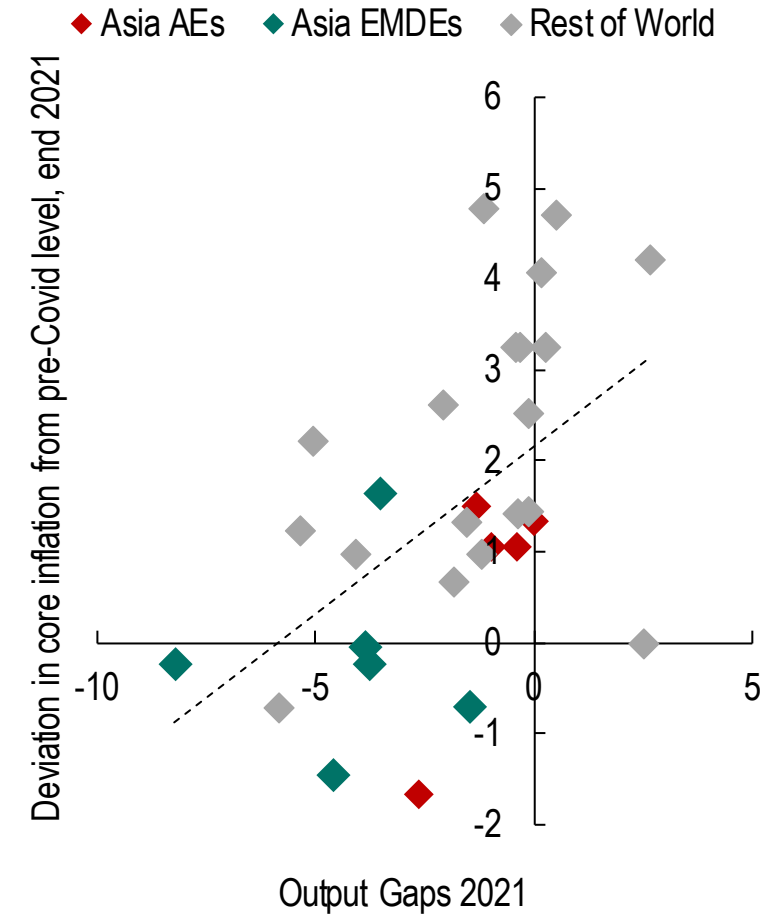Note: Data as of March 31, 2022. Asia AEs includes Australia, Hong Kong SAR, Japan, Korea, New Zealand, and Singapore. Asia EMDEs includes China, India, Indonesia, Malaysia, Philippines, and Thailand.

Headline inflation in Asia
(Percent change Y-o-Y)

— Asia AEs
— Asia EMDEs

Sources: Haver Analytics and IMF staff calculations.
Note: Data as of March 31, 2022. Asia AEs includes Australia, Hong Kong SAR, Japan, Korea, New Zealand, Macao SAR, Singapore and Taiwan Province of China. Asia EMDEs includes China, India, Indonesia, Malaysia, Philippines, and Thailand.

Core inflation vs output gaps
(Percent)

◆ Asia AEs   ◆ Asia EMDEs   ◆ Rest of World

Deviation in core inflation from pre-Covid level, end 2021

Output Gaps 2021

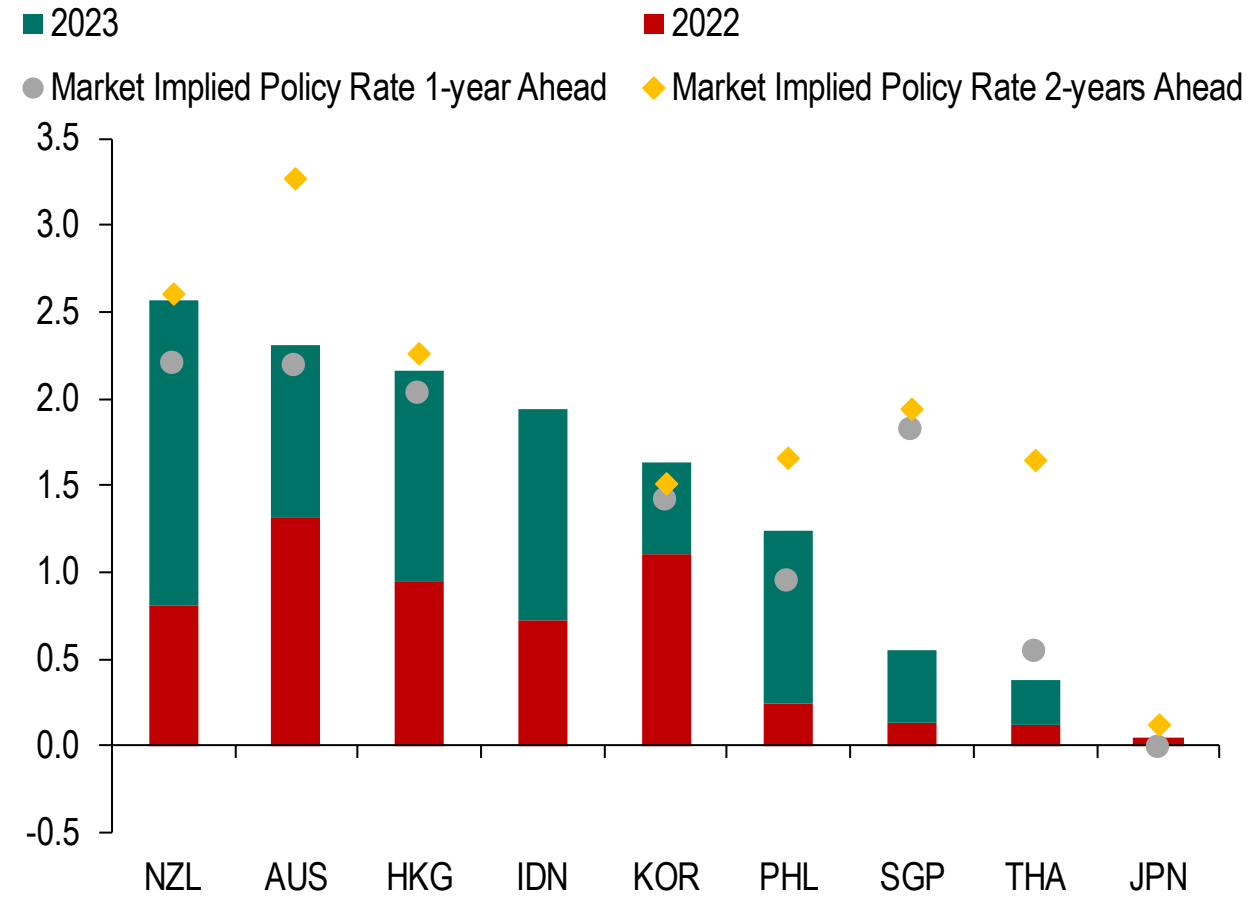Source: IMF World Economic Outlook.
Notes: Core inflation is Headline CPI excluding food and energy.

Monetary policy is expected to tighten to keep inflation within target ranges

Expected inflation
(Percent)

Legend:
- Inflation Targeting Range
- Inflation Target
- Latest Monthly Data
- Consensus Forecast: Two Years Ahead

Countries (x-axis): IND, NZL, THA, SGP, KOR, PHL, AUS, IDN, VNM, MYS, HKG, JPN, CHN

Source: Consensus Forecasts and IMF staff calculations.
Note: Data as of April 25th, 2022. Latest inflation and consensus forecasts are for headline inflation. Some countries do not have explicit inflation targeting regimes and no target, while target ranges apply to core inflation in some countries.

Expected change in policy rate, WEO and market implied
(percentage points)

Legend:
- 2023
- 2022
- Market Implied Policy Rate 1-year Ahead
- Market Implied Policy Rate 2-years Ahead

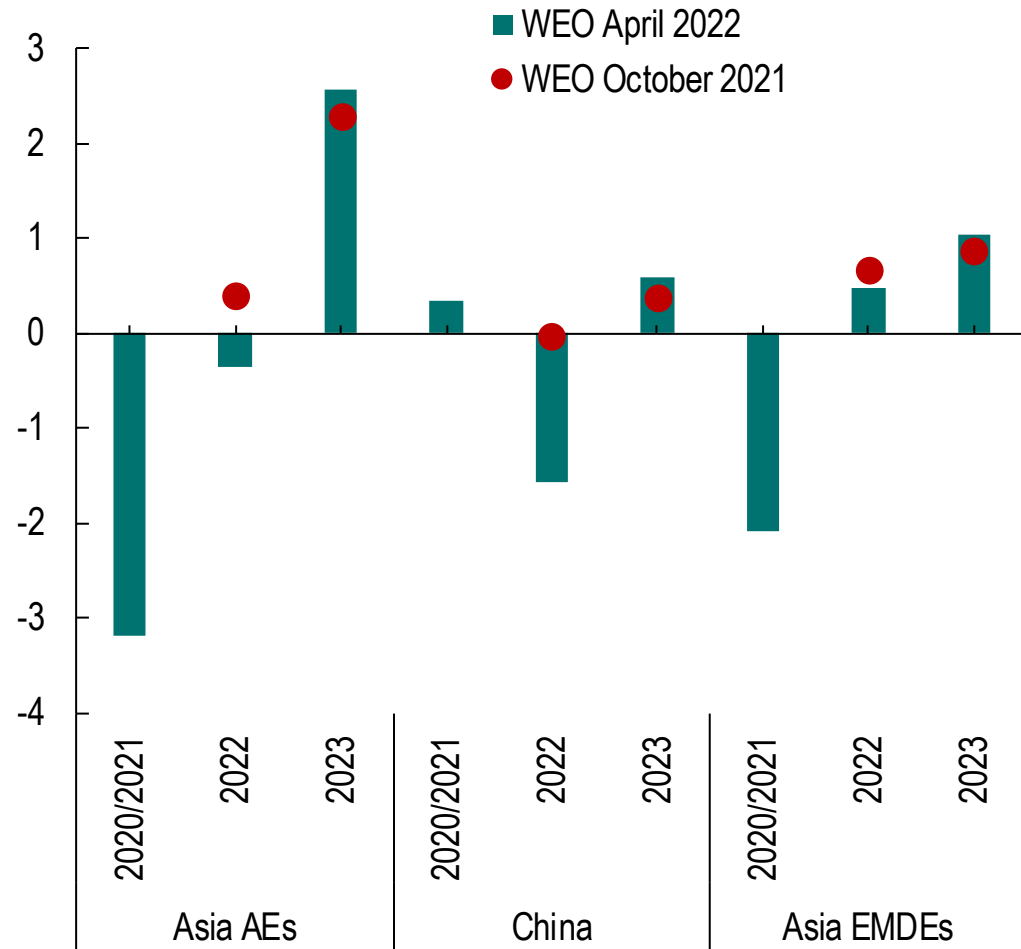Countries (x-axis): NZL, AUS, HKG, IDN, KOR, PHL, SGP, THA, JPN

Source: World Economic Outlook and Bloomberg.
Note: Bars show the change in policy rate as projected in the April 2022 WEO for 2022 and 2023 compared to 2021. Changes in market implied policy rates are from Bloomberg and refer to 1-year and 2-year ahead rates, therefore cover a sightly different timeframe than WEO projections.

Planned fiscal adjustment is projected to stabilize debt at high levels

Fiscal impulse
(Percent of potential GDP, weighted average)

Legend:
- ■ WEO April 2022
- ● WEO October 2021

X-axis groups: Asia AEs (2020/2021, 2022, 2023), China (2020/2021, 2022, 2023), Asia EMDEs (2020/2021, 2022, 2023)

Debt ratios
(Percent of fiscal year GDP; weighted average)

Legend:
- ── Asia AEs
- ── Asia EMDEs (Excl.China)
- ── Asia PICs
- ── China

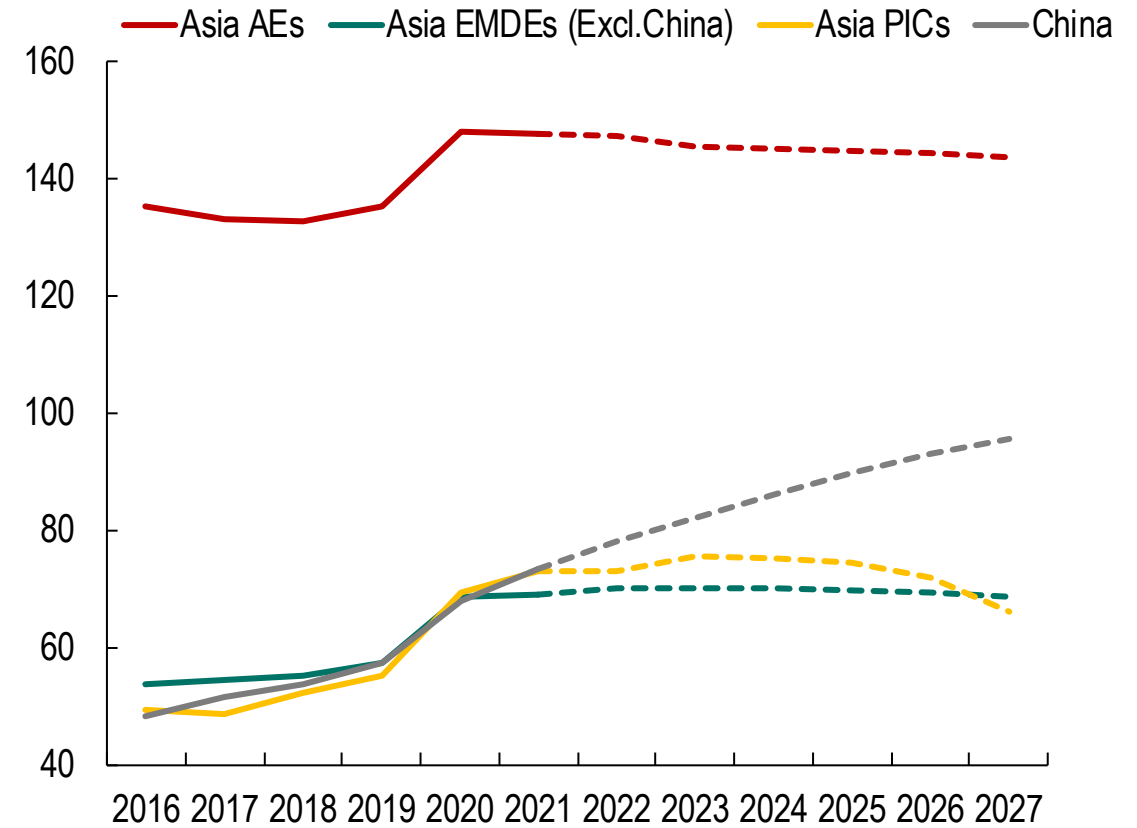X-axis: 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

Source: World Economic Outlook and IMF staff calculations.
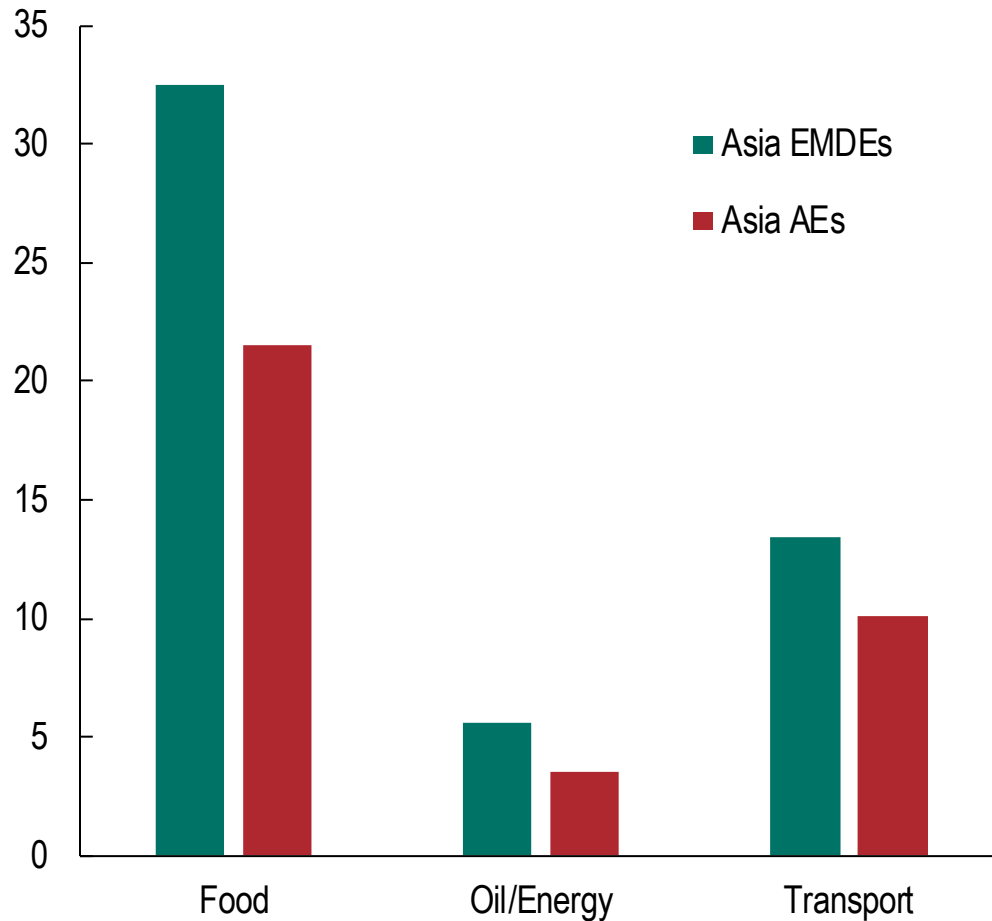Note: Fiscal impulse is calculated as the change in the structural primary balance.

Source: World Economic Outlook and IMF staff calculations.

# In the short-term, policies to protect the vulnerable from rising food and energy prices may be needed

Share in CPI basket
(percent)

Legend: ■ Asia EMDEs ■ Asia AEs

Categories: Food, Oil/Energy, Transport

Sources: Haver Analytics and IMF staff calculations.

Introduction of fiscal measures in response to rise in energy and food prices
(percent of economies within groups)

Legend: ■ Tax Measures ■ Spending Measures ■ Both Measures

Categories: Asia AEs, Asia EMDEs
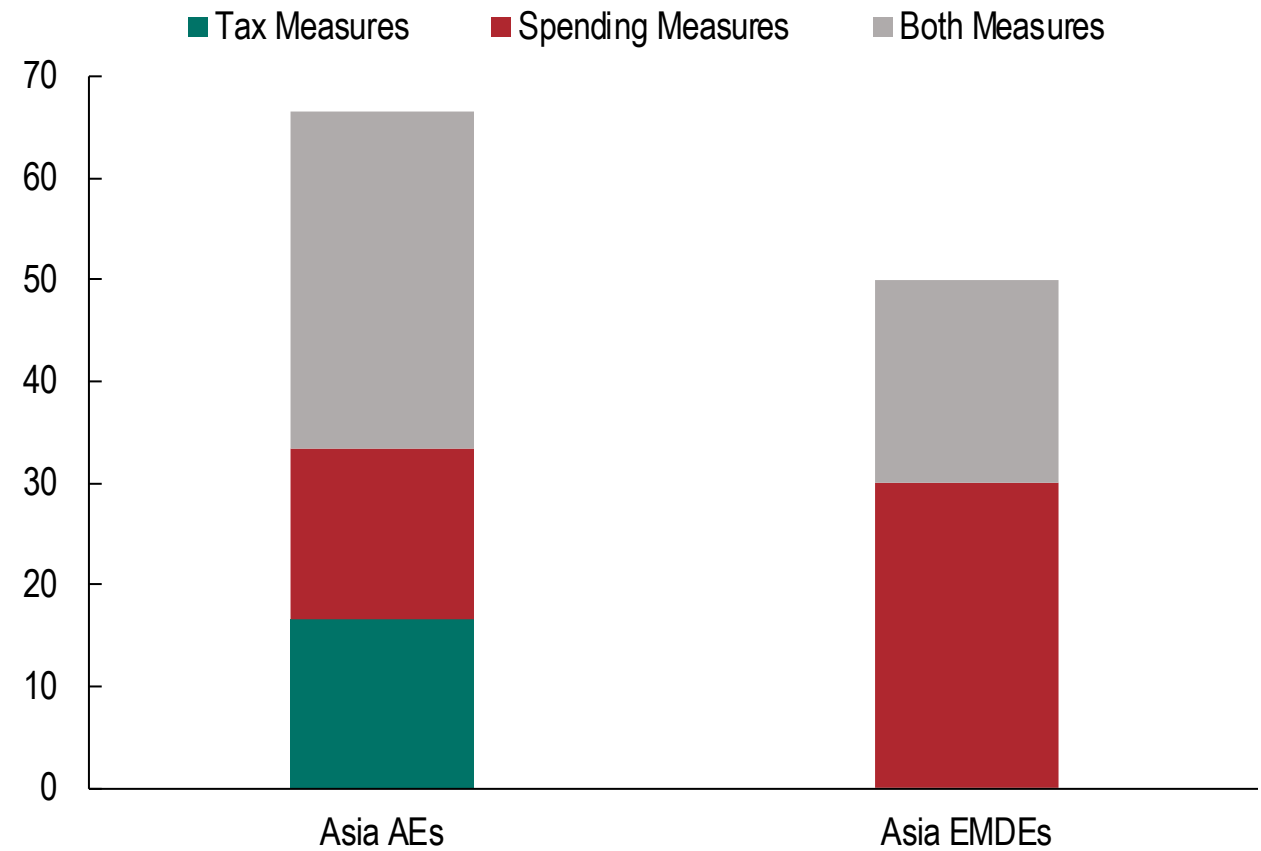
Sources: IMF desk survey and IMF staff calculations.
Note: Based on a survey of 16 Asian economies. Bars show the share of economies in the group that have introduced discretionary tax or spending measures in 2022 as a response to the rise in energy and food prices.

Significant output scarring expected, aggravated by rising corporate debt

Medium-term GDP losses
(Difference in cumulative growth rates 2020-25, current projection relative to pre-COVID-19 forecast, percentage points)
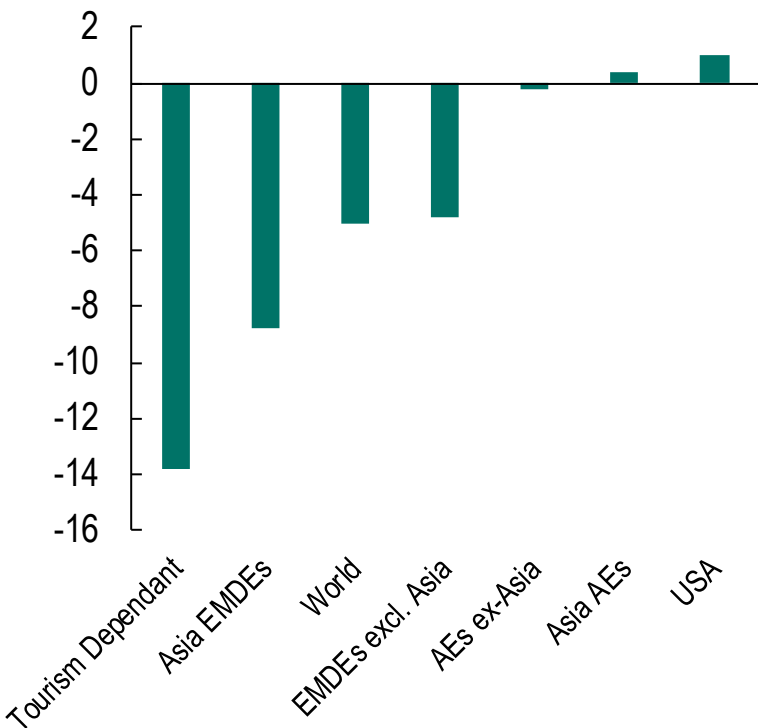
Source: IMF World Economic Outlook and IMF staff calculations.
Note: Current projections based on WEO April 2022. Updated as of March 31, 2022. A country is Tourism Dependent if 10 percent or more of their GDP derives from tourism. These countries include Cambodia, Fiji, Maldives, Thailand, and Vanuatu.

Change in non-financial corporate debt, loans and debt securities 2020 vs. 2019
*(In percent of GDP)*
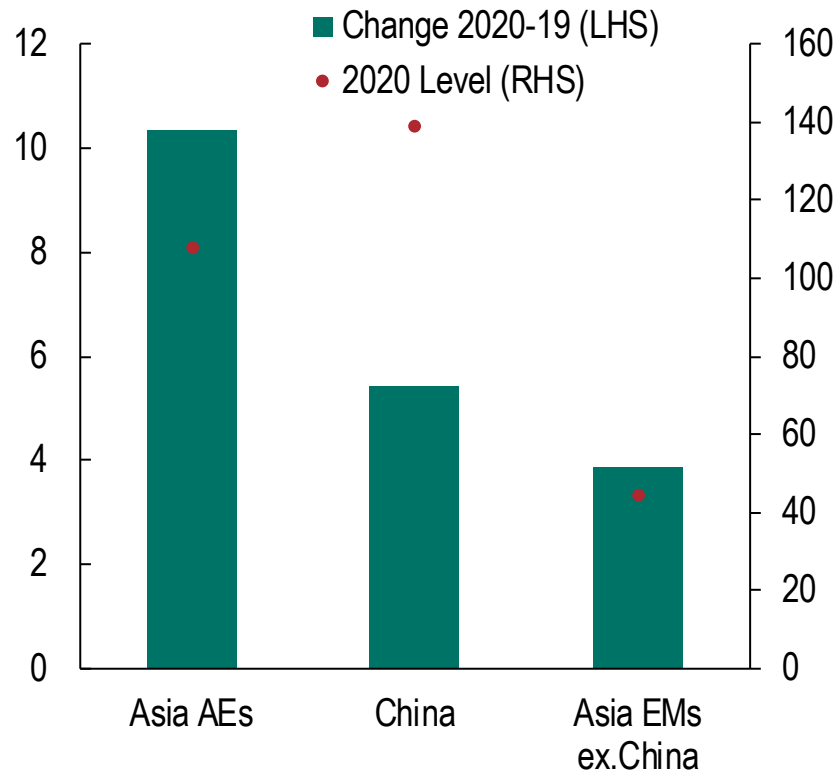
Source: IMF Global Debt Database and IMF staff calculations.
Note: Includes non-financial corporate debt, loans and debt securities. Consistent sample across time of 12 Asian countries. Asia AEs (3): Australia, Japan and Korea. Asia EMs excluding China (8): Cambodia, India, Indonesia, Malaysia, Micronesia, Philippines, Thailand, and Vietnam. Weighted average within groups.

Decline in investment following recessions, high debt firms relative to low debt firms
(Percentage points)
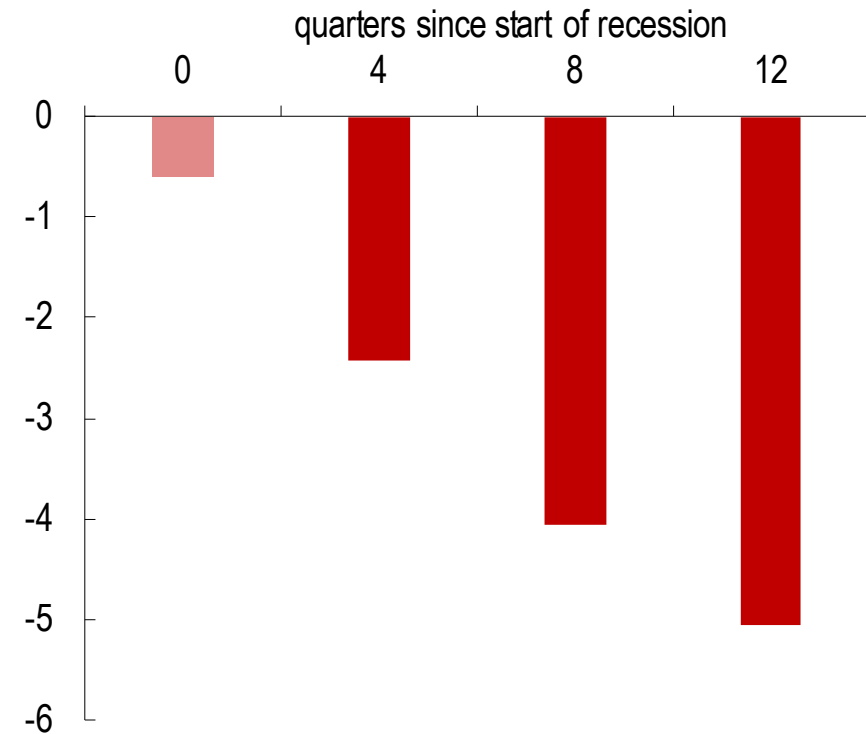
Source: Capital IQ and Estefania-Flores and others (forthcoming).
Note: Uses quarterly firm level data. Based on a difference-in-difference estimate, comparing the decline in capital expenditure for high debt firms relative to low debt firms for different horizons since start of a recession. Light shaded bars refer to statistically not significant coefficients.

Policy priorities

Difficult Trade-offs: Rising inflation, still incomplete recovery amid limited fiscal space and tightening global financial conditions. Heterogeneity across countries will require policy responses to be tailored to country-specific circumstances, though some broad priority areas are outlined below.

Fiscal Policy

- Temporary, targeted measures to mitigate cost of living increases for vulnerable—avoid untargeted fuel subsidies where possible
- Start unwinding pandemic-era support; if space available speed of consolidation may be slowed to alleviate new headwinds
- Credible medium-term plans to rebuild buffers while supporting pressing priorities

Monetary Policy

- Monetary tightening in most countries to meet inflation targets and anchor expectations
- Speed of tightening dependent on inflation expectations, second round effects, external pressures
- Communicate clearly to ensure orderly market reaction

Structural Policies

- Boosting long-term growth remains critical, given short-term challenges and expected scarring
- Priorities include trade reforms, modernizing corporate restructuring frameworks, investing in human capital, digitization, product and labor market reforms, and facilitating in a green transition

Thank You