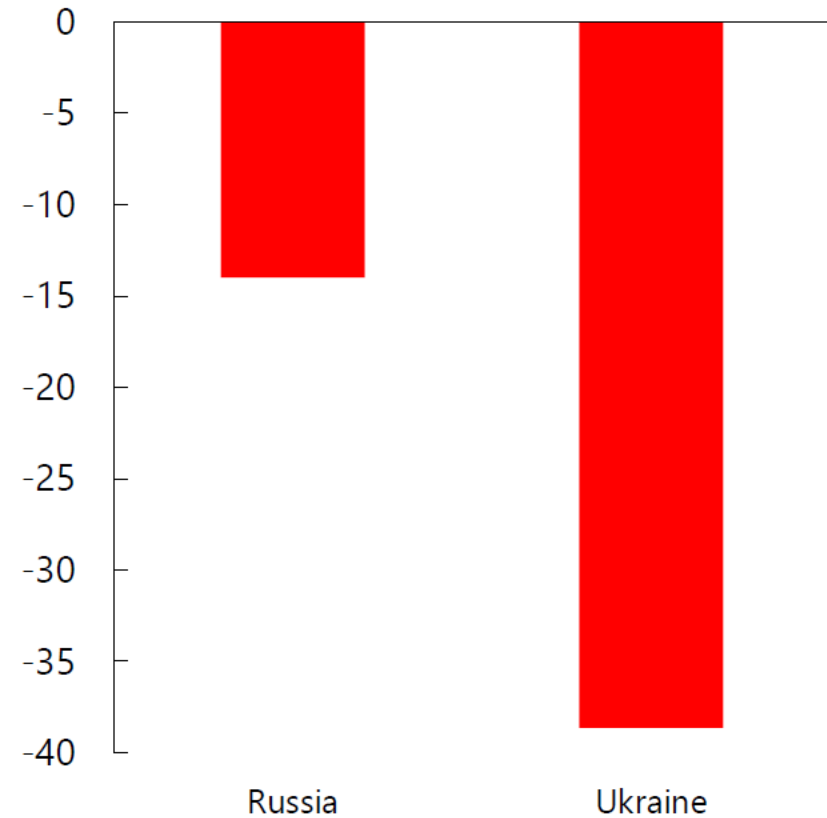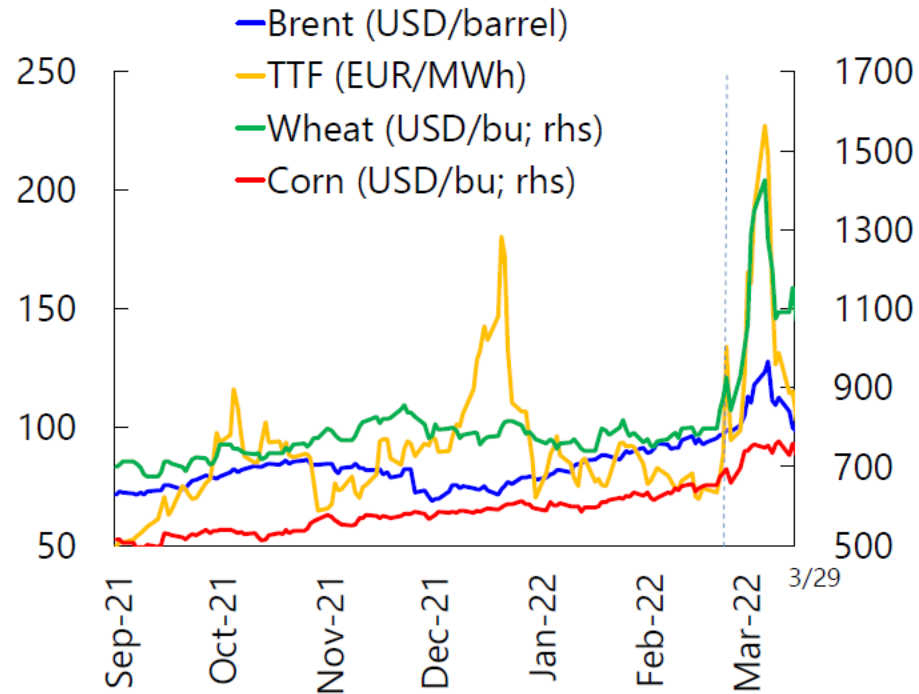# Recent Developments

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

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

- *Commodities prices surge and volatility*

- *Trade flows, supply disruptions, remittances and refugee crisis*

- *Financial conditions tightening*

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
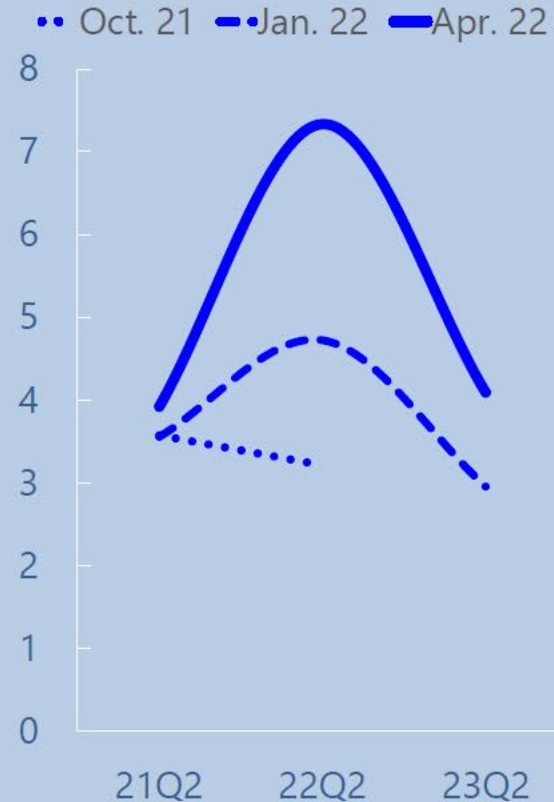
2022 Growth path
(percentage points; qoq annualized)

- - Jan. 22   ▬ Apr. 22
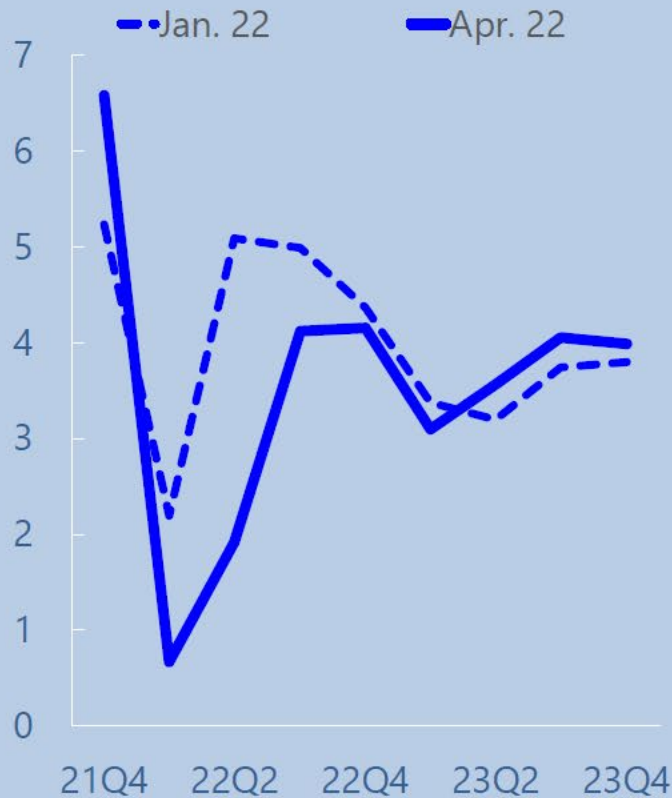
2022 Total revision
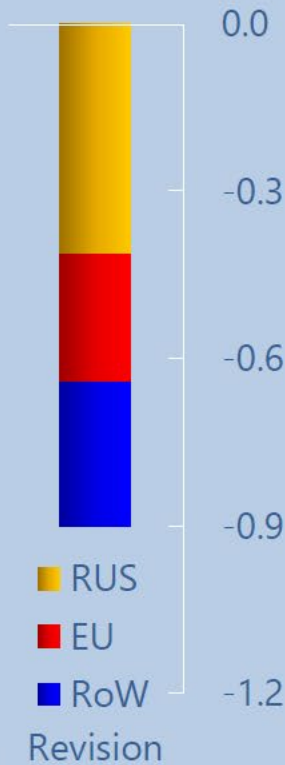
Projected inflation path
(percent; yoy)

•• Oct. 21   - - Jan. 22   ▬ Apr. 22

- RUS
- EU
- RoW

Revision

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.

As inflation revised up and seen as more persistent, monetary policy is being tightened in US and Euro Area

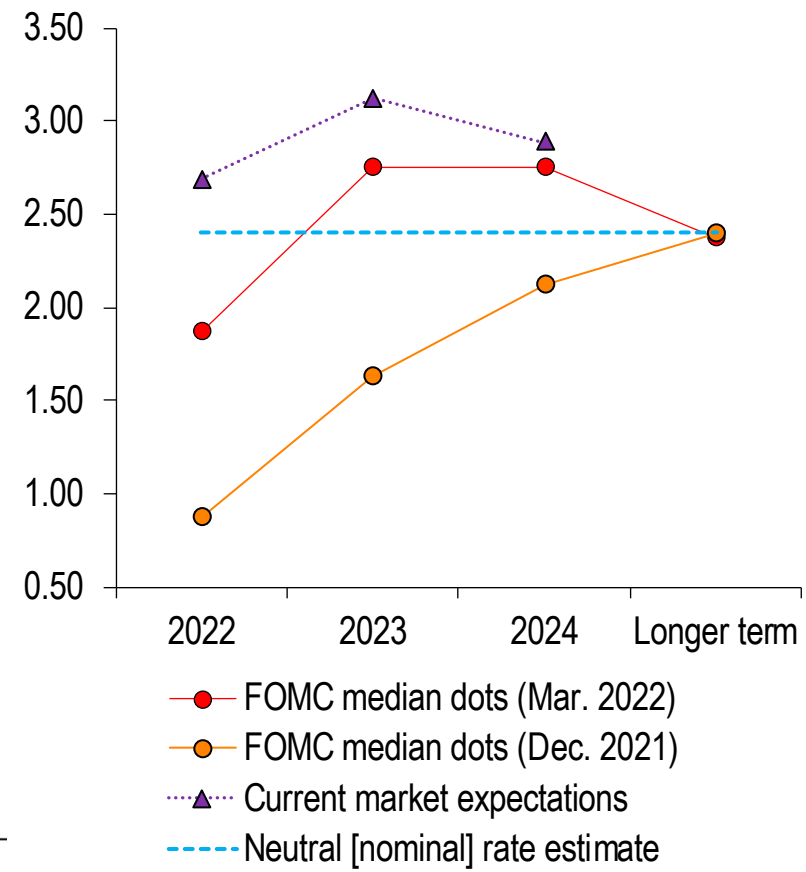## Headline inflation outturns and forecasts
(Percent; year over year)

US

Euro area
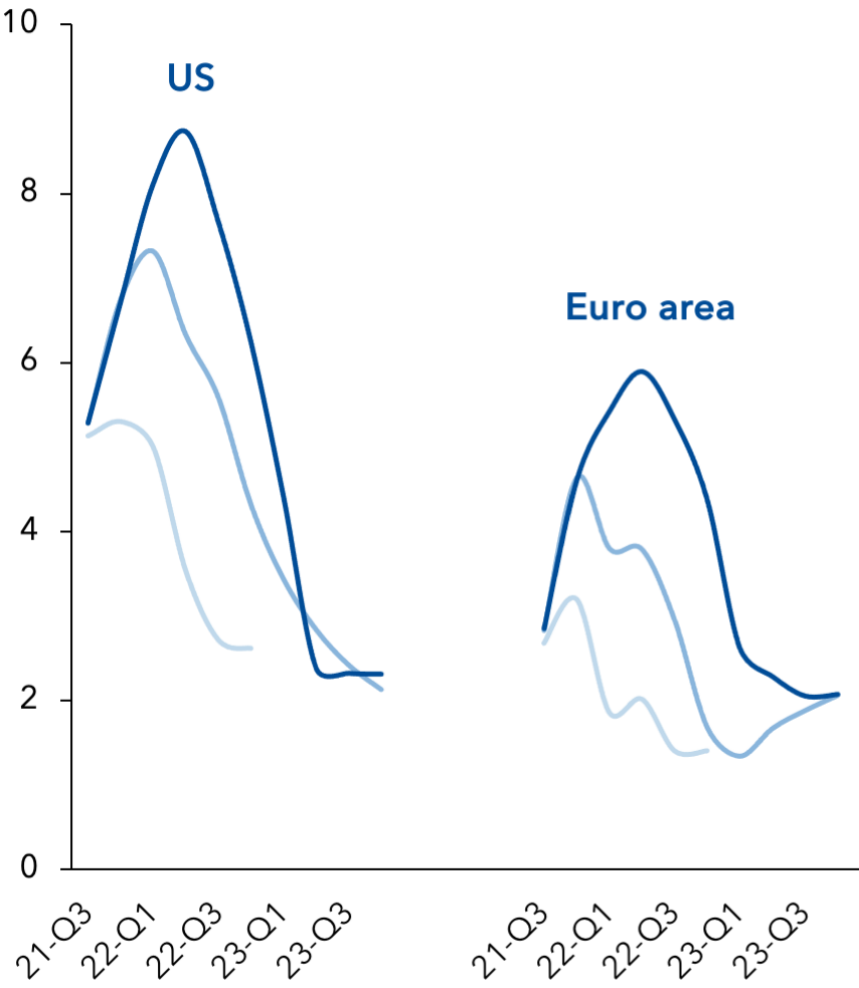
Source: World Economic Outlook and IMF staff calculations. From blog post by Gourinchas (April 19).

Federal Funds Rate
(Percent; year over year)

- FOMC median dots (Mar. 2022)
- FOMC median dots (Dec. 2021)
- Current market expectations
- Neutral [nominal] rate estimate
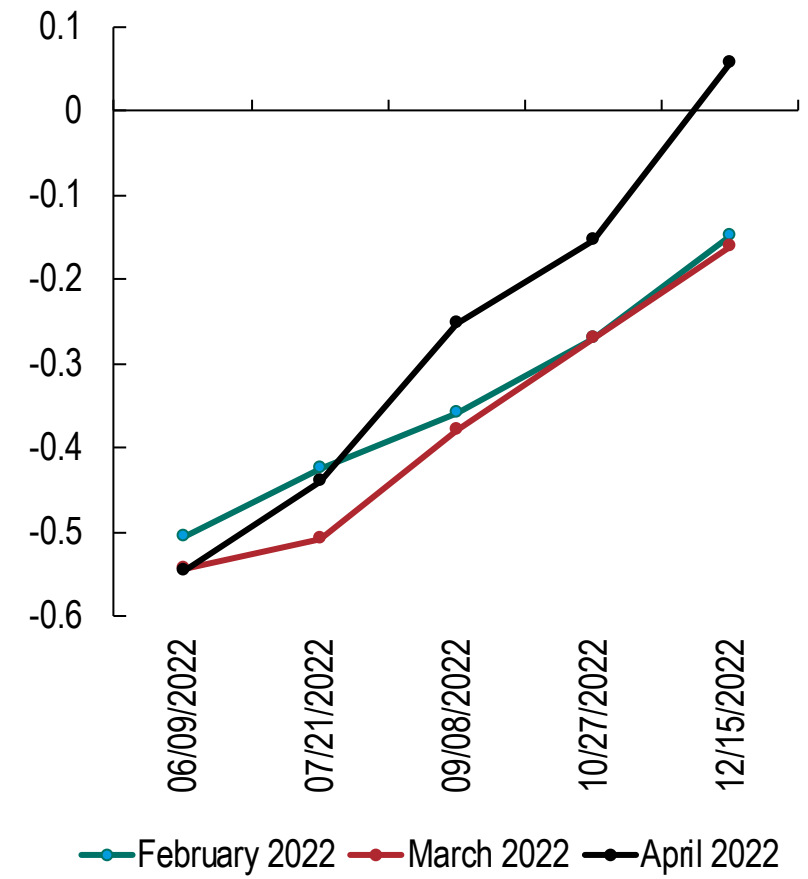
Source: Bloomberg; April 2022 *Global Financial Stability Report*; and IMF staff calculations.
Note: Market expectations are from Federal Funds futures trading on May 9, 2022.

Euro Area monetary policy rates
(Percent)

February 2022 — March 2022 — April 2022

Source: Bloomberg and IMF staff calculations.
Note: Market expectations are based on Implied Overnight Index Swaps prior to each meeting of the ECB Governing Council.

Growth projections: Advanced Economies

|	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 World Economic Outlook, April 2022.

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)

Legend: Asia AE, Asia EMDE
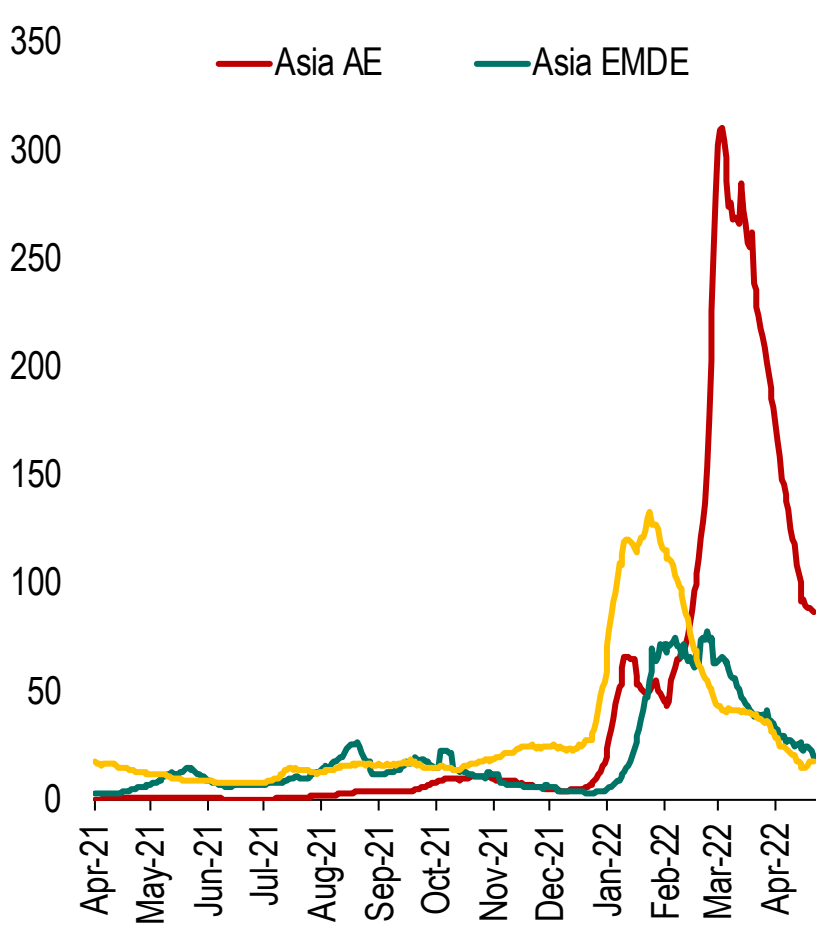
Sources: Johns Hopkins University and IMF staff calculations.
Note: Data as of April 25, 2022.

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

Legend: Korea, New Zealand, Vietnam, China
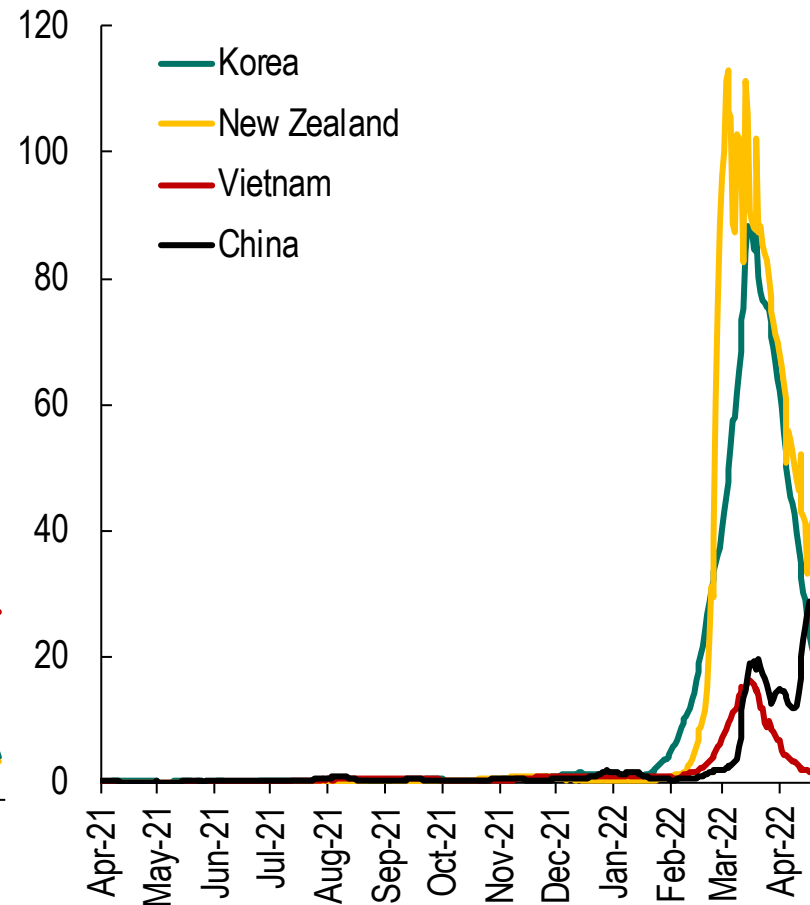
Sources: Johns Hopkins University, CEIC and IMF staff calculations.
Note: Data as of April 25, 2022.

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

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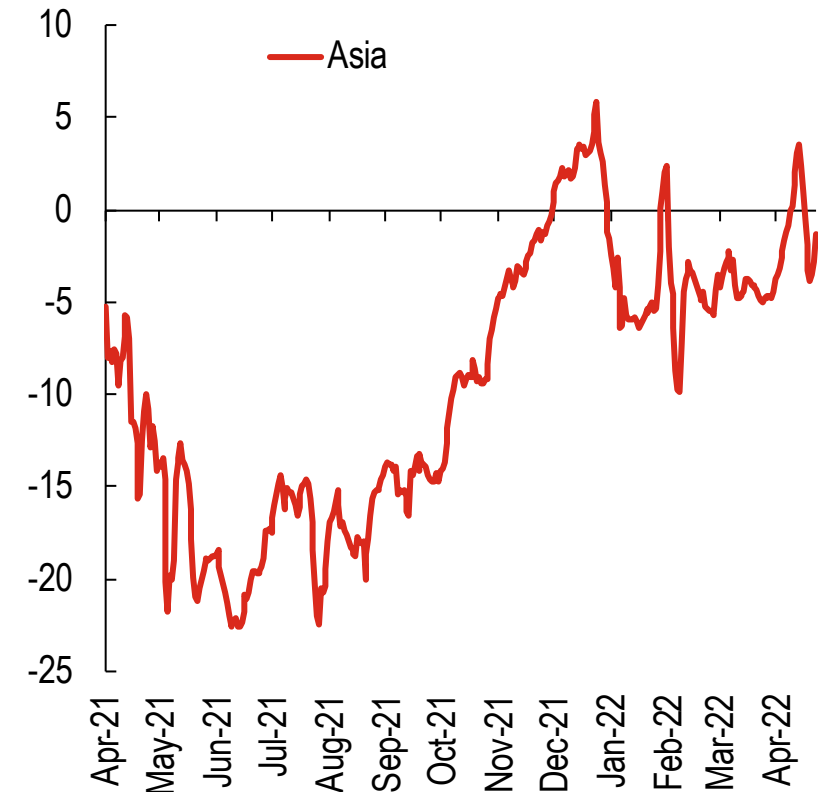
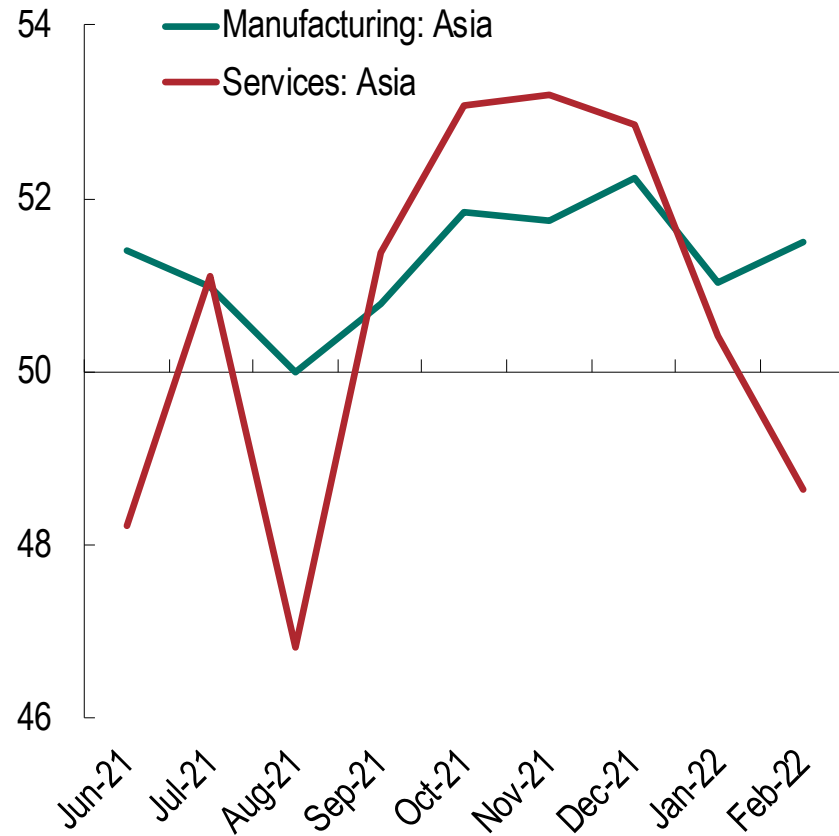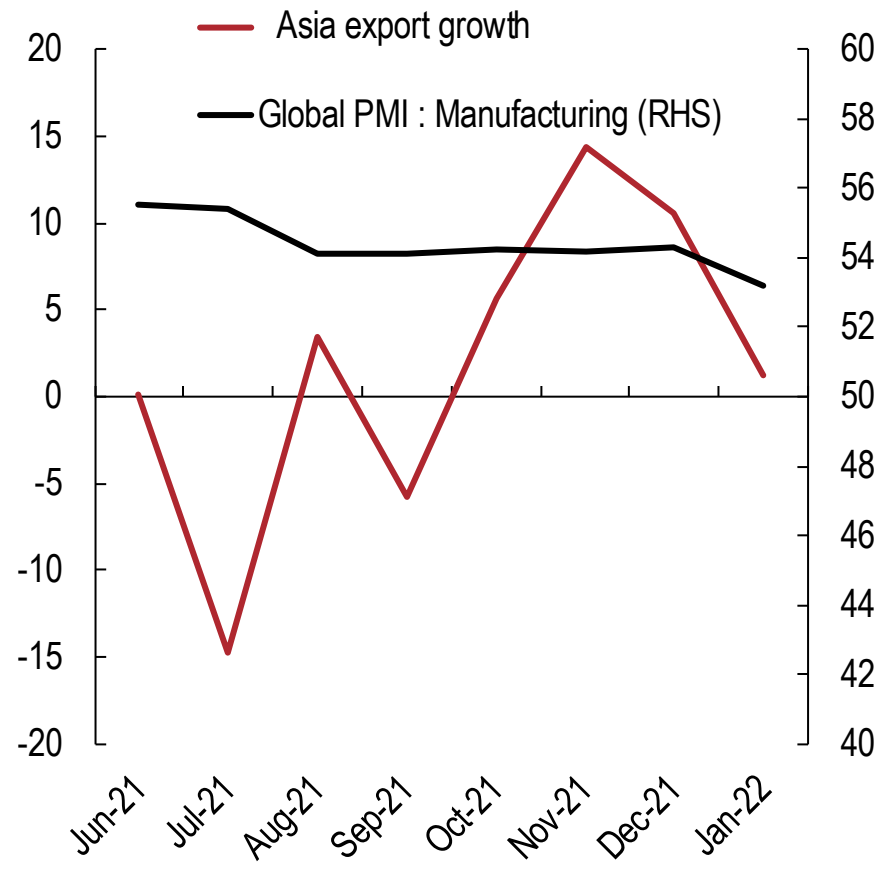Source: Google COVID-19 Community Mobility Report and IMF staff calculations.
Note: The figure display the 7-day moving average of overall mobility, defined as percentage change from pre-pandemic baselines. Computed as the mean of the following categories: retail, grocery and pharmacy, transit and workplaces.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

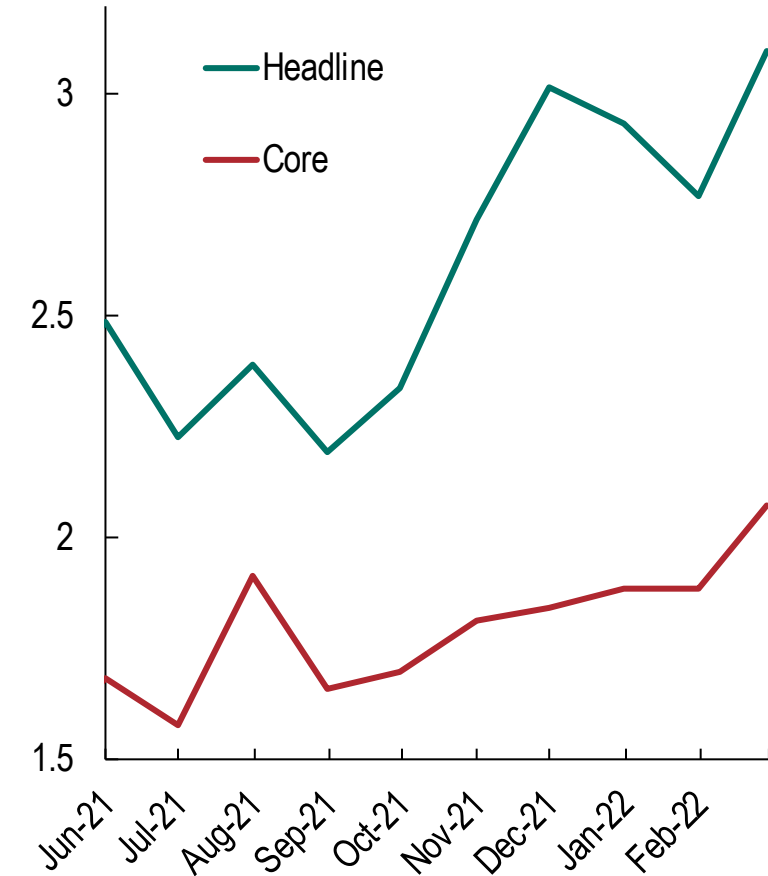# Growth in Asia has been strong despite omicron driven by strong external demand, and inflation is rising

## 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.
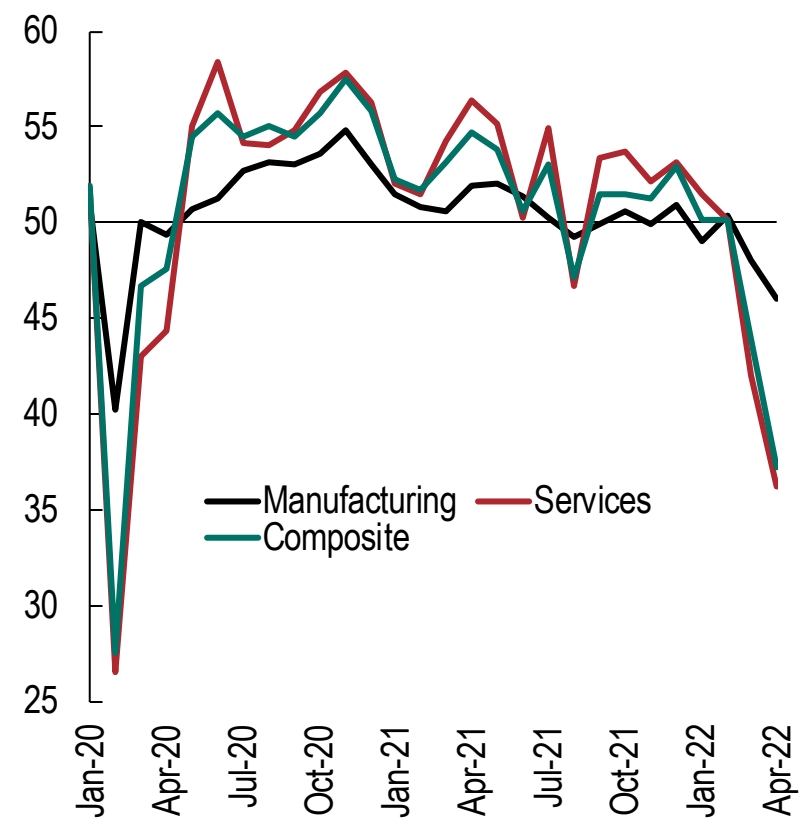Note: Data as of March 31, 2022.

Omicron wave is slowing China's manufacturing, with growing implications for supply chains

China: Exports (USD; FOB)
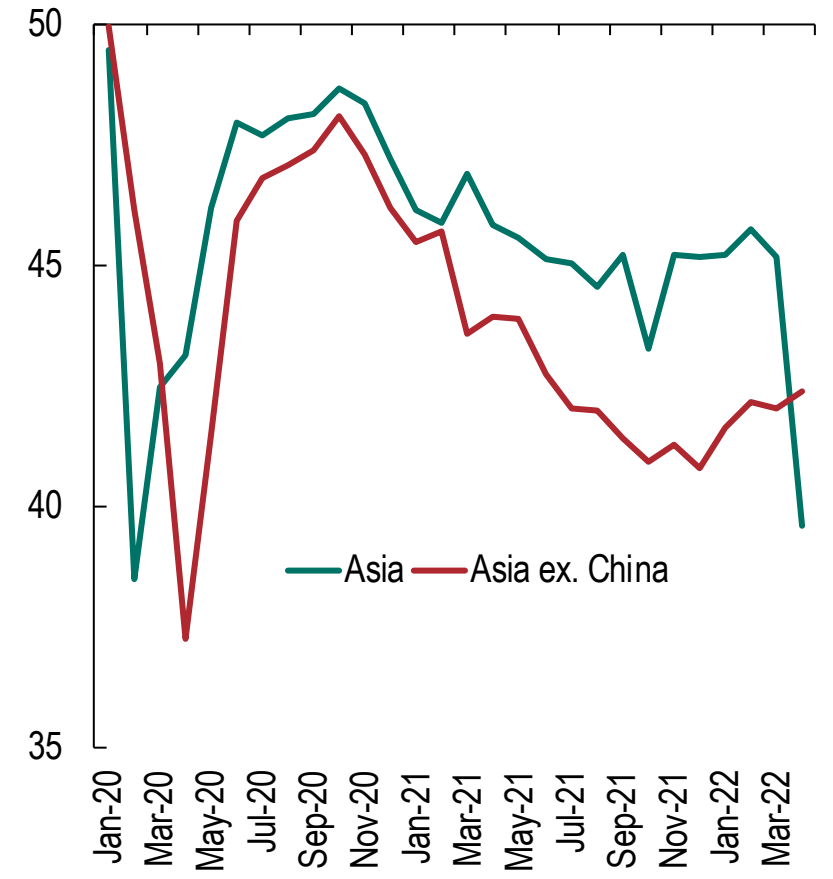*(year-on-year percentage change)*
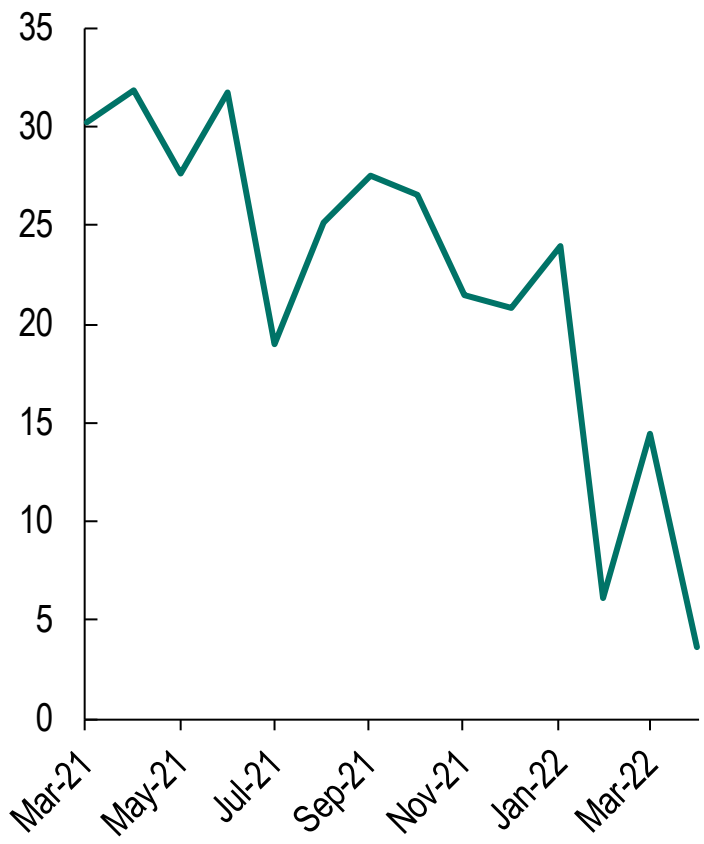
Source: Haver Analytics. Data through April 2022.

China: PMI
(50+: expansion)

Manufacturing — Services
Composite

Source: Haver Analytics. Date through April 2022.

PMI Suppliers' Delivery Times
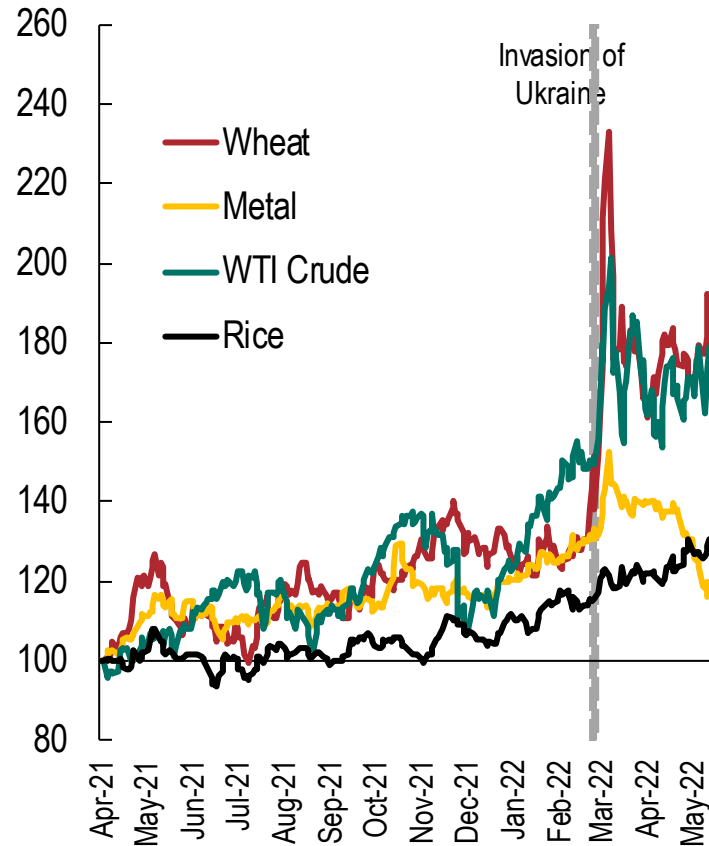*(50+: Reduction in delivery times)*

Asia — Asia ex. China

Source: Haver Analytics. Data through April 2022.

The war in Ukraine will impact the recovery

Commodity prices
(Index; April 2021=100)

- Wheat
- Metal
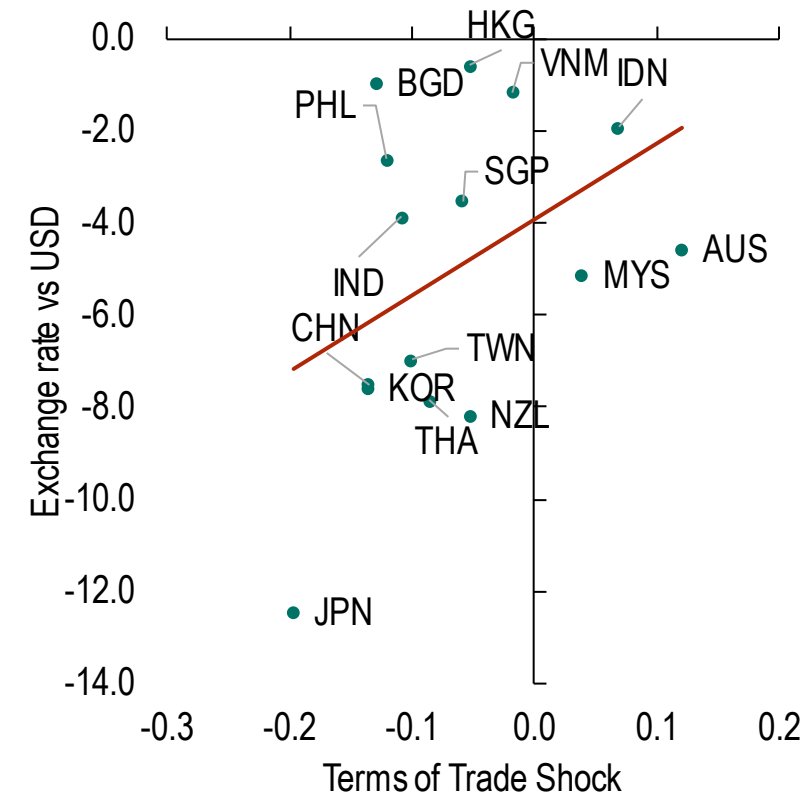- WTI Crude
- Rice

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 May 13, 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 May 13 compared to February 23, 2022.

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

- ■ Latest
- ▲ Avg: 2010-2019
- ● Lowest pandemic
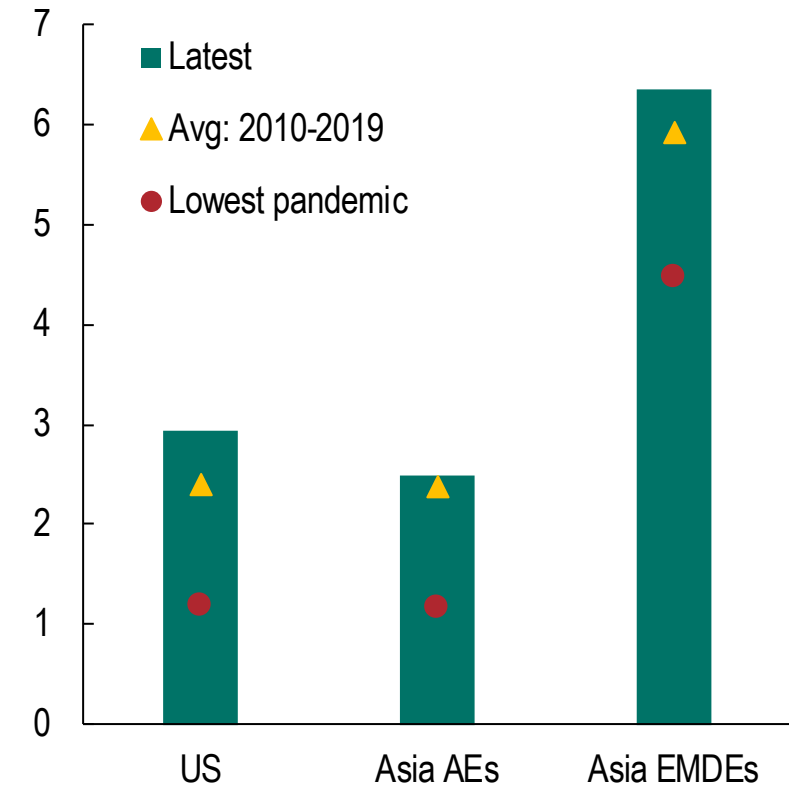
Source: Bloomberg LLP and IMF staff calculations.
Note: Simple average of 10-year yields. Asia EMDEs includes China, India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand and Vietnam. Asia AEs includes Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, and Taiwan Province of China. Data as of May 13, 2022.

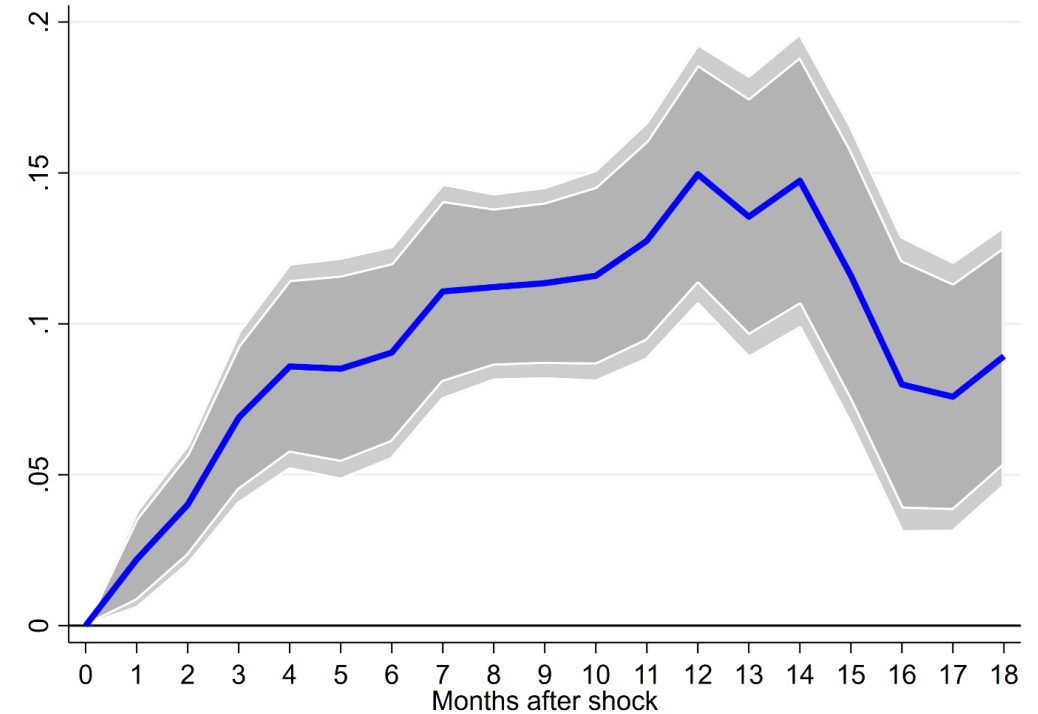# Recent spike in shipping costs will raise inflation

Global shipping costs
(Indices; March 2020=100)

Legend: Baltic Dry Index, Freightos Global Container Freight Index
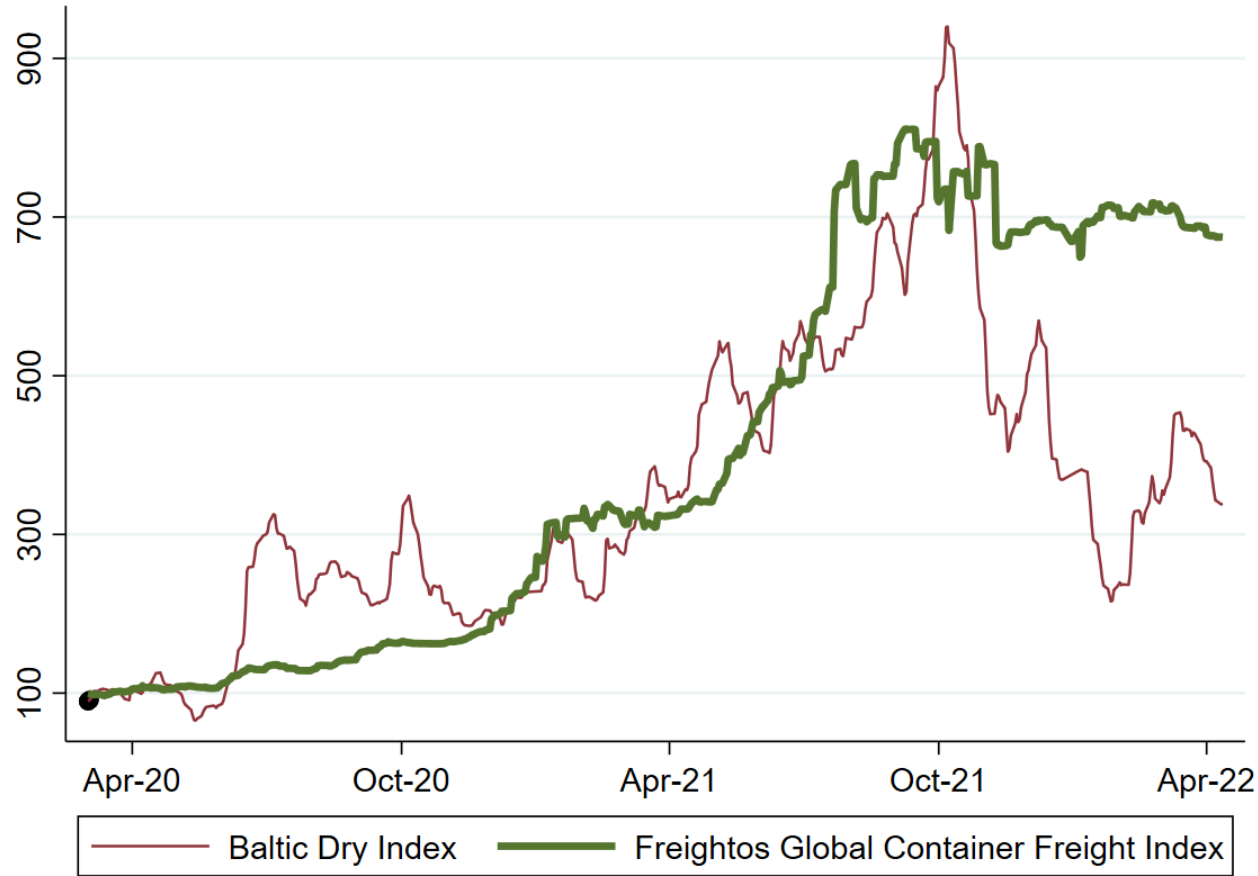
Estimated response of headline inflation following an increase in shipping costs
(Percentage points)

Months after shock

Source: Carrière-Swallow and others (2022).
Note: The figure presents the impact of a one standard deviation change in world shipping costs (+22 percentage points) on headline inflation in the baseline sample of 46 economies over period of 1992 to 2021. The solid line is the impulse response function; the dark shaded region indicates the 90 percent confidence band; the light shaded region indicates the 95 percent confidence band. t=0 denotes the year of the shock.

Russia-Ukraine War:

Channels of Transmission to Asia and Pacific

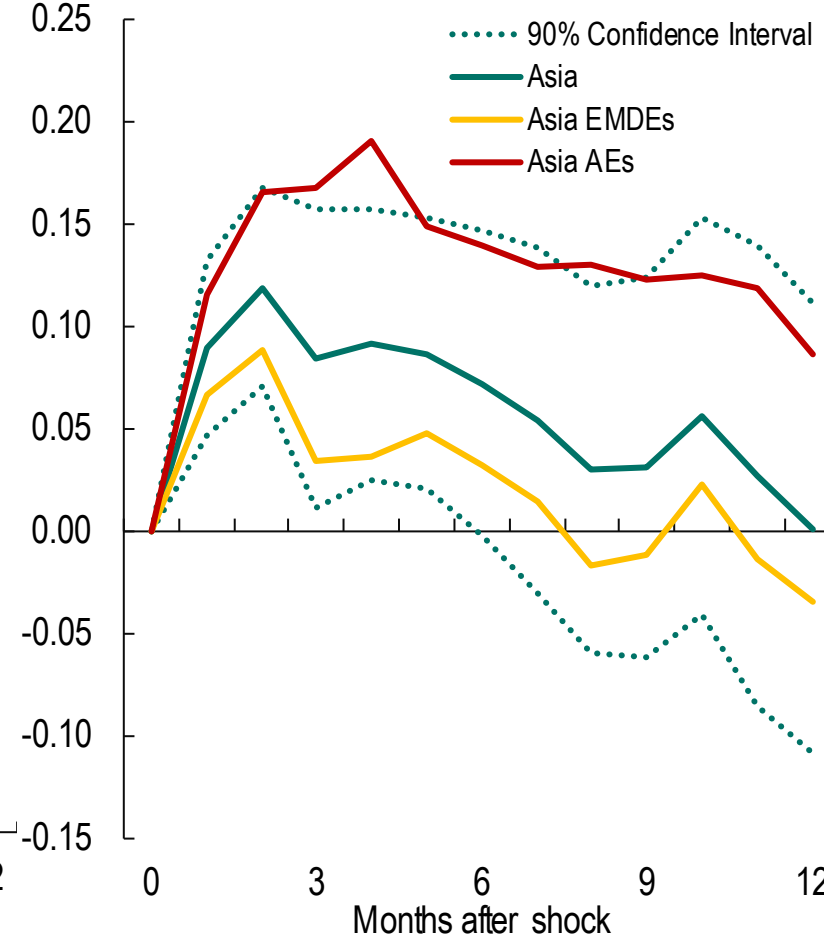# Spike in commodity and food prices will have inflationary impact

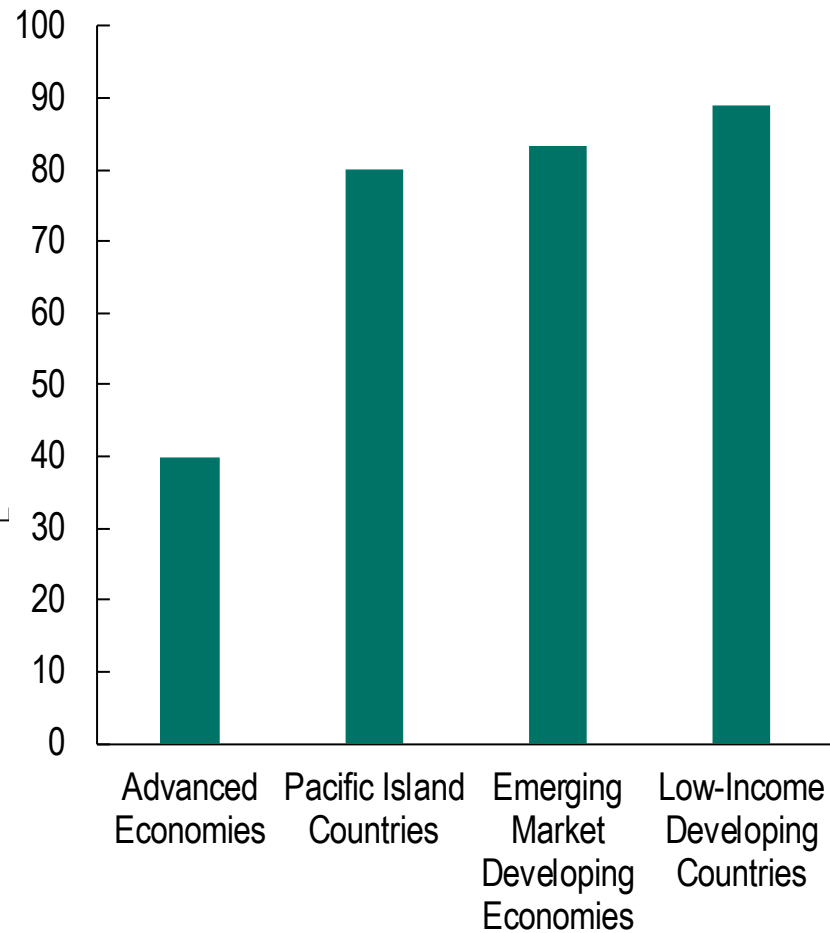**Food price shock effect on inflation**
(Percentage points)
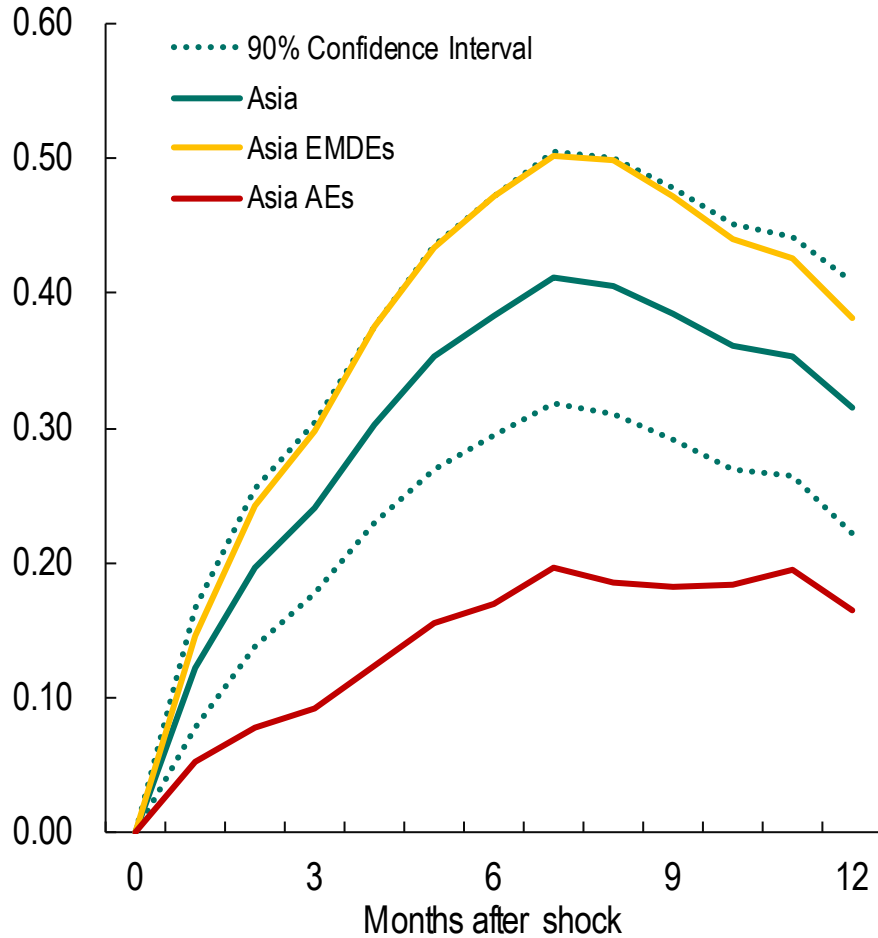
Oil price shock effect on inflation
(Percentage points)

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

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.
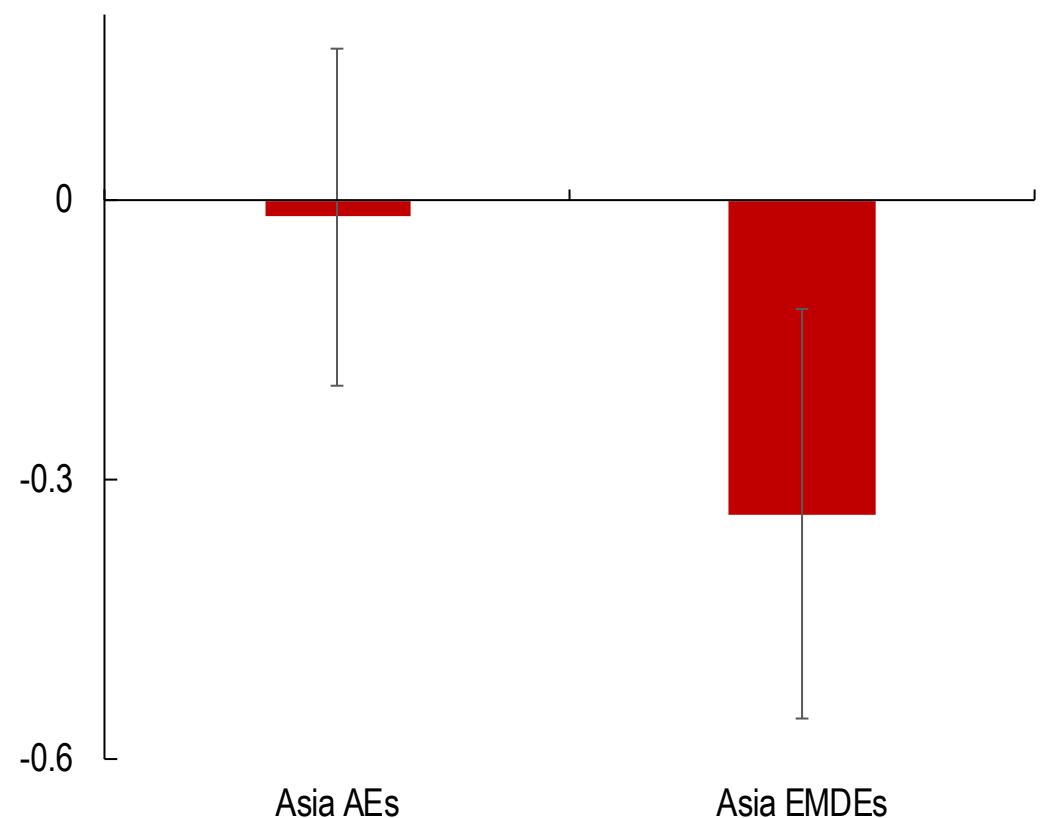
Sources: IMF country desk survey.

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)
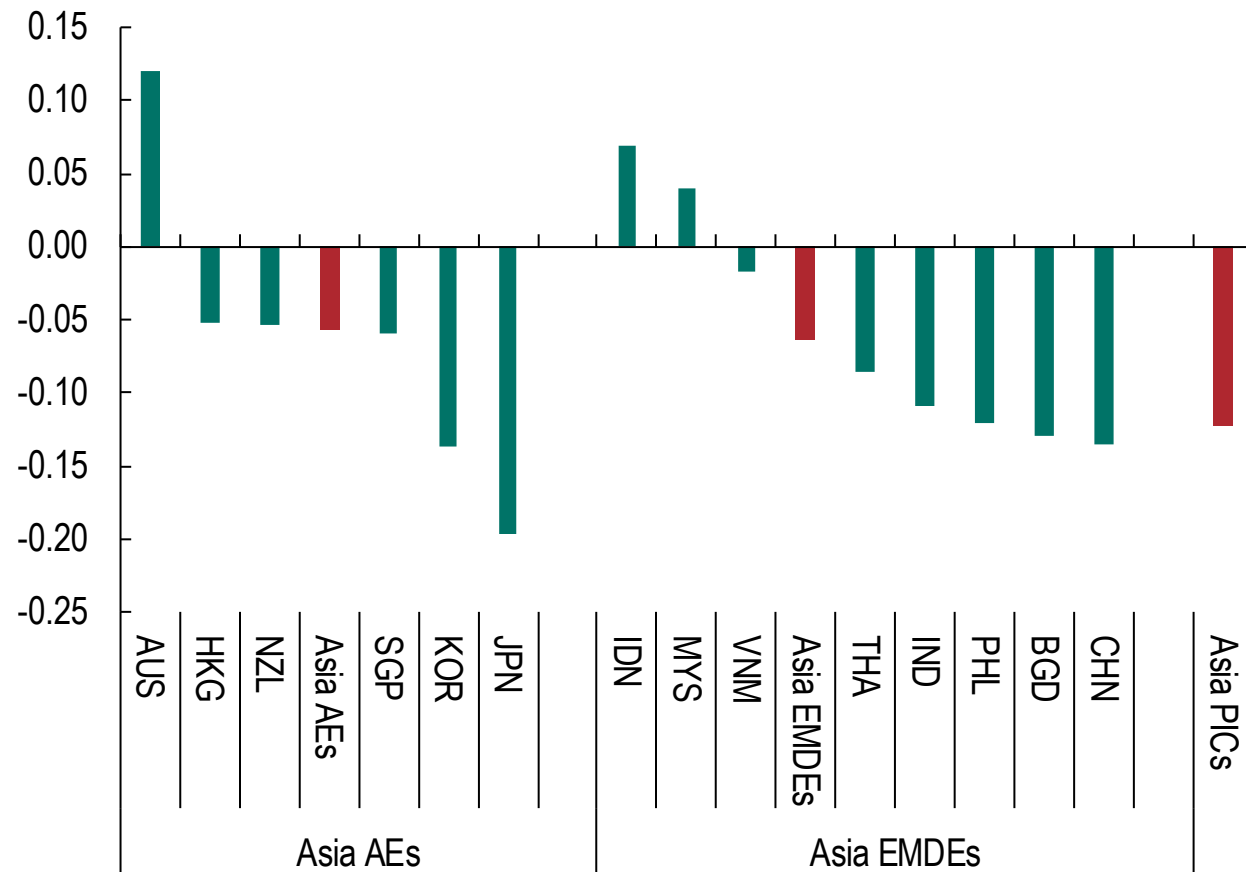
Source: Gruss and Kebhaj (2019) and IMF staff calculations.
Note: Aggregates show the median. Commodity terms of trade is computed based on international prices, including projections, of 45 commodities which are weighted using commodity-level trade data for each country. See Gruss and Kebhaj (2019) for details.

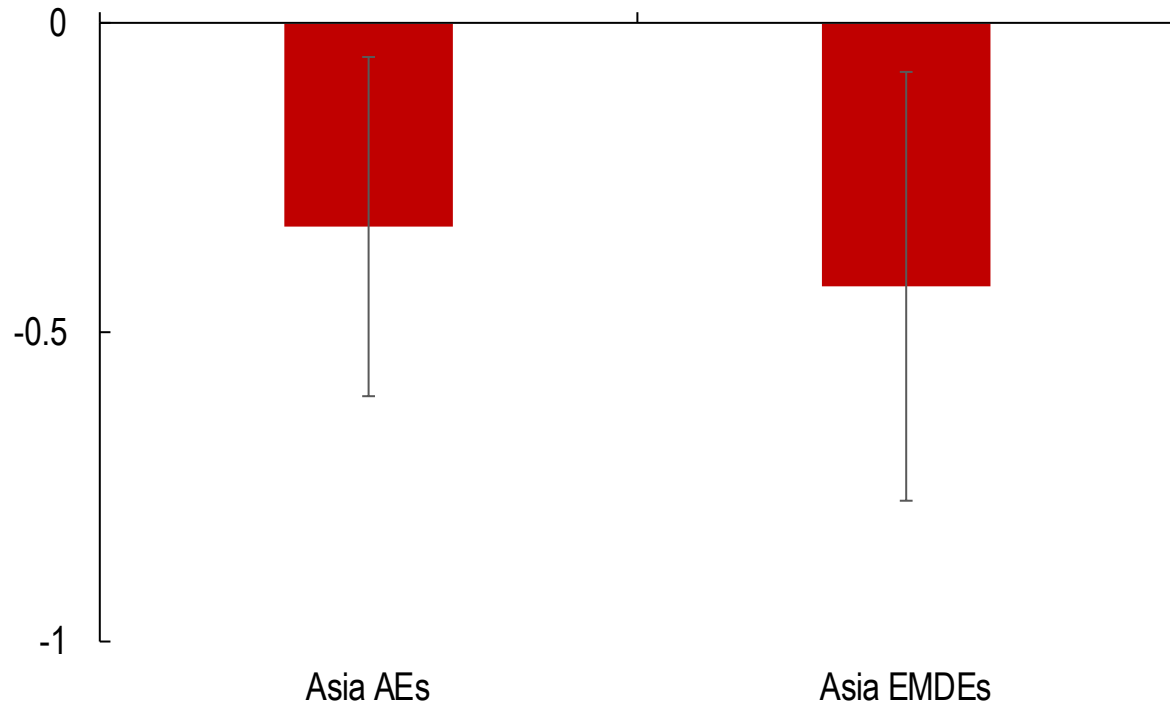Source: World Economic Outlook and IMF staff calculations.
Note: Bars represent the effect of a 1 standard deviation decrease in commodity terms of trade at impact four quarters ahead. Lines around the bars represent +/- 1 std dev intervals around the coefficients.

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

Asia: Net imports
(Percent of GDP)
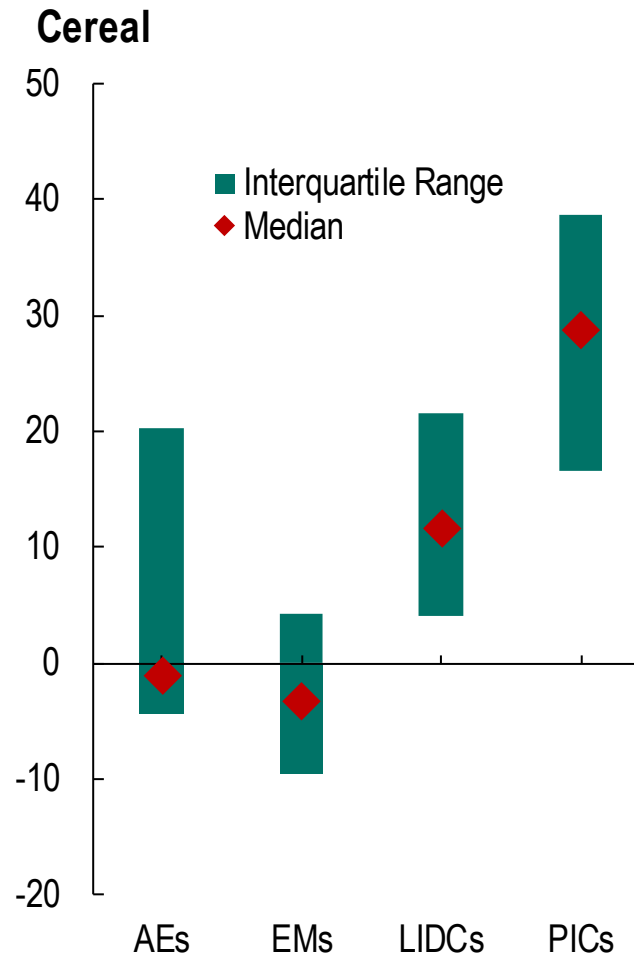
Cereal

Oil and gas

Source: World Economic Outlook and IMF staff calculations.
Note: Bars represent the effect of a 1 standard deviation decrease in commodities terms of trade at impact four quarters ahead. Lines around the bars represent +/- 1 std dev intervals around the coefficients.
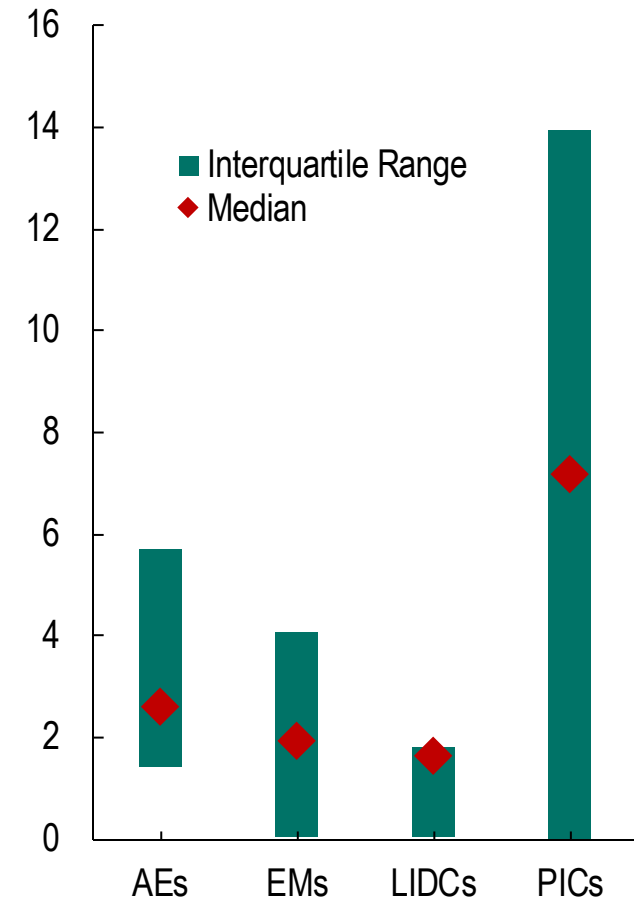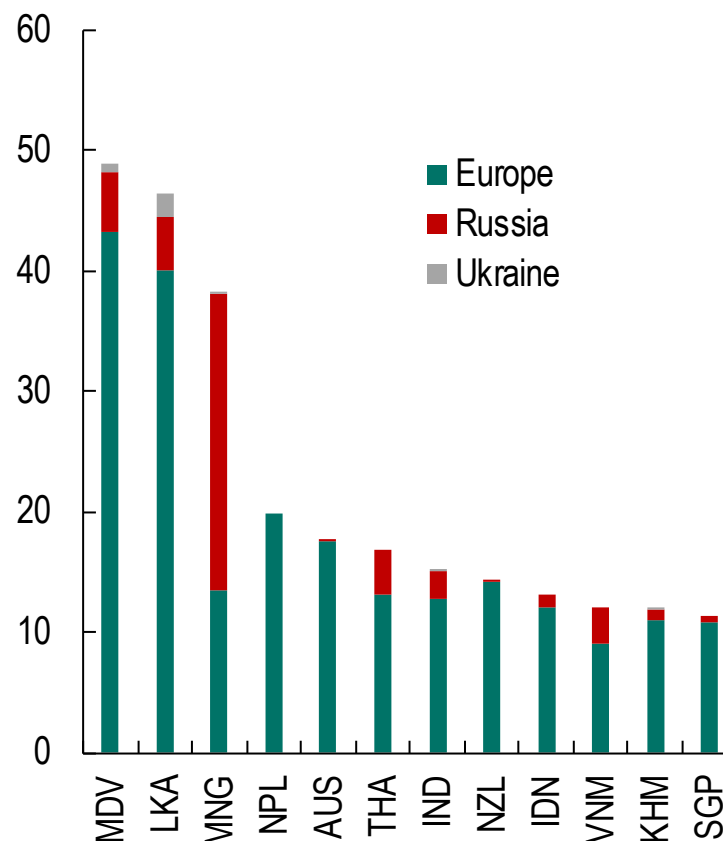
Note: Harvard University Growth Lab

Source: Country Desks Survey.

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
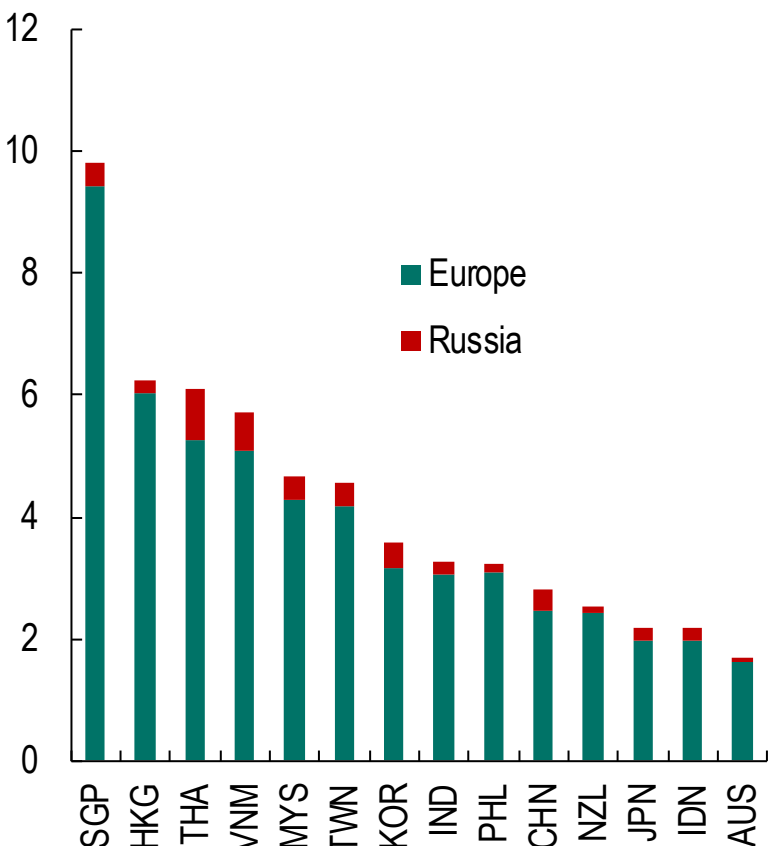
Sources: OECD and IMF staff calculations.

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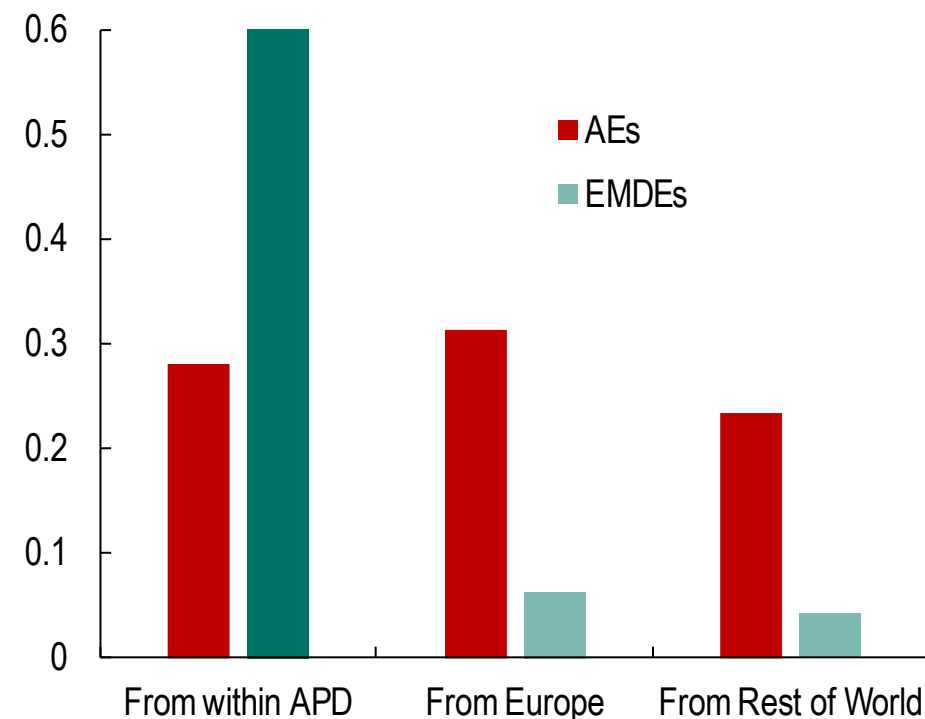
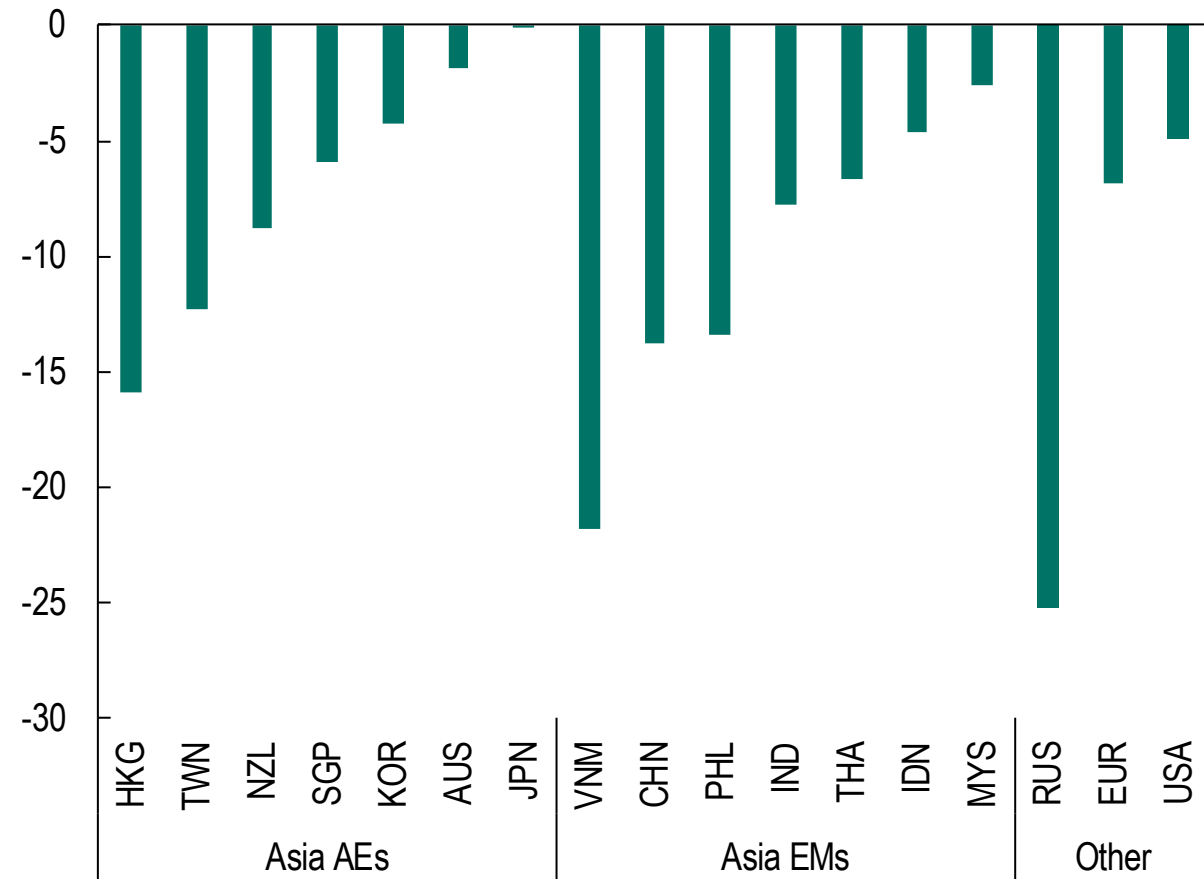Sources: IMF WEO database and staff estimations.
Note: Based on panel regression of quarterly GDP growth on GDP growth of partner regions. All regressions control for four lags of own GDP growth, country fixed effects, and growth in three partner regions (rest of APD excluding own growth; European Union;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

Since the invasion, Asia's equity markets are down and sovereign spreads are rising

Change in equity prices
(Percent; May 13 relative to February 23, 2022)

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

Source: Bloomberg LLP.

Change in EMBI spreads in Asia
(Basis points; May 13 relative to February 23, 2022)

EMBI Spread

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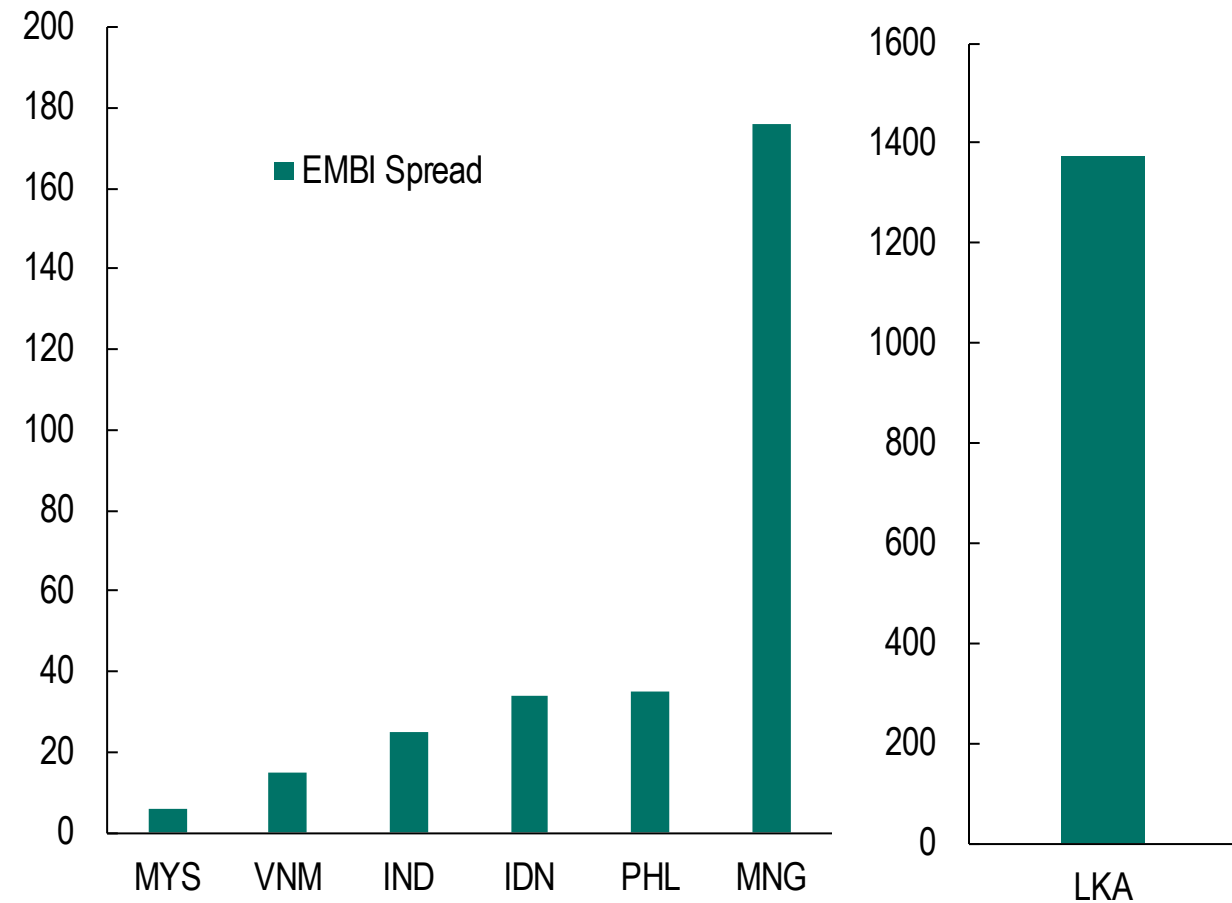
Source: Bloomberg LLP.

Forecast

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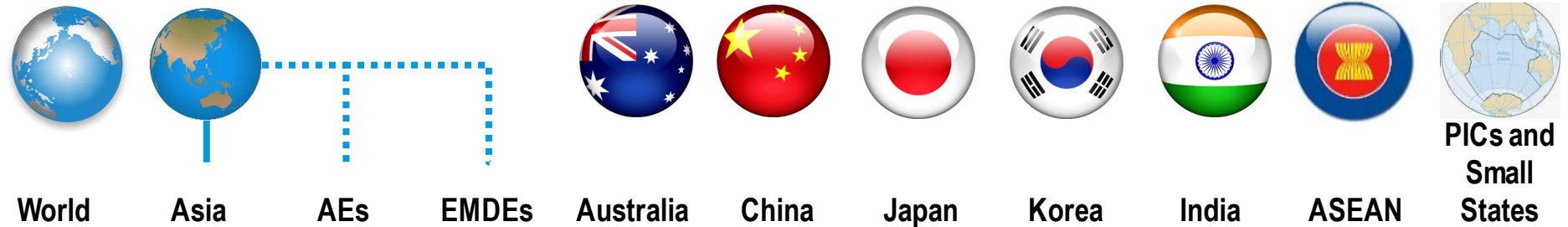
	World	Asia	AEs	EMDEs	Australia	China	Japan	Korea	India	ASEAN	PICs and Small States
2021	6.1	6.5	3.6	7.2	4.7	8.1	1.6	4.0	8.9	3.1	4.2
2022	3.6	4.9	2.7	5.4	4.2	4.4	2.4	2.5	8.2	5.1	4.7
Revision: Jan. 2022 to Apr. 2022	-0.8	-0.5	-0.6	-0.5	0.1	-0.4	-0.9	-0.5	-0.8	-0.2	-0.8
Revision: Oct. 2021 to Jan. 2022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

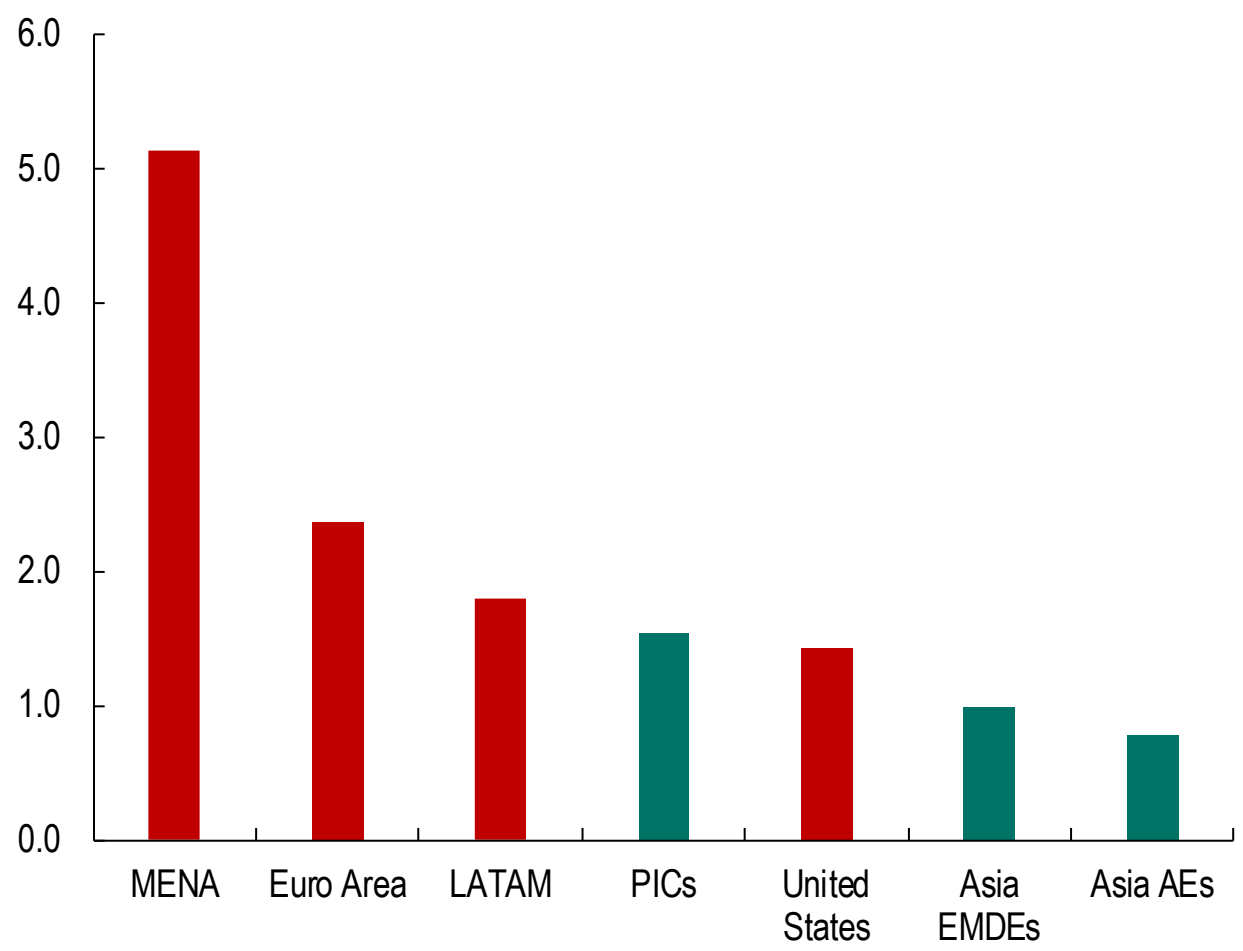## Growth revisions for 2022 relative to January WEO
(Percentage points; weighted average)
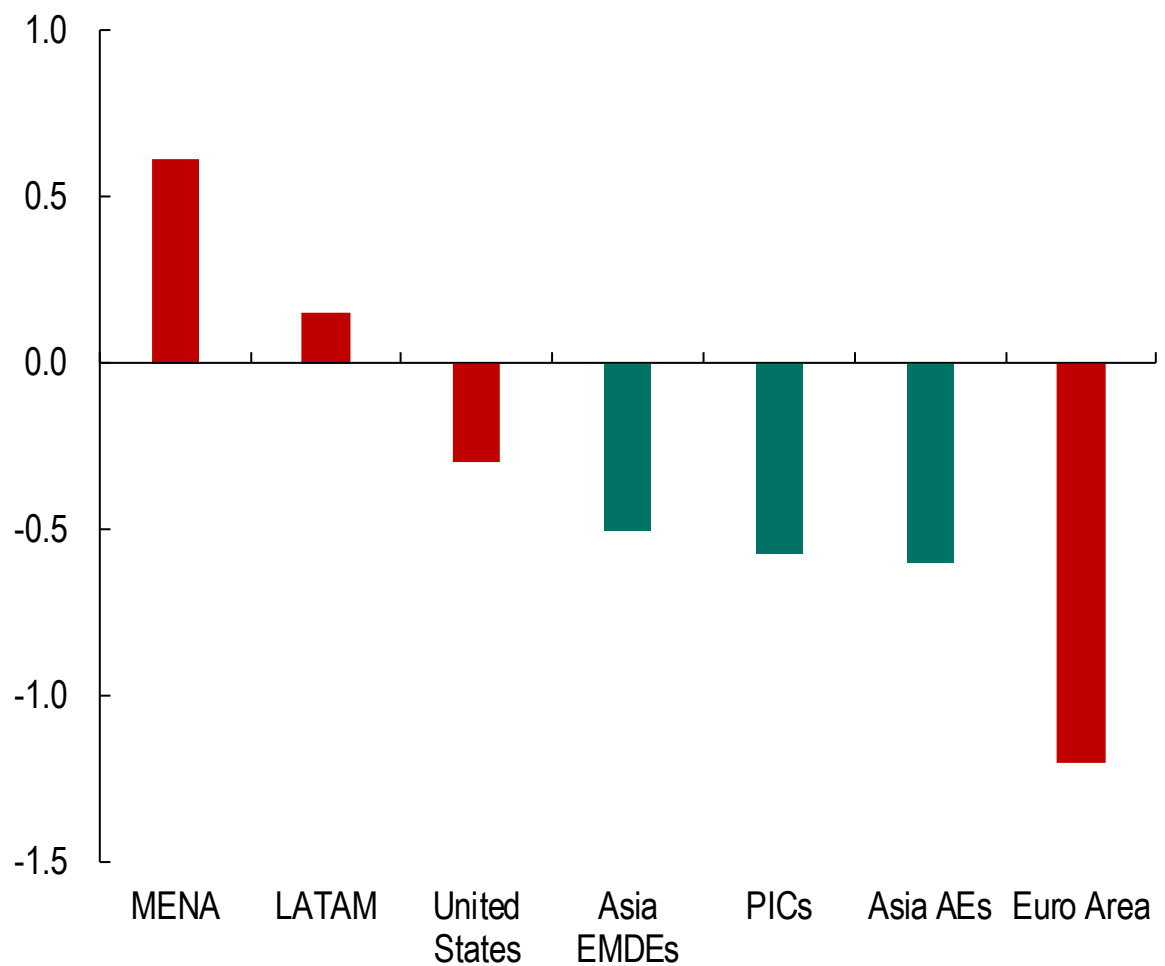
Source: IMF World Economic Outlook, April 2022.

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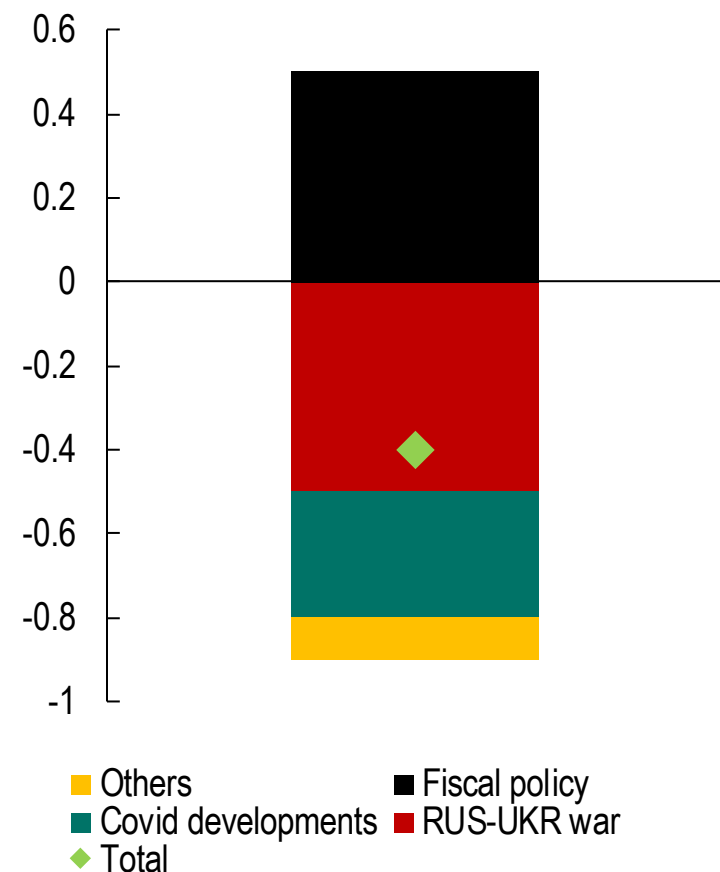*(Percentage points; weighted average; end-of-period inflation)*

Source: IMF World Economic Outlook, April 2022.

China: Facing multiple headwinds, policy support has been increased
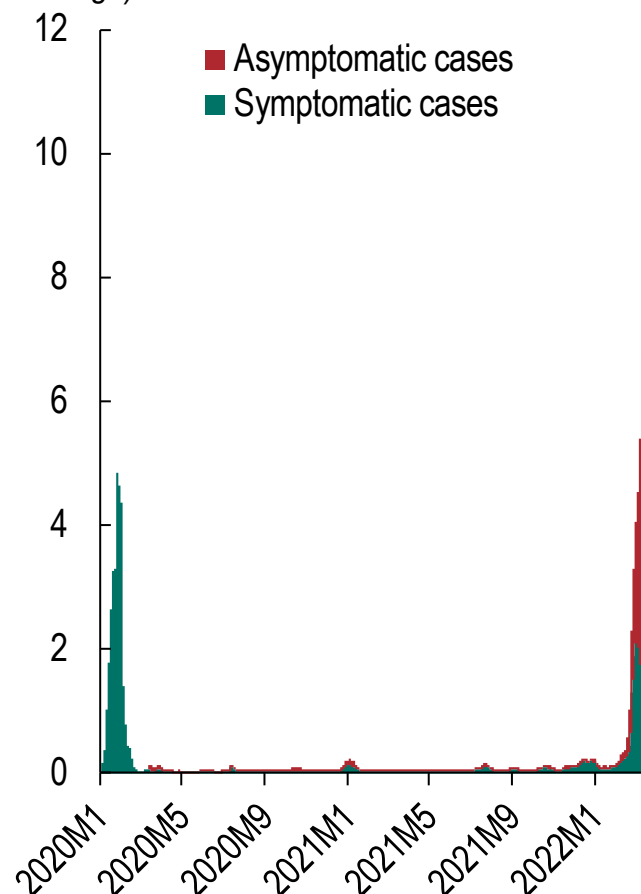
China: Revisions to GDP growth for 2022
(Percentage points, April 2022 WEO minus Jan 2022 WEO update)

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

Source: IMF staff calculations

Daily new COVID-19 cases
New cases in thousands. 7 day moving average)

Legend:
- Asymptomatic cases
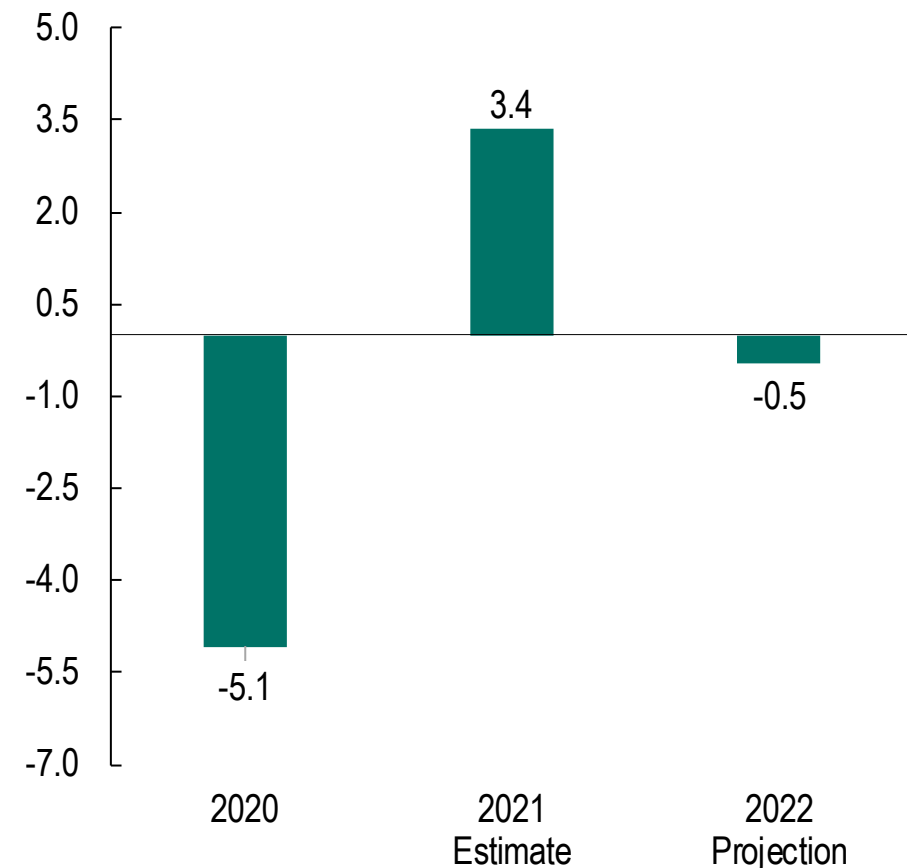- Symptomatic cases

Sources: National Health Commission, and IMF staff calculations.

Change in cyclically-adjusted primary balance
(Percent of potential GDP)

- 2020: -5.1
- 2021 Estimate: 3.4
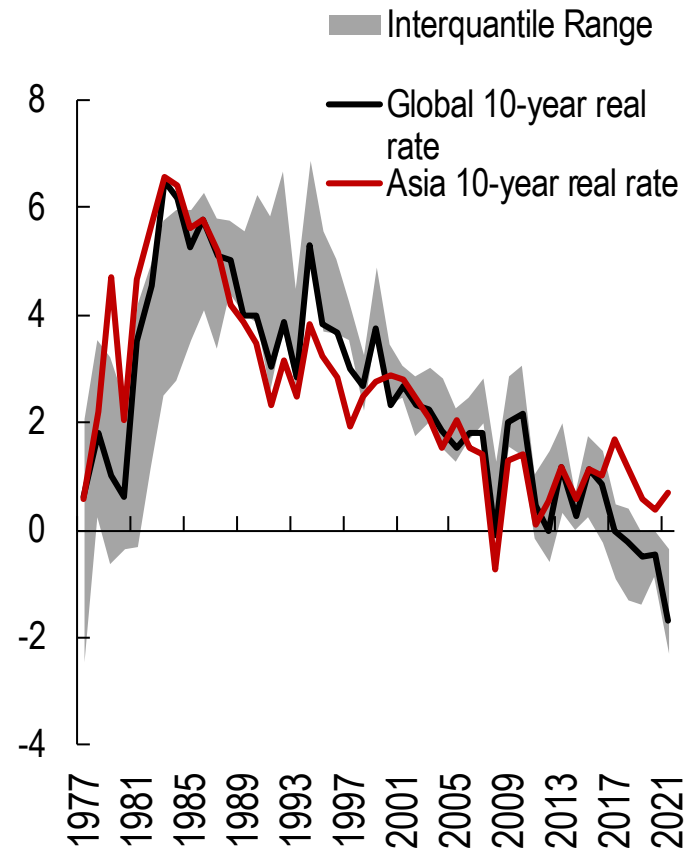- 2022 Projection: -0.5

Sources: CEIC, 2022 budget document and IMF staff calculations.
Notes: Transport congestion index: actual trip time/the trip time without traffic.

Risks

Real rates may rise due to faster than expected policy normalization

Real interest rates
(Percent)

Legend:
- Interquantile Range
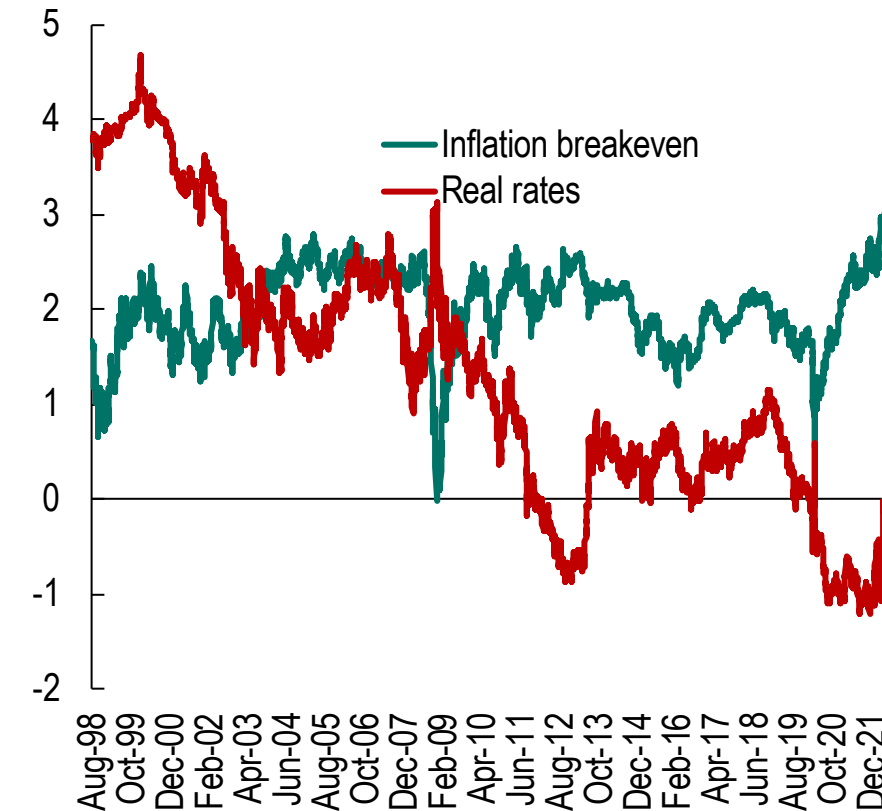- Global 10-year real rate
- Asia 10-year real rate

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)

Legend:
- Inflation breakeven
- Real rates

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

US Treasury yield curve
(Percent)

Legend:
- WEO October 2021
- WEO January 2022
- Latest
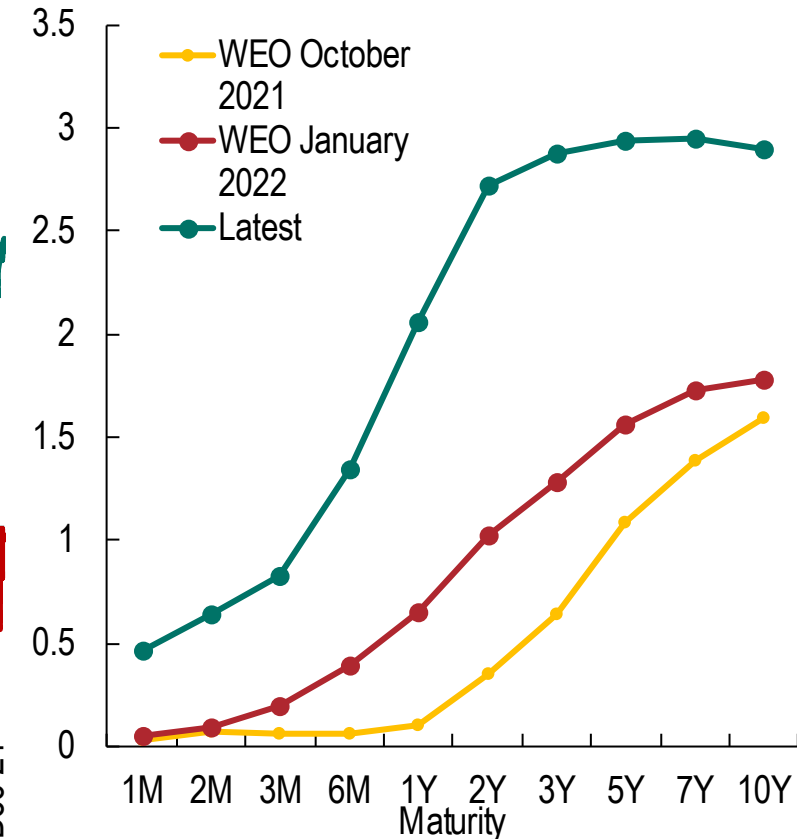
Source: US Department of the Treasury.
Note: Data from WEO vintages correspond with the publication date of WEO in October (10/12/2021) and January (1/25/2022). Latest as of April 25, 2022.
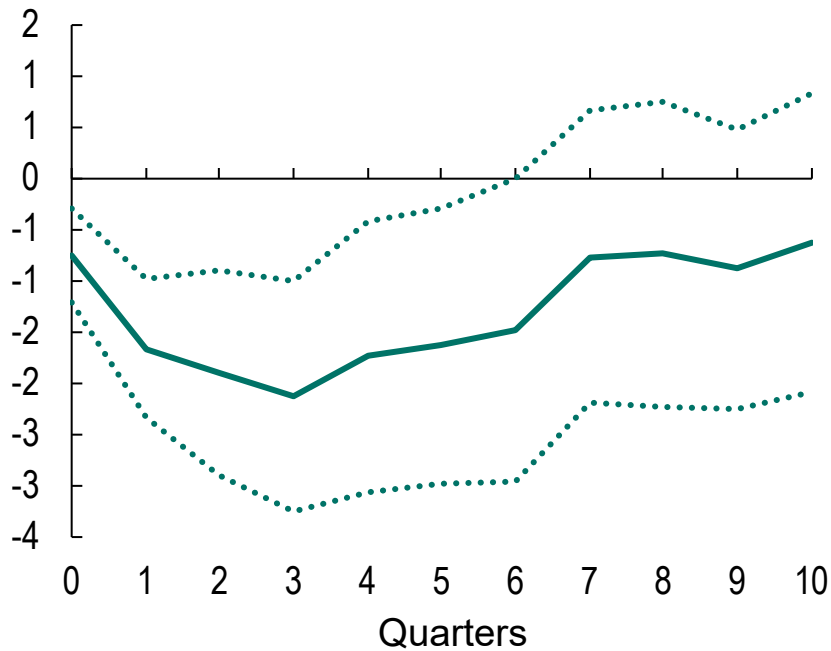
A rise in US real rates can have significant spillovers for Asia, representing an important downside risk
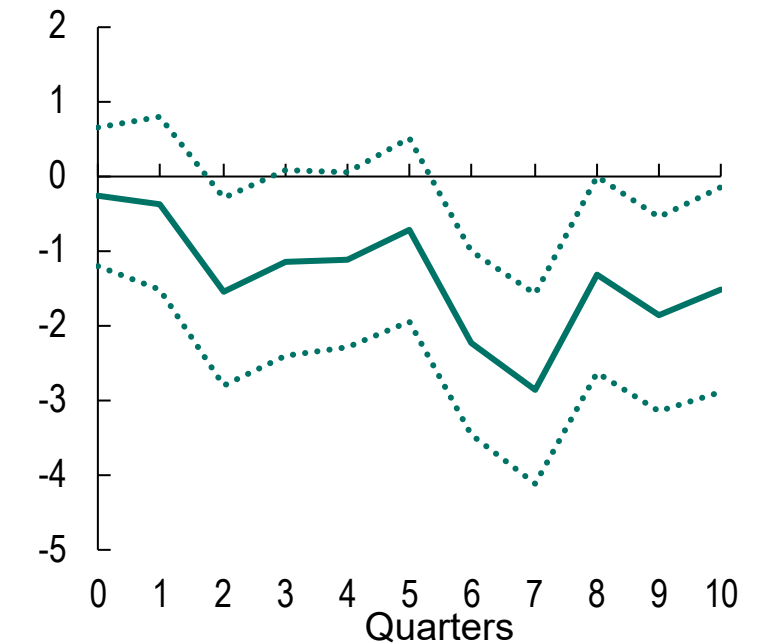
Impact of US monetary policy shock on:

10-year real rates
(Percentage points)

— World — Asia
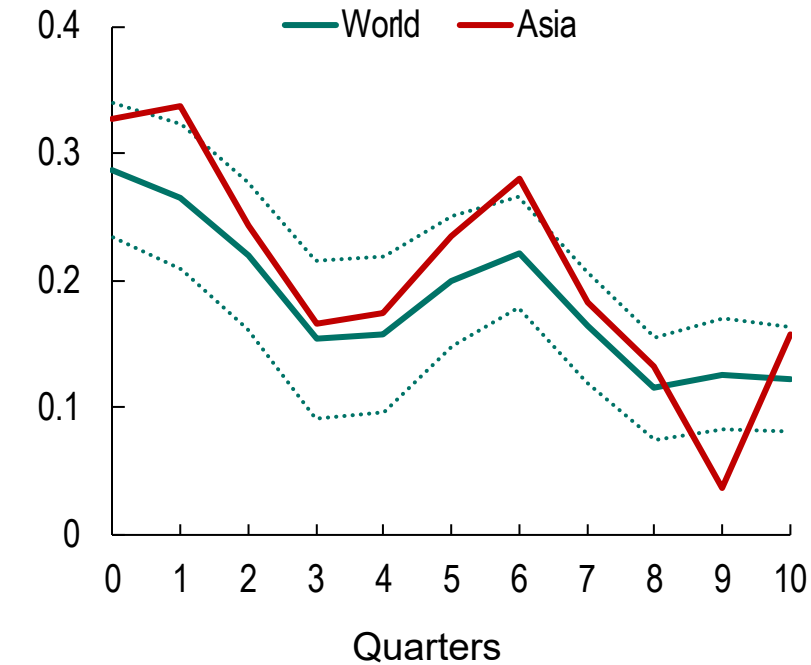
Real investment
(Percent)

Investment of high-leverage firms relative to low-leverage firms
(Percent)

Quarters

Sources: Furceri, González-Domínguez and Tawk, forthcoming.
Note: Impulse responses based on a panel of 28 economies using quarterly data since 1973Q2 (Asia sample based on 13 countries). Response to a 100 basis points increase in monetary policy tightening shock. Dotted lines show 90 percent confidence intervals.

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 $h = 0 \dots 10$ 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.

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.

Risk of a China slowdown

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

Legend:
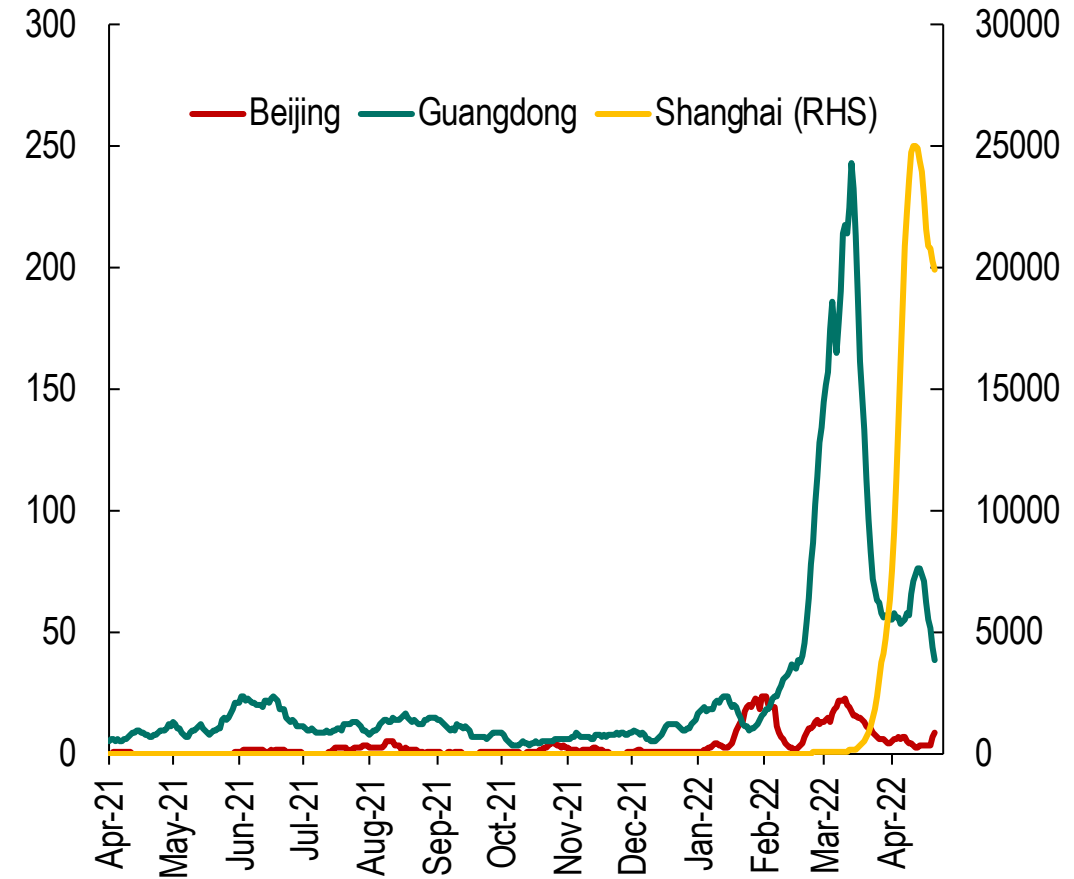— Real estate bond price index
— 30-city real estate transactions (RHS)
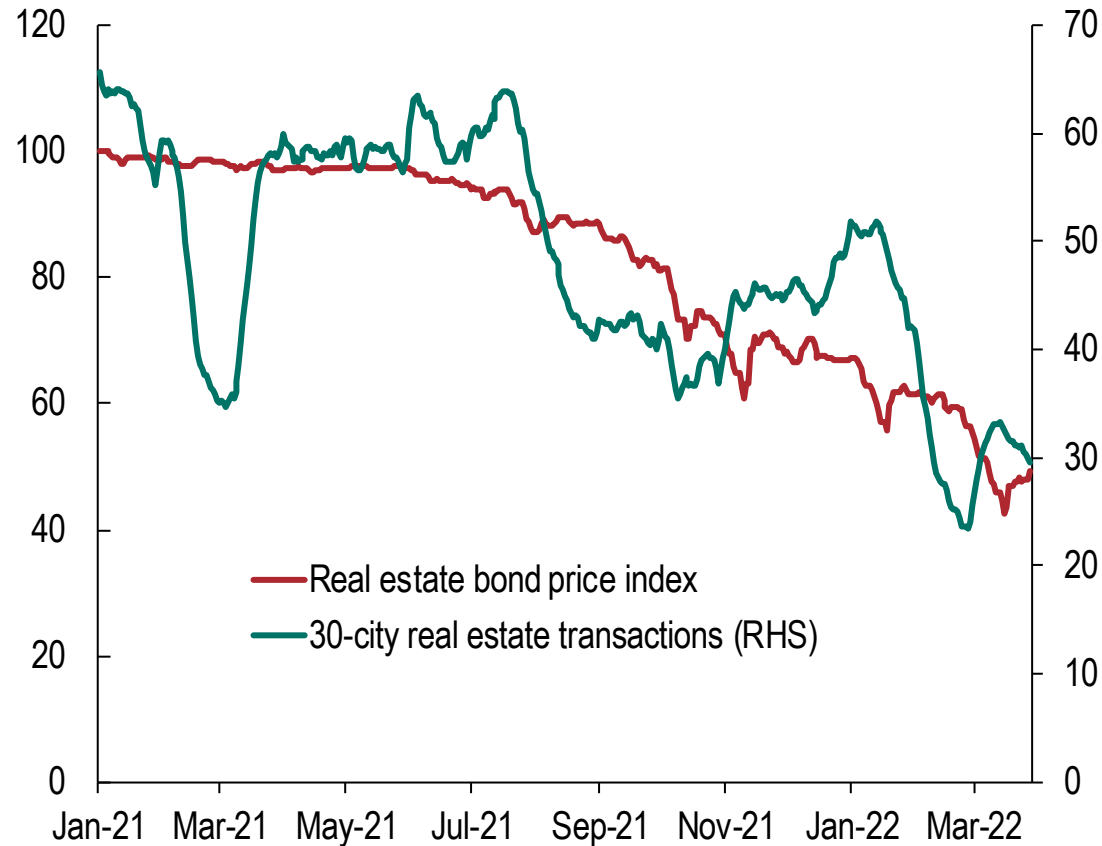
Source: Bloomberg LLP, Wind and IMF staff calculations.
Note: Bond price series based on Markit iBoxx China Real Estate Composite Bond Price Index.
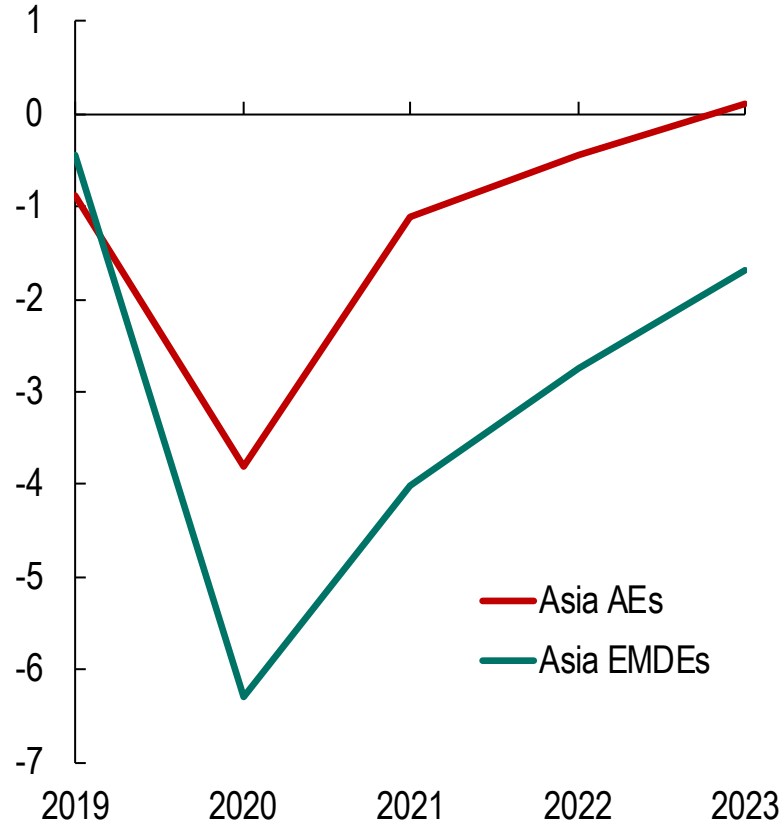
Covid-19 new cases
(7-day moving average)

Legend:
— Beijing — Guangdong — Shanghai (RHS)

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

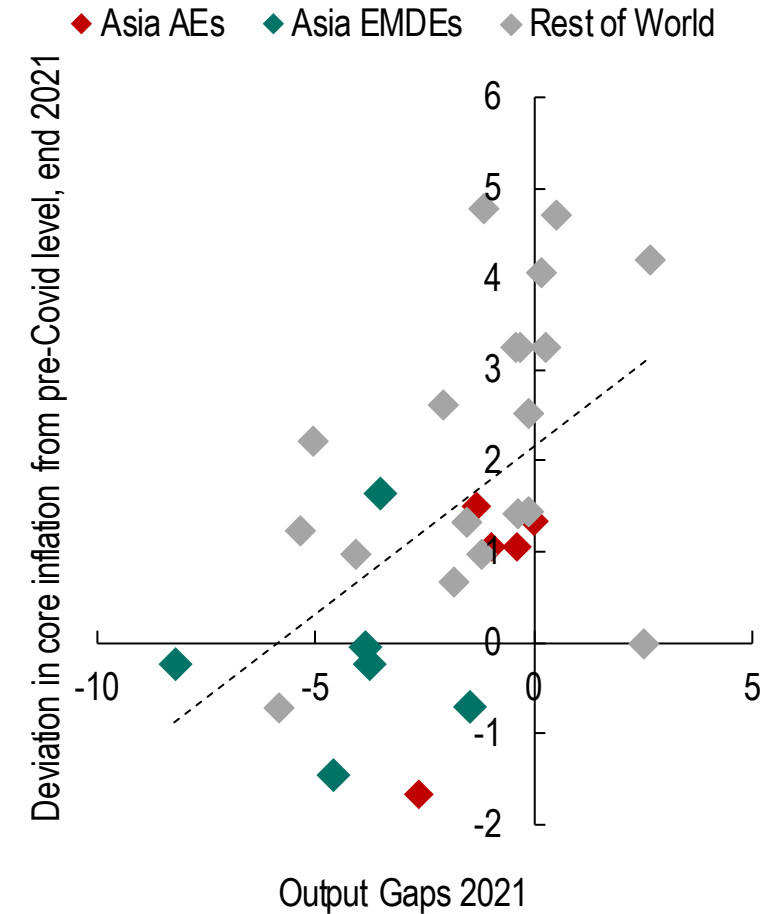# Policy Trade-offs and Priorities

A difficult trade-off

Output gaps
(Percent of GDP)

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)

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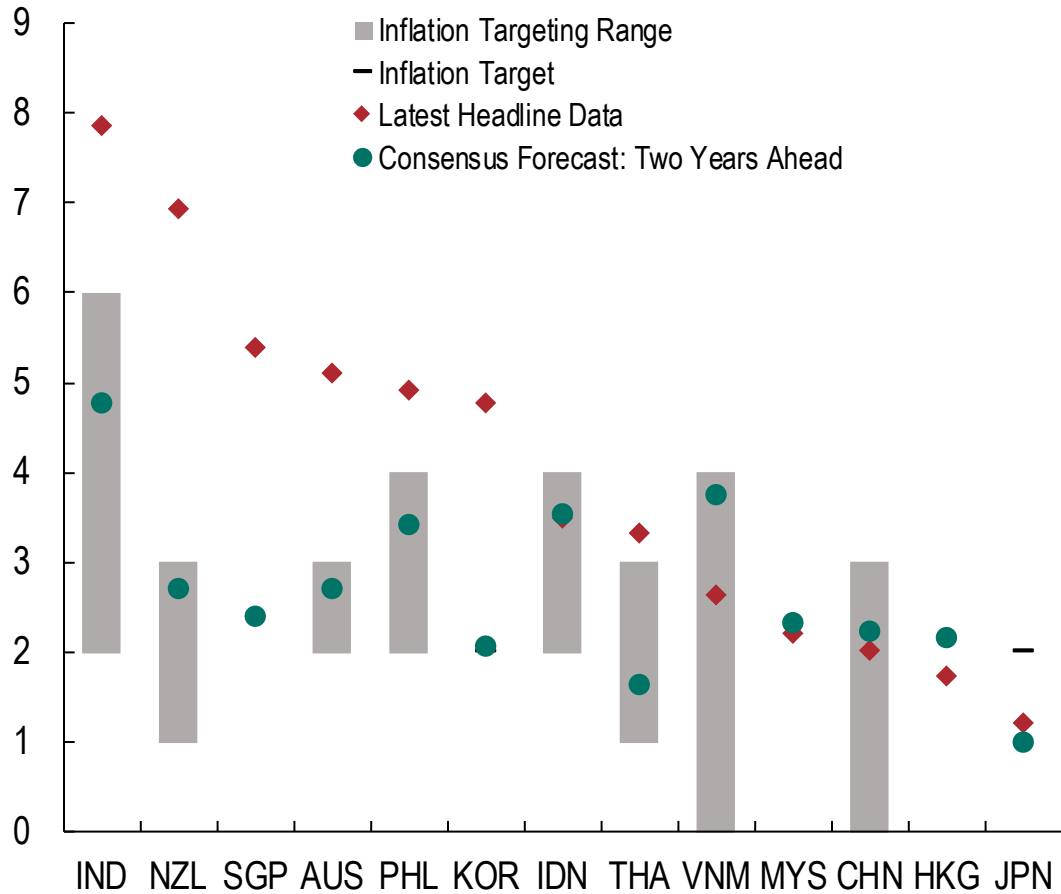Note: Data as of March 31, 2022. Asia AEs includes Australia, Hong Kong SAR, Japan, Korea, New Zealand, Macao SAR, Singapore and Taiwan Province of China. Asia EMDEs includes China, India, Indonesia, Malaysia, Philippines, and Thailand.
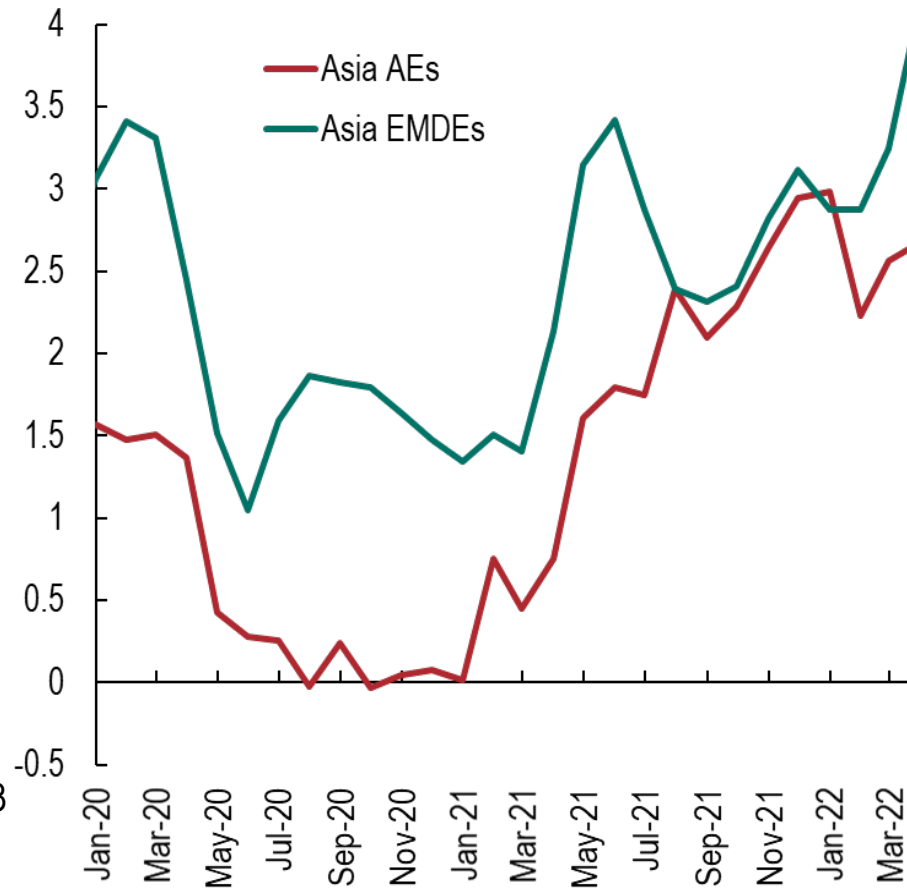
Core inflation vs output gaps
(Percent)

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

Expected inflation
(Percent)

Legend:
- ■ Inflation Targeting Range
- — Inflation Target
- ◆ Latest Headline Data
- ● Consensus Forecast: Two Years Ahead

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

Expected change in short-term rate, WEO and market implied
(percentage points)

Legend:
- ■ 2023
- ■ 2022
- ● Market Implied Policy Rate 1-year Ahead
- ◆ Market Implied Policy Rate 2-years Ahead
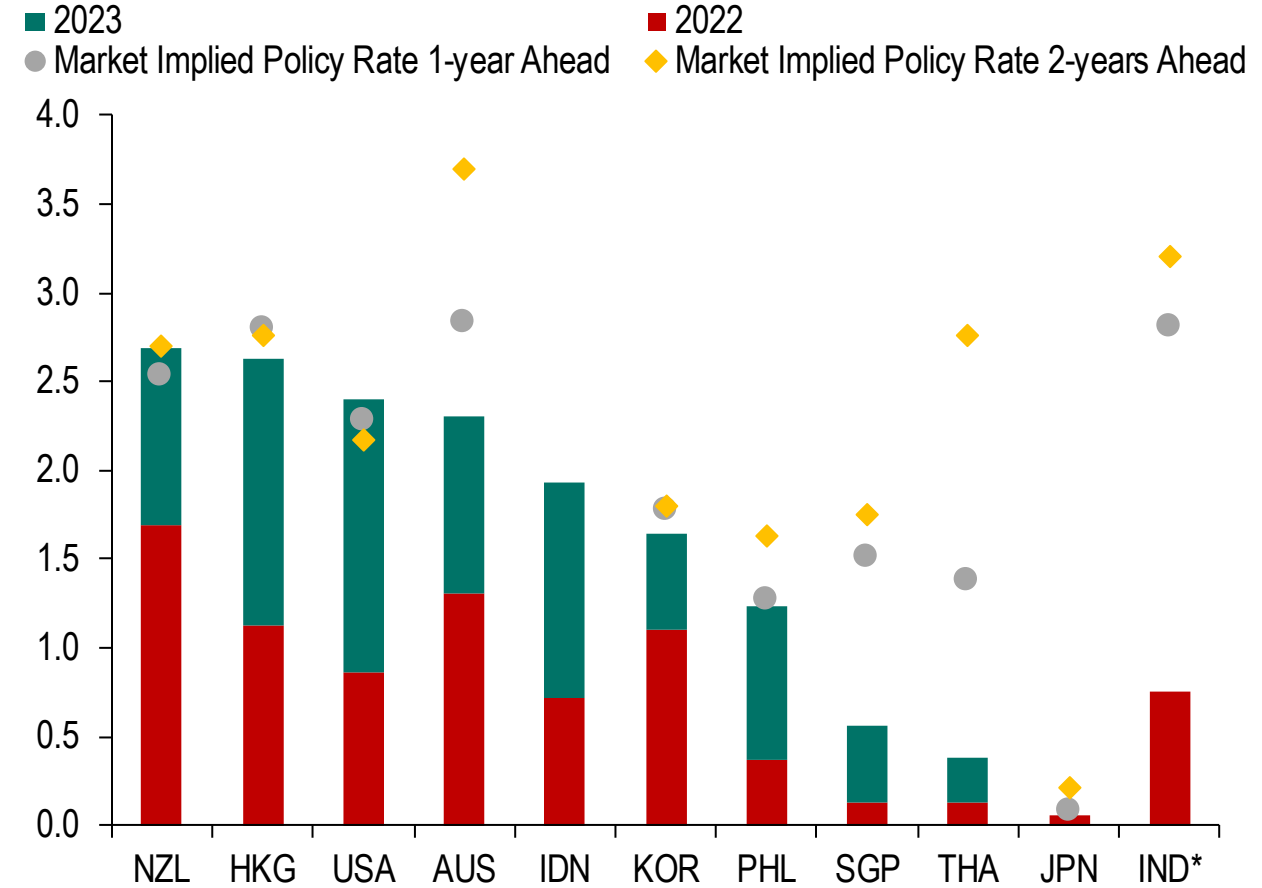
Countries (x-axis): NZL HKG USA AUS IDN KOR PHL SGP THA JPN IND*

Source: Consensus Forecasts and IMF staff calculations.
Note: Data as of May 13th, 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.
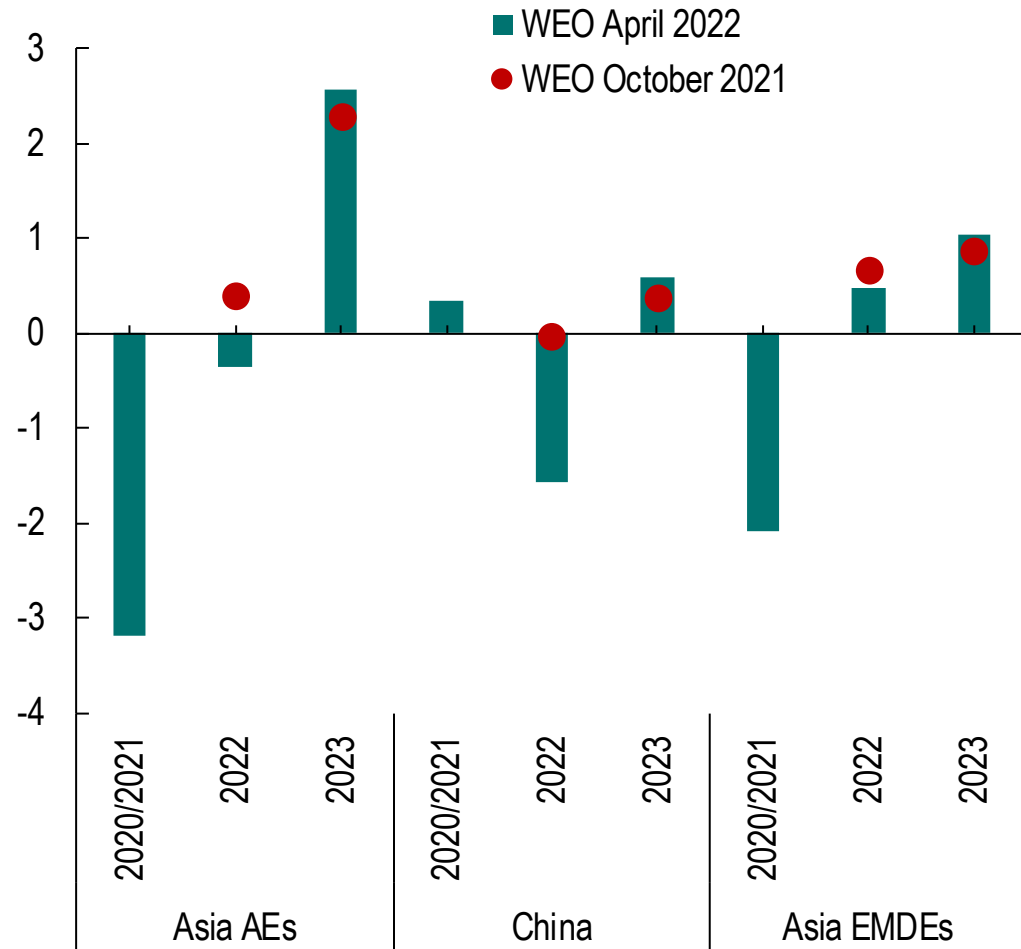
Source: World Economic Outlook and Bloomberg.
Note: Bars show the change in short-term rates as projected in the April 2022 WEO for 2022 and 2023 compared to 2021. Changes in market implied policy rates are from Bloomberg and refer to 1-year and 2-year ahead rates, therefore cover a sightly different 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)
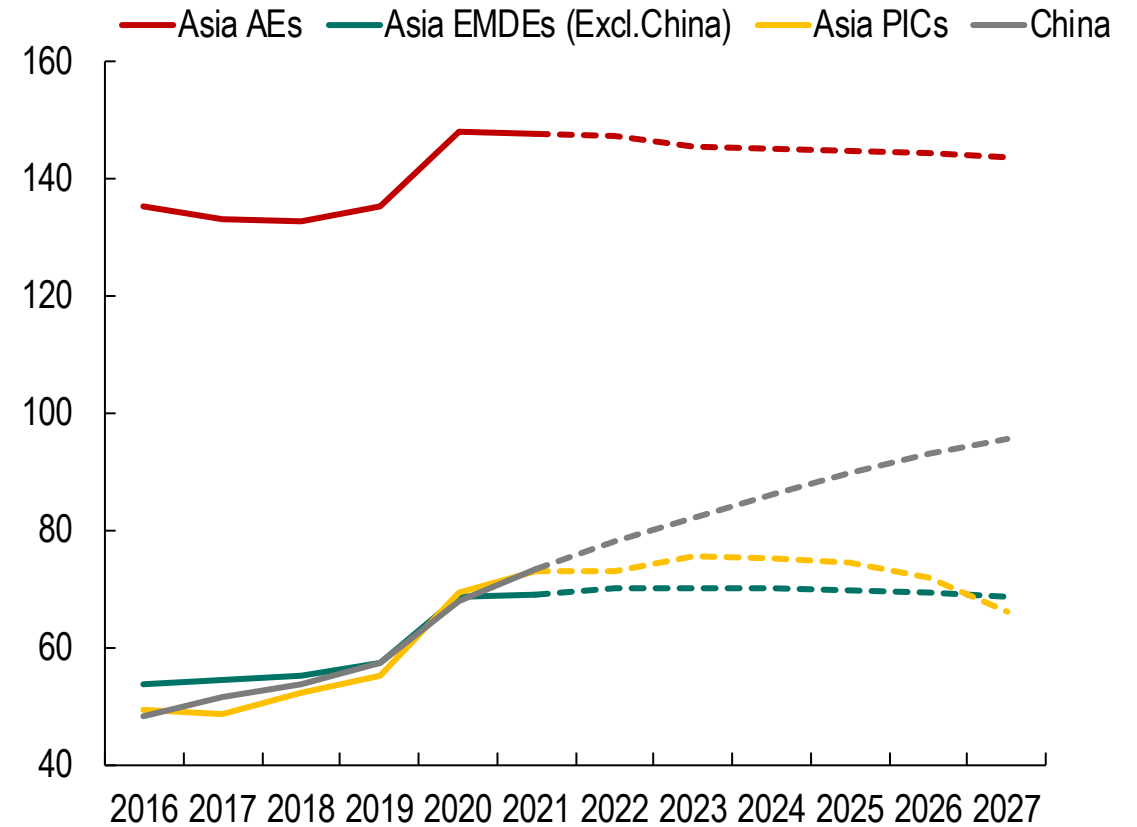
Source: World Economic Outlook and IMF staff calculations.
Note: Fiscal impulse is calculated as the change in the structural primary balance.

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

Legend: Asia AEs — Asia EMDEs (Excl.China) — Asia PICs — China

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
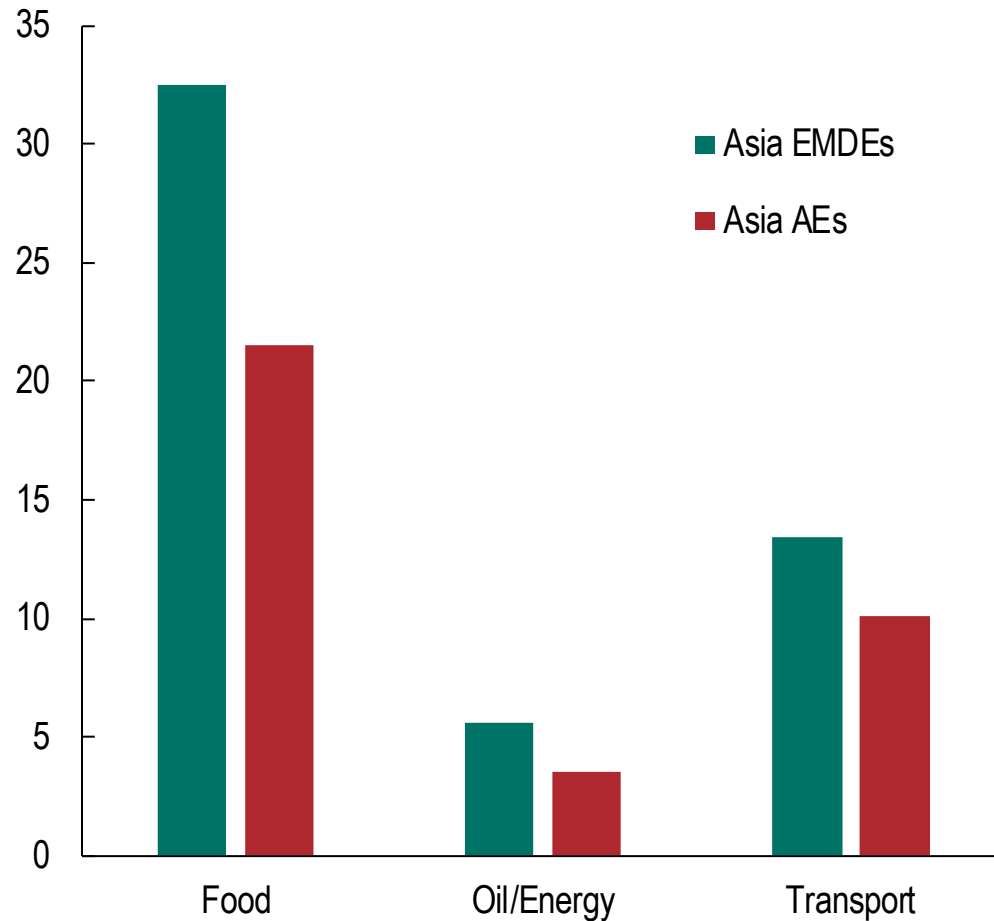
Sources: Haver Analytics and IMF staff calculations.

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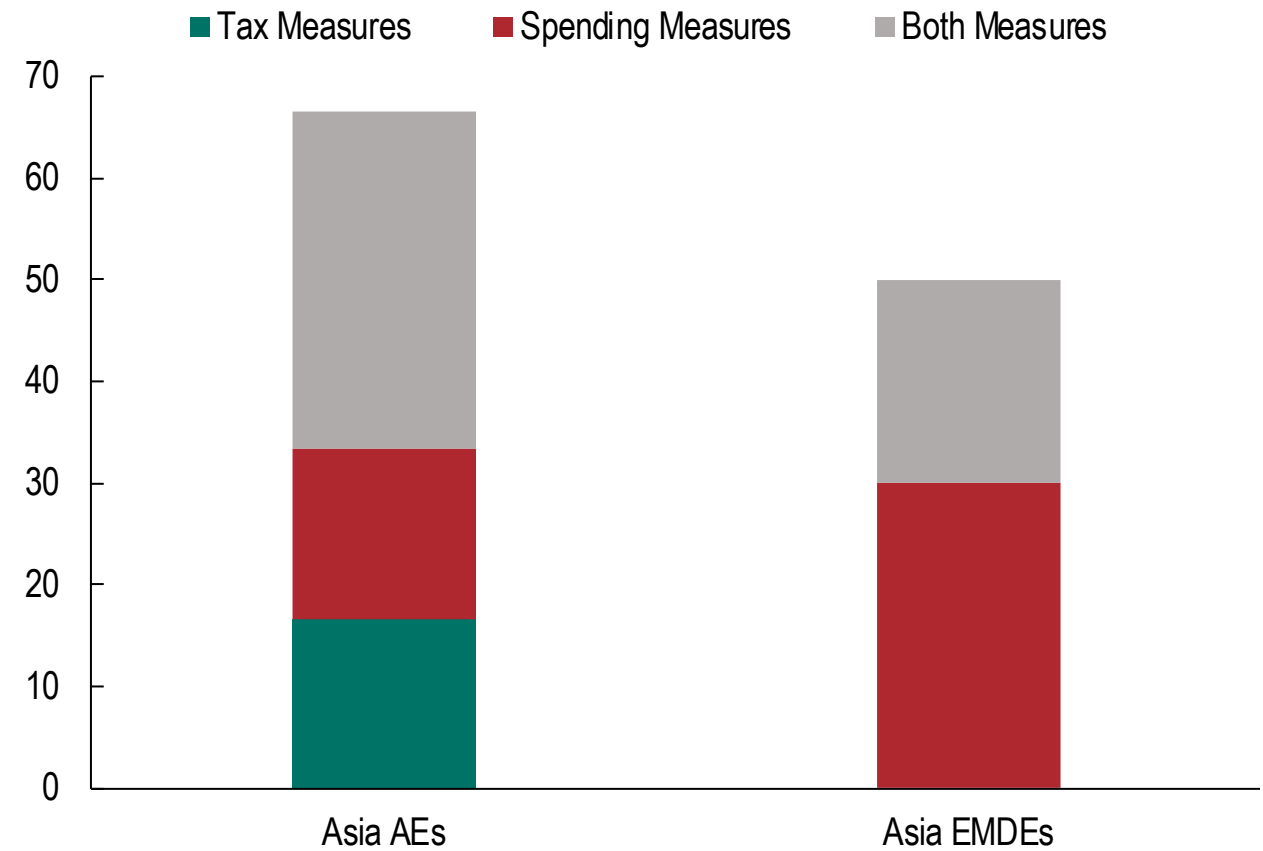
Sources: IMF desk survey and IMF staff calculations.
Note: Based on a survey of 16 Asian economies. Bars show the share of economies in the group that have introduced discretionary tax or spending measures in 2022 as a response to the rise in energy and food prices.

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)
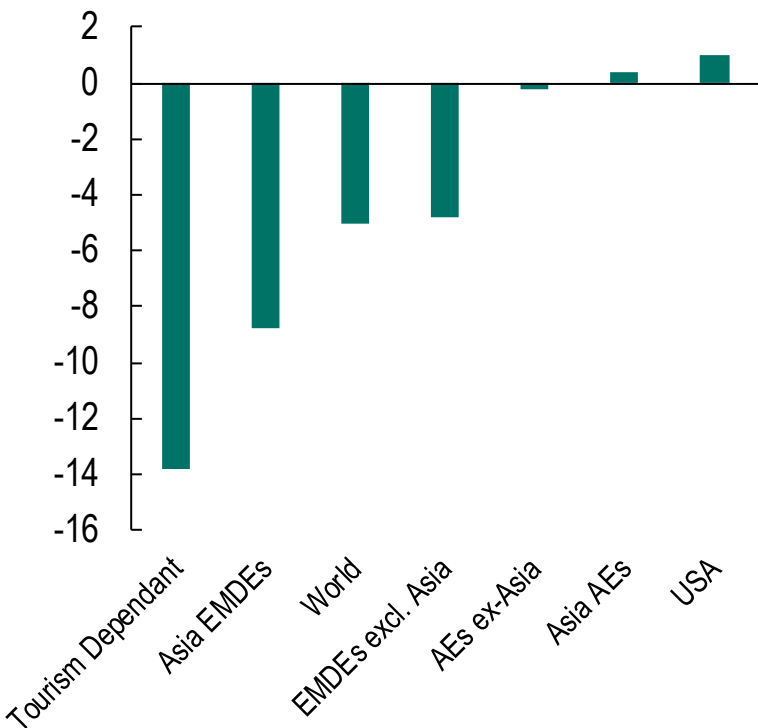
Source: IMF World Economic Outlook and IMF staff calculations.
Note: Current projections based on WEO April 2022. Updated as of March 31, 2022. A country is Tourism Dependent if 10 percent or more of their GDP derives from tourism. These countries include Cambodia, Fiji, Maldives, Thailand, and Vanuatu.

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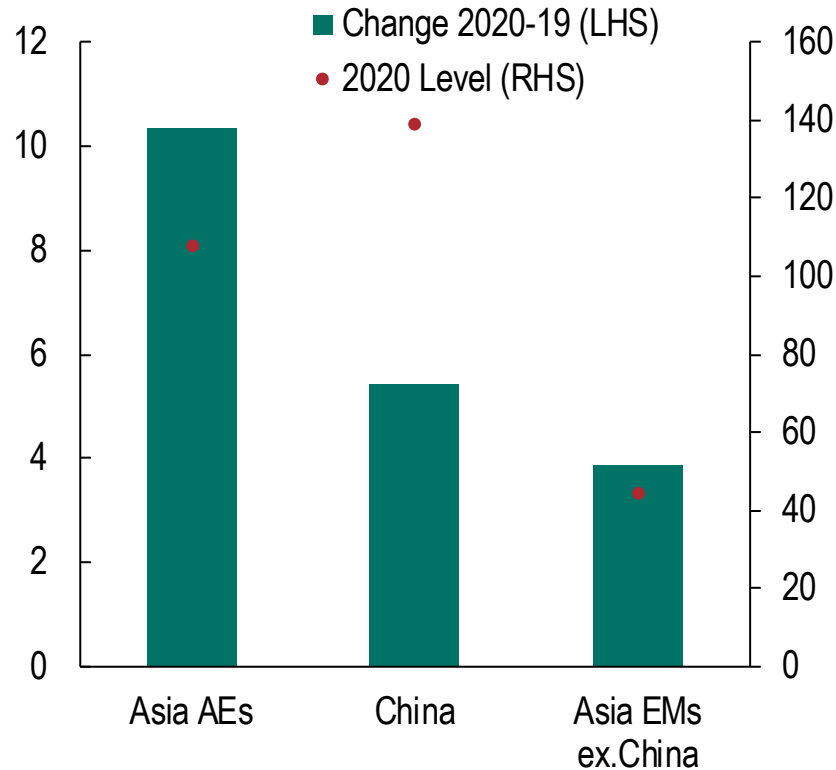
Source: IMF Global Debt Database and IMF staff calculations.
Note: Includes non-financial corporate debt, loans and debt securities. Consistent sample across time of 12 Asian countries. Asia AEs (3): Australia, Japan and Korea. Asia EMs excluding China (8): Cambodia, India, Indonesia, Malaysia, Micronesia,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

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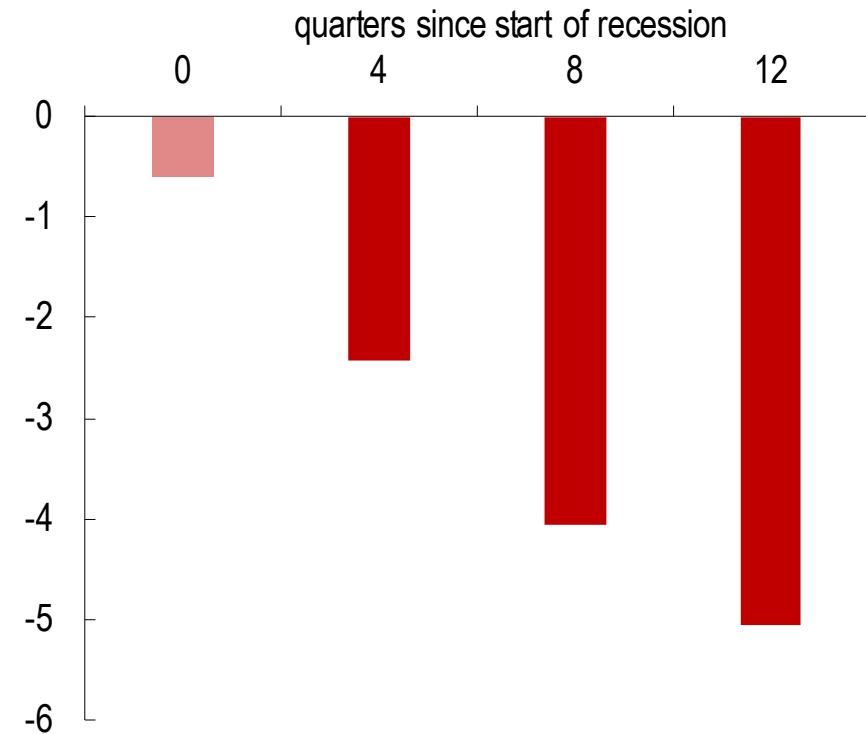
Source: Capital IQ and Estefania-Flores and others (forthcoming).
Note: Uses quarterly firm level data. Based on a difference-in-difference estimate, comparing the decline in capital expenditure for high debt firms relative to low debt firms for different horizons since start of a recession. Light shaded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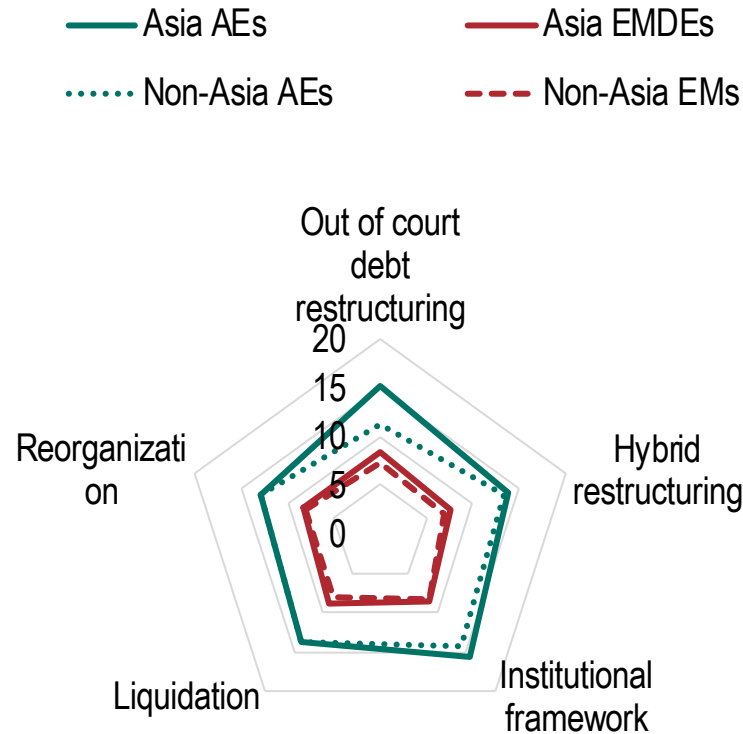
Modern restructuring regimes and macroprudential policies can mitigate corporate and household debt vulnerabilities

Share of NFC debt in vulnerable firms
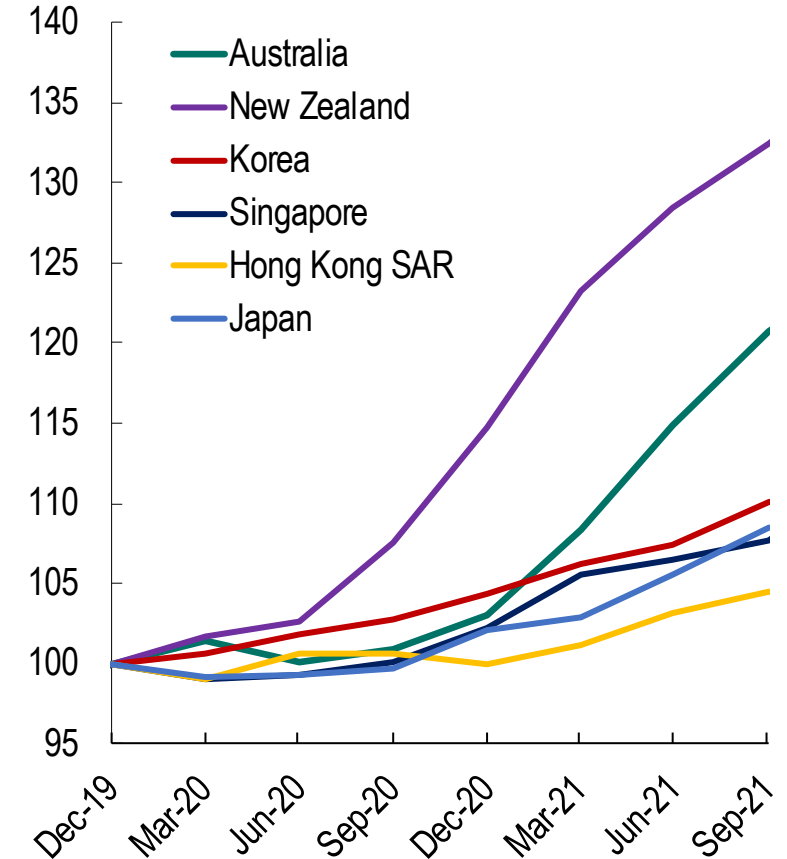*(Percent of total debt in NFCs with ICR less than 1)*
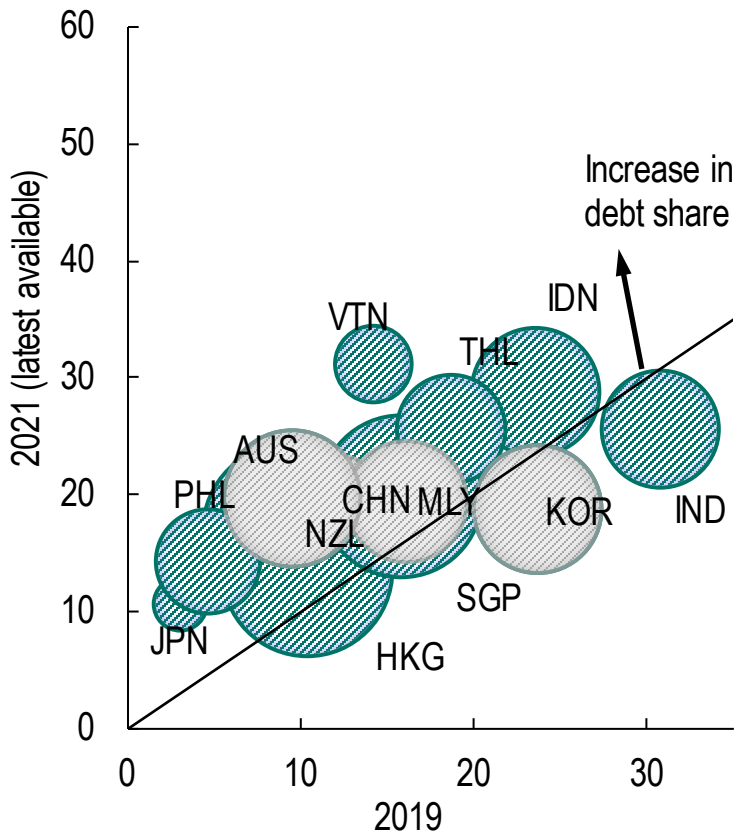
Crisis readiness index

Real housing costs
(Index, 2019Q4 = 100)

Source: Kashiwase and others (forthcoming) and IMF staff calculations.
Note: Includes publicly traded non-financial corporations (NFCs) in operation. Width of the bubble represents the share of NFCs with ICR less than 1 in total number of NFCs in the sample. Based on latest available quarterly data.
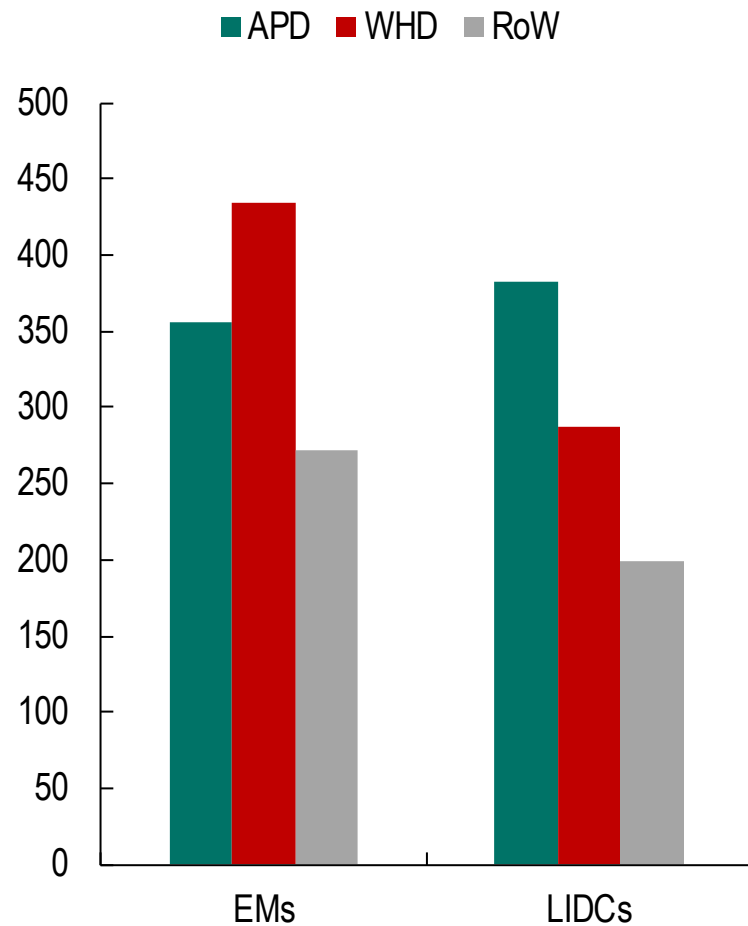
Source: Araujo and others (2022) and IMF staff calculations.
Note: Simple average across groups. The closer to the center, the lower the value of the sub-indicator, showing a lesser level of preparedness.

Source: Bank for International Settlements.

Recouping human capital losses due to school closures essential to mitigate scarring, especially in LIDCs
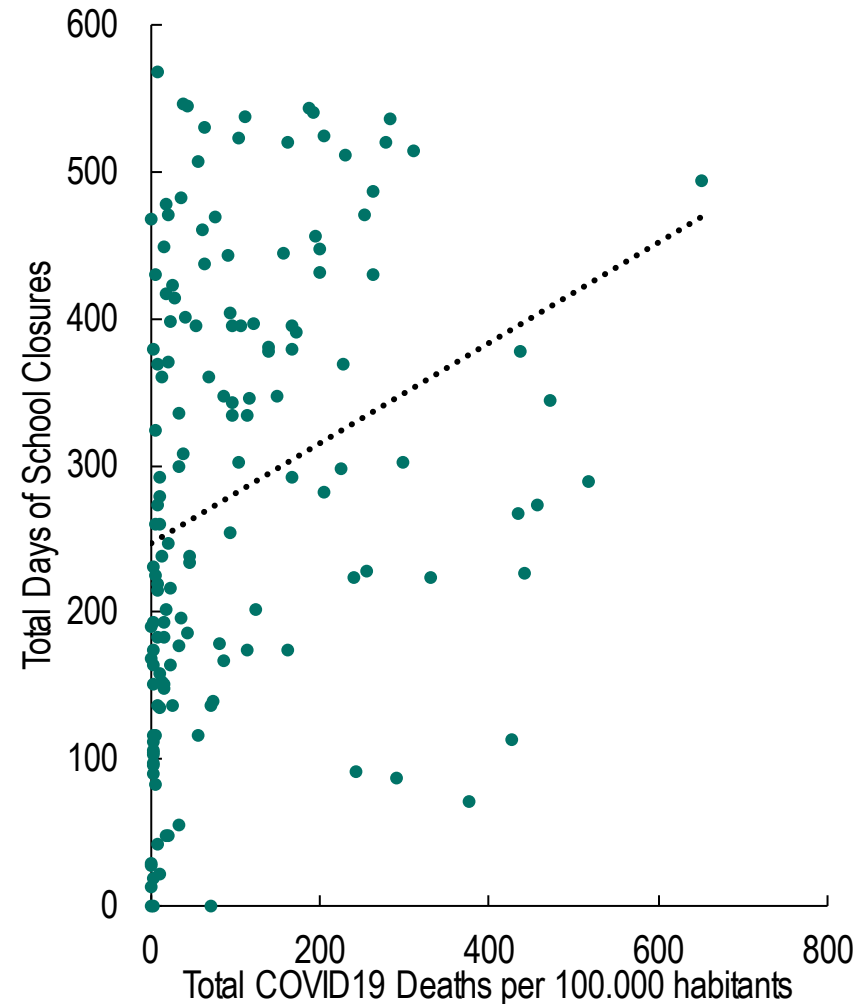

School closures due to COVID-19
(Average days of school closures)

Legend: APD, WHD, RoW

School closures and COVID-19 deaths in EMDEs

Y-axis: Total Days of School Closures
X-axis: Total COVID19 Deaths per 100.000 habitants

Internet connectivity
(Individuals using internet; percent of population; simple average)

Legend: APD, WHD, RoW

Total AEs Average

Source: UNESCO and IMF staff calculations.
Note: Analysis excludes PICs.

Source: Johns Hopkins University, UNESCO and IMF staff calculations.
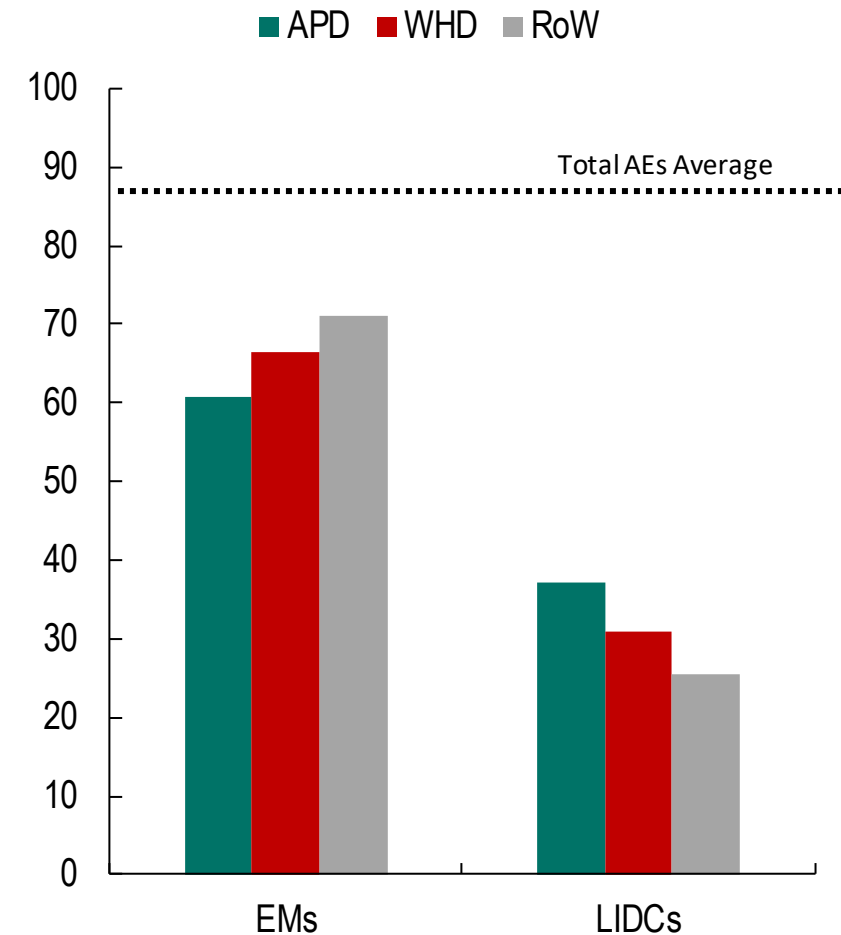
Source: UNESCO and IMF staff calculations.

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
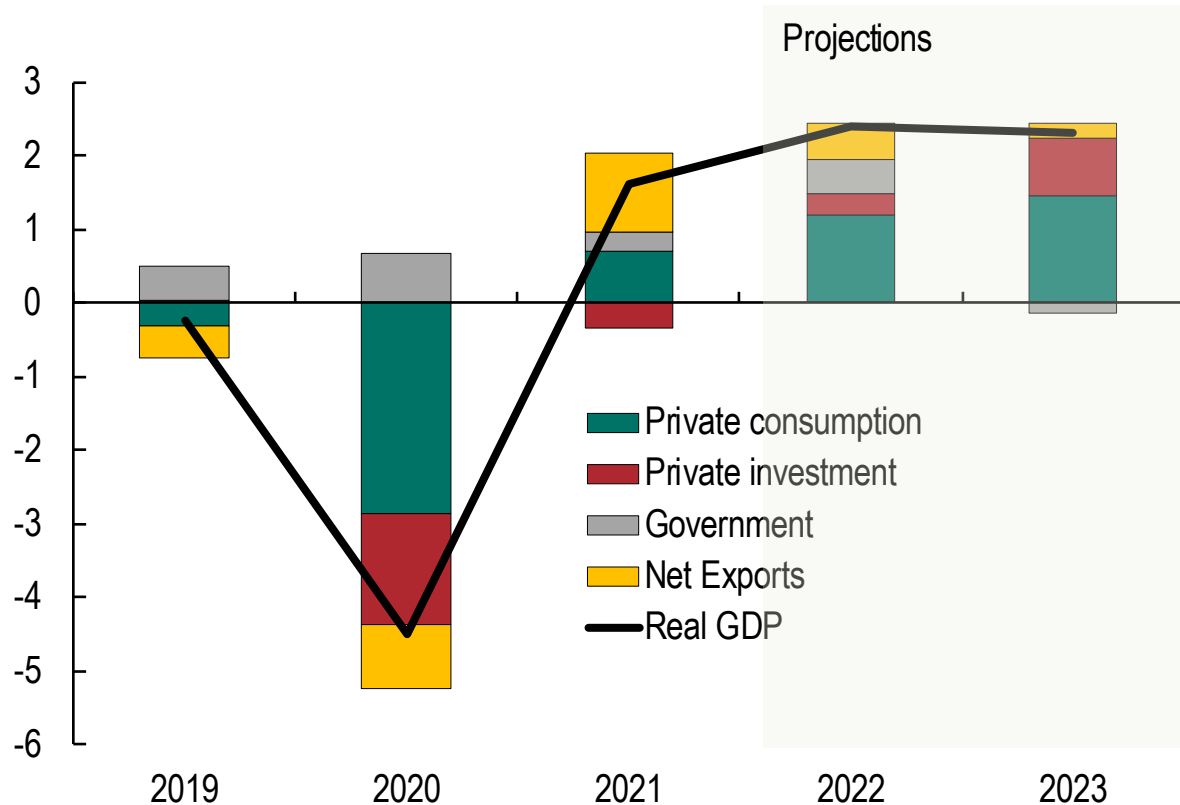
Country focus

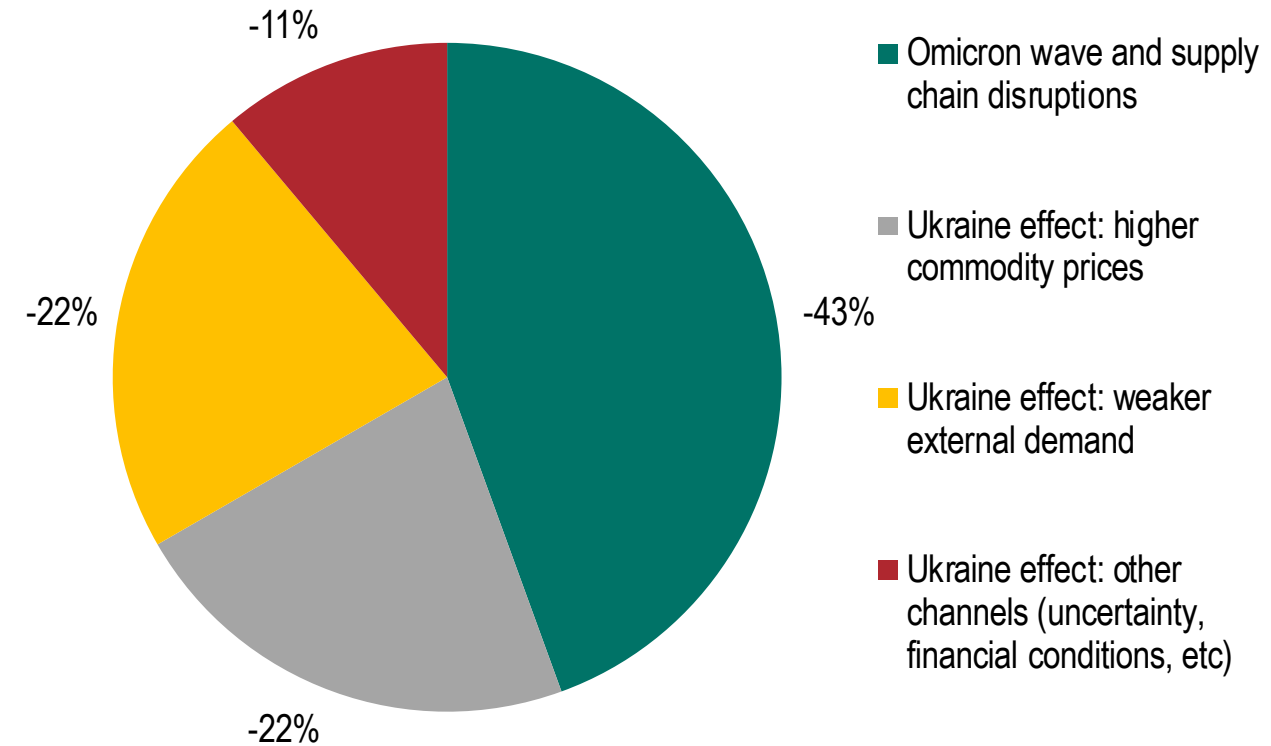**Growth in 2022 is underpinned by fiscal support and pent-up demand...**

... but the war in Ukraine and the omicron wave in Q1 has slowed the recovery.

Japan: Real GDP Growth
(In percent)

Downward Revision to 2022 Growth

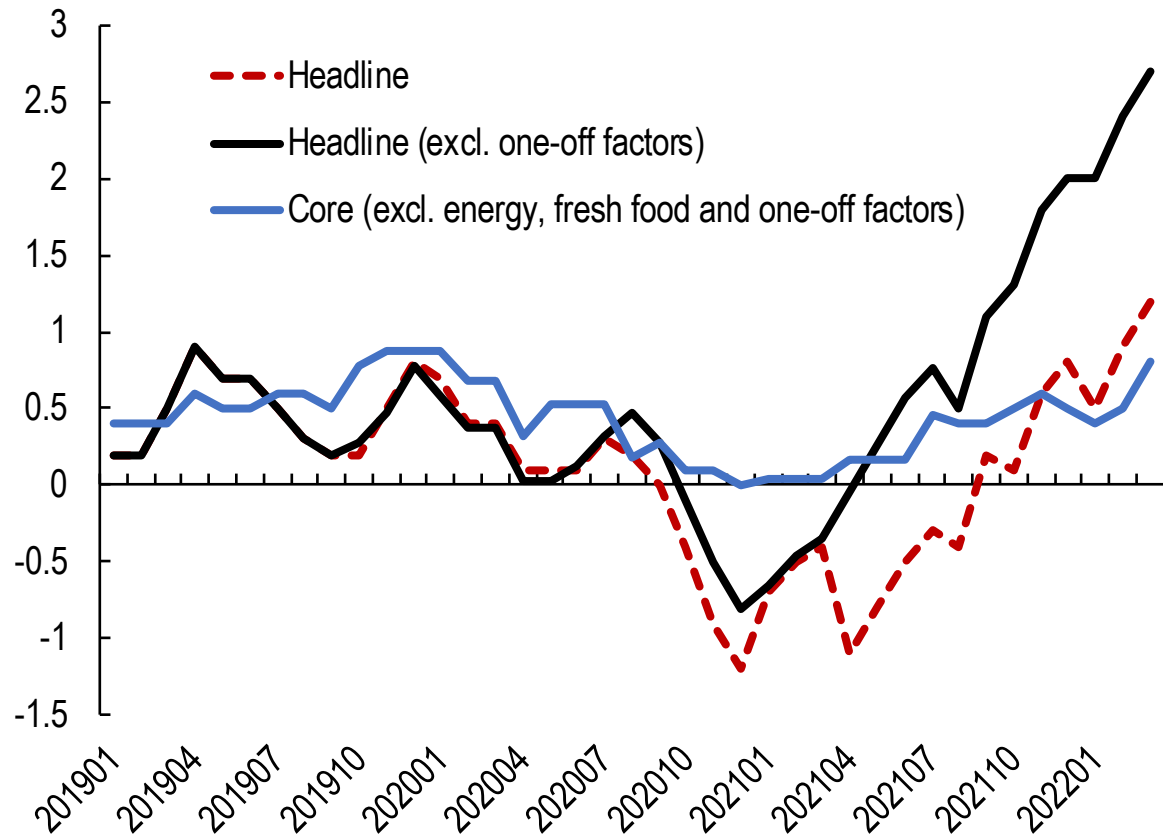Sources: Haver and IMF Staff Projections.

Sources: IMF Staff calculations.

Headline inflation is accelerating but underlying core inflation remains subdued.

**So far, headline inflation is driven by external cost-push factors**

Japan: Inflation Indicators
(in percent)

- Headline
- Headline (excl. one-off factors)
- Core (excl. energy, fresh food and one-off factors)

Sources: Haver Analytics.

Recent yen depreciation puts additional upward pressure on inflation

Exchange Rate and Interest Rate Differential
(2021-2022)

- USD/yen
- 10-year bond yield differentials (US minus Japan, RHS)
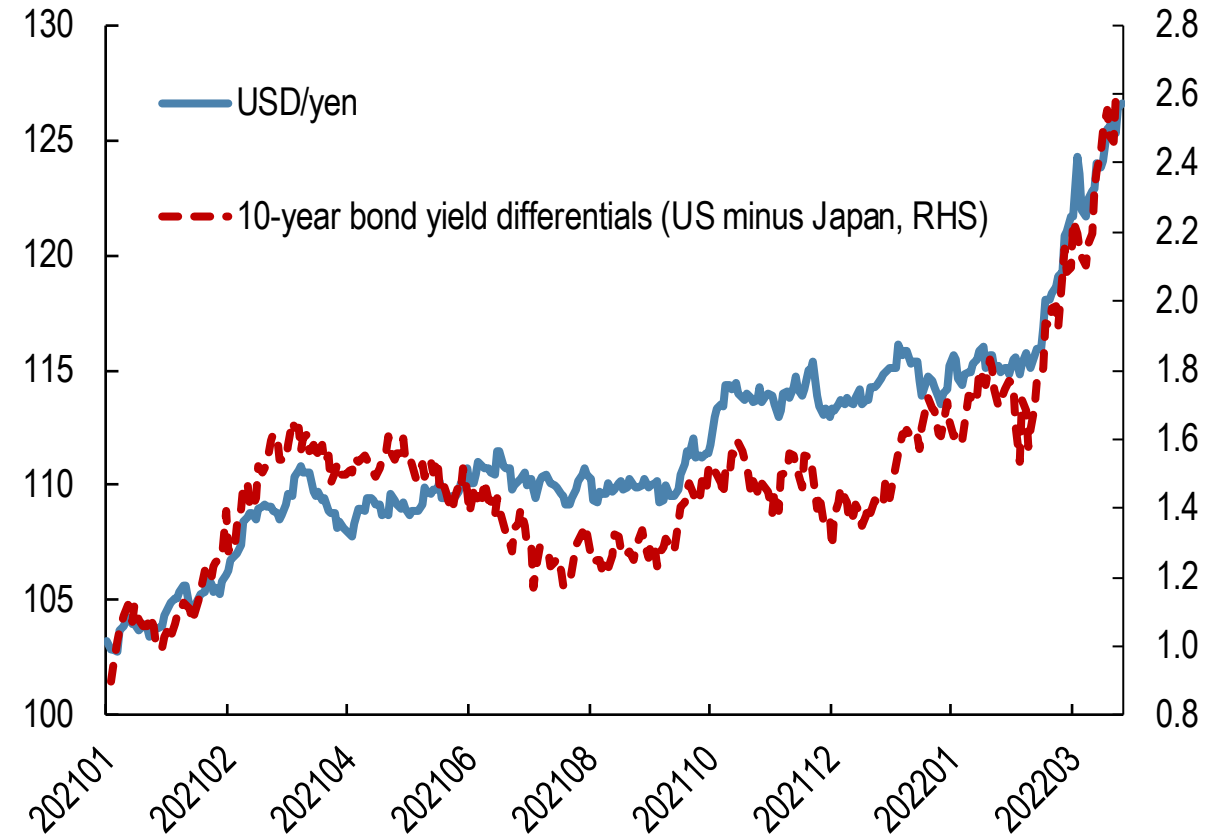
Sources: Haver Analytics.

Risks are tilted towards the downside

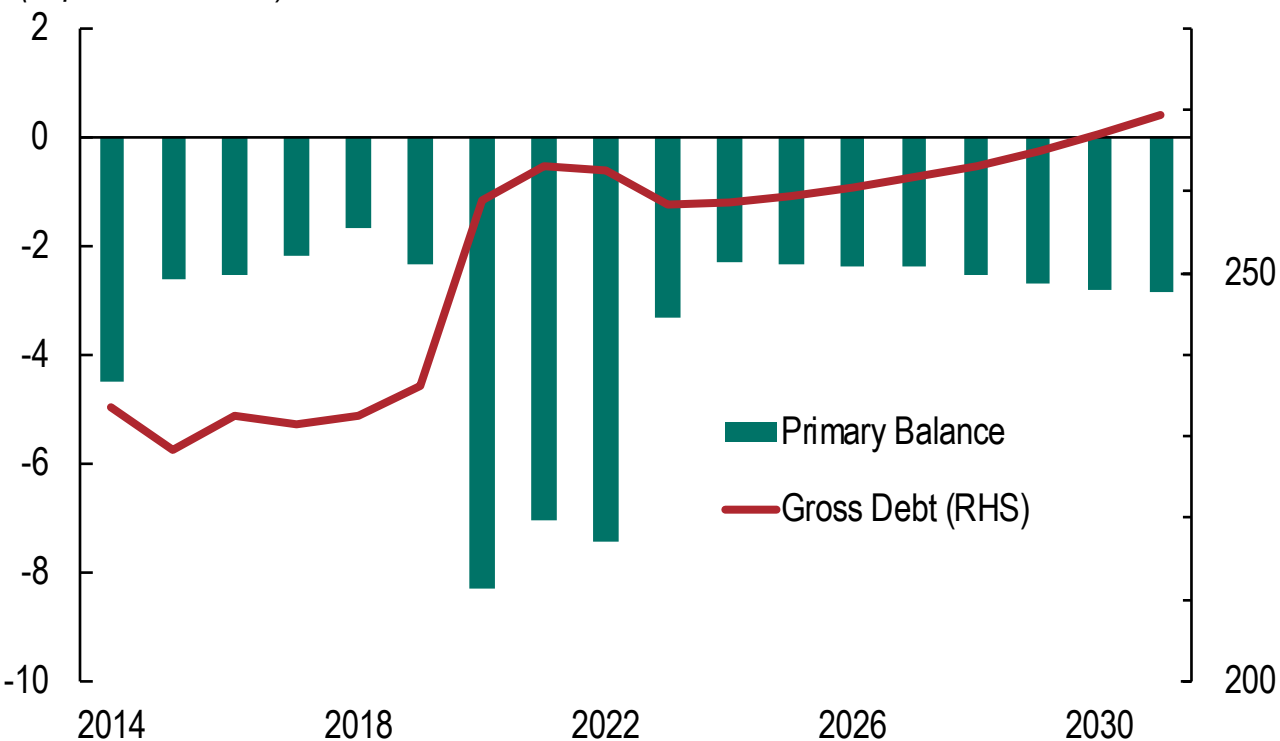| Source of Risk	Likelihood	Source	Time Horizon	Expected Impact
Extended global supply chain disruptions	High	External	ST, MT	↓
Outbreaks of lethal and highly contagious Covid-19 variants	High	External, Domestic	ST	↓
Geopolitical tensions and de-globalization	High	External	ST, MT	↓
Rising and volatile energy and food prices	High	External	ST, MT	↓
De-anchoring of inflation expectations in the US leads to rising core yields and risk premia	Medium	External	MT	Ambiguous
Higher frequency and severity of natural disasters related to climate change	Medium	External	MT	↓
Abrupt growth slowdown in China	Medium	External	ST, MT	↓
Disorderly transformations due to labor market rigidities and untargeted support	Medium	Domestic	MT	↓

Fiscal stance in 2022 is expected to be supportive. In the long-run, debt sustainability concerns could rise…
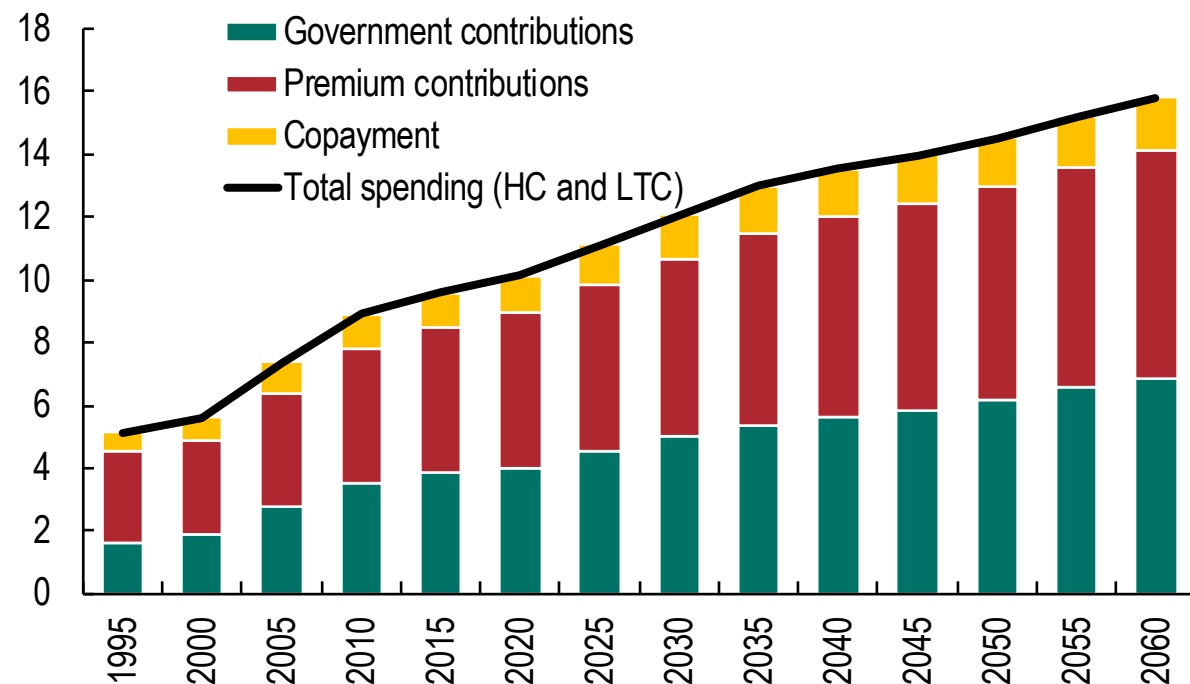
…on the back of rising age-related expenditures.

Japan: Gross Public Debt and Primary Balance 1/
(In percent of GDP)

Primary Balance

Gross Debt (RHS)

Financing of Health Care and Long-Term Care
(In percent of GDP)

Government contributions

Premium contributions

Copayment
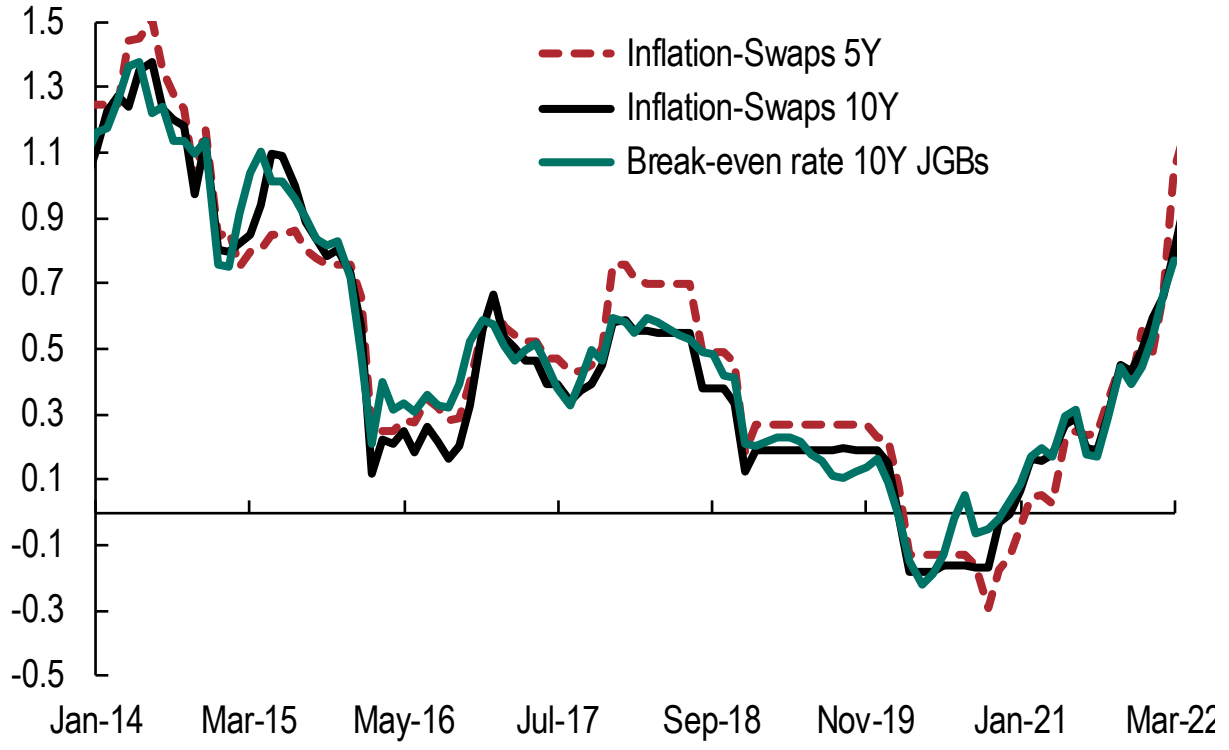
Total spending (HC and LTC)

Sources: Cabinet Office; and IMF staff estimates and projections.
1/ Gross debt of the general government including the social security fund.

Sources: Ministry of Health, Labor, and Welfare; IMF World Economic Outlook database; and IMF staff calculations.

The BoJ's commitment to maintain monetary easing until the 2 percent target is reached durably is appropriate

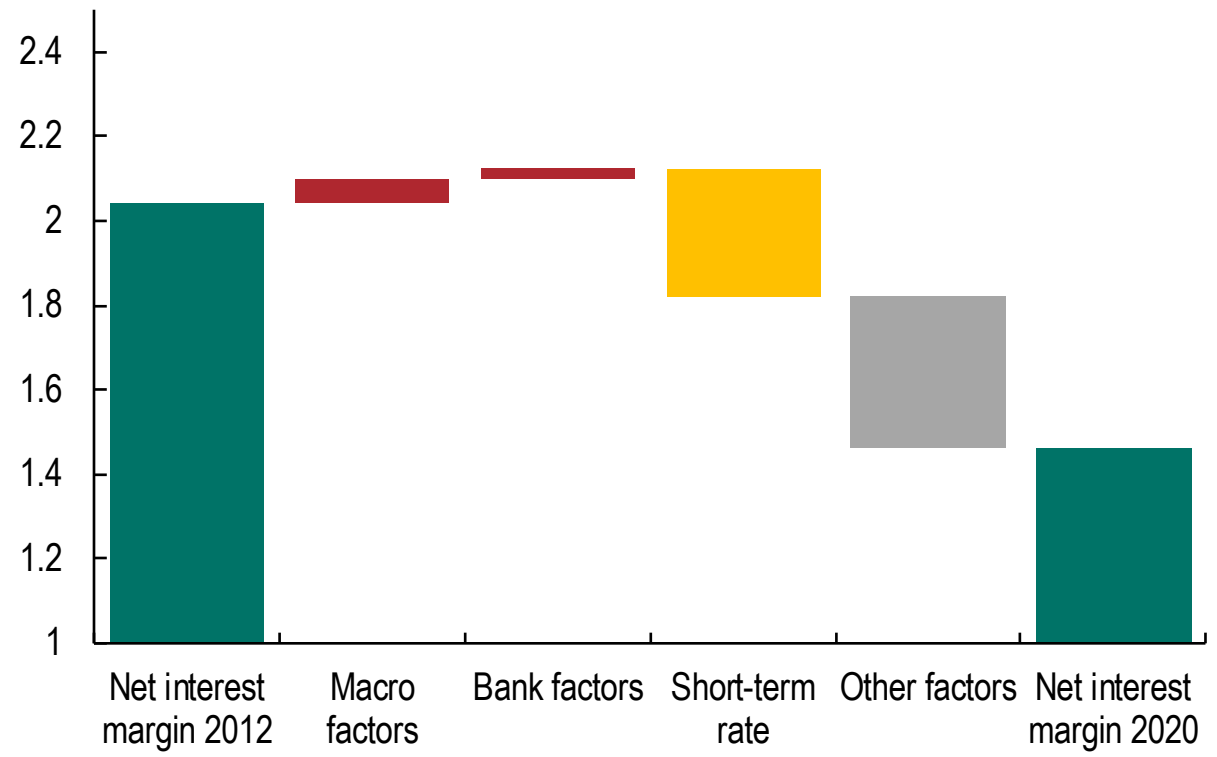**Underlying inflation and inflation expectations remain below the 2% target**

Further measures could be considered to make easing more sustainable

Inflation Expectations
(In percent YoY)

Legend:
- Inflation-Swaps 5Y
- Inflation-Swaps 10Y
- Break-even rate 10Y JGBs

Sources: Bloomberg L.P.; and IMF staff estimates.

Contributions to the Change in Net Interest Margins
(Percent, all banks)

Categories: Net interest margin 2012, Macro factors, Bank factors, Short-term rate, Other factors, Net interest margin 2020
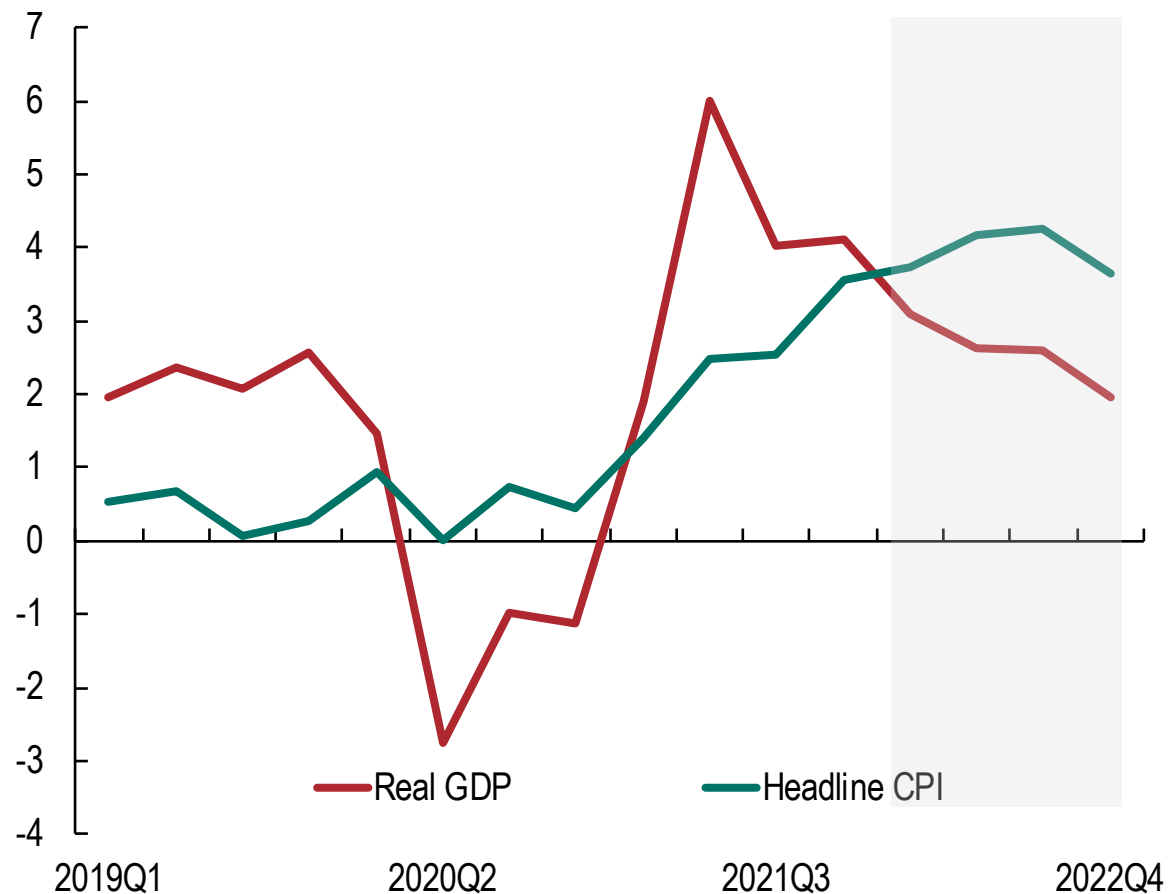
Source: IMF staff estimates.

Korea: Near-term monetary and long-term fiscal trade-offs
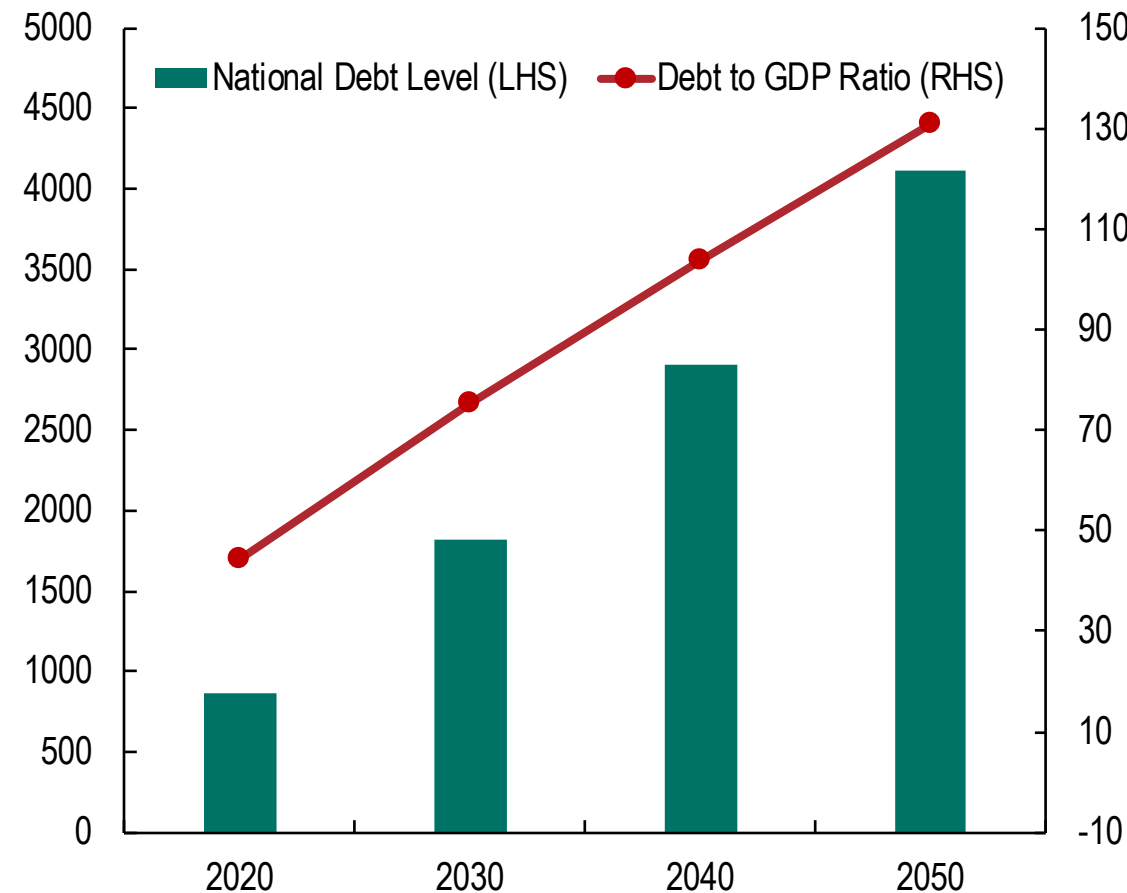
Real GDP and headline CPI growth
(In y/y percent growth)

Source: World Economic Outlook and IMF staff calculations.

Public debt projection
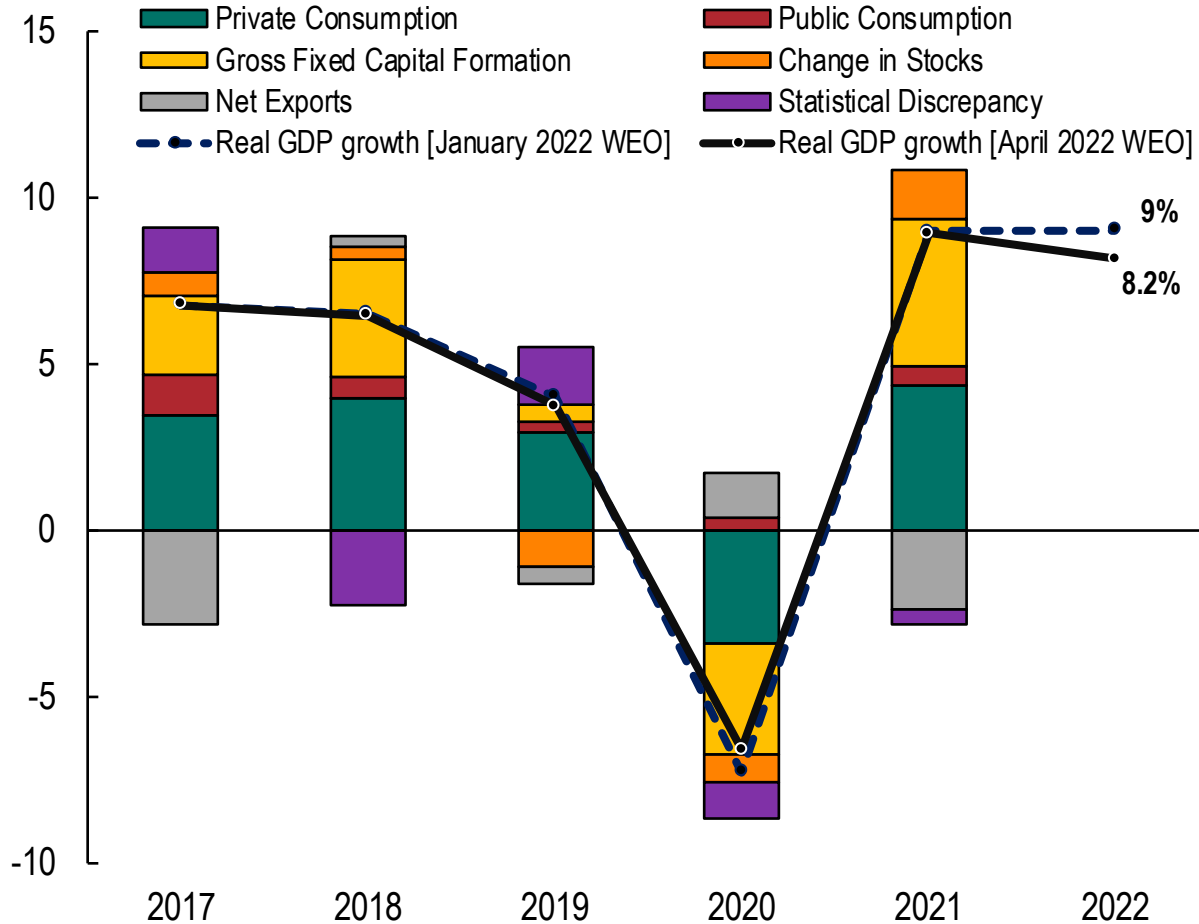*(Trillion Won)*

Source: NABO.

India: War is having adverse macro impact, exacerbating policy trade-offs
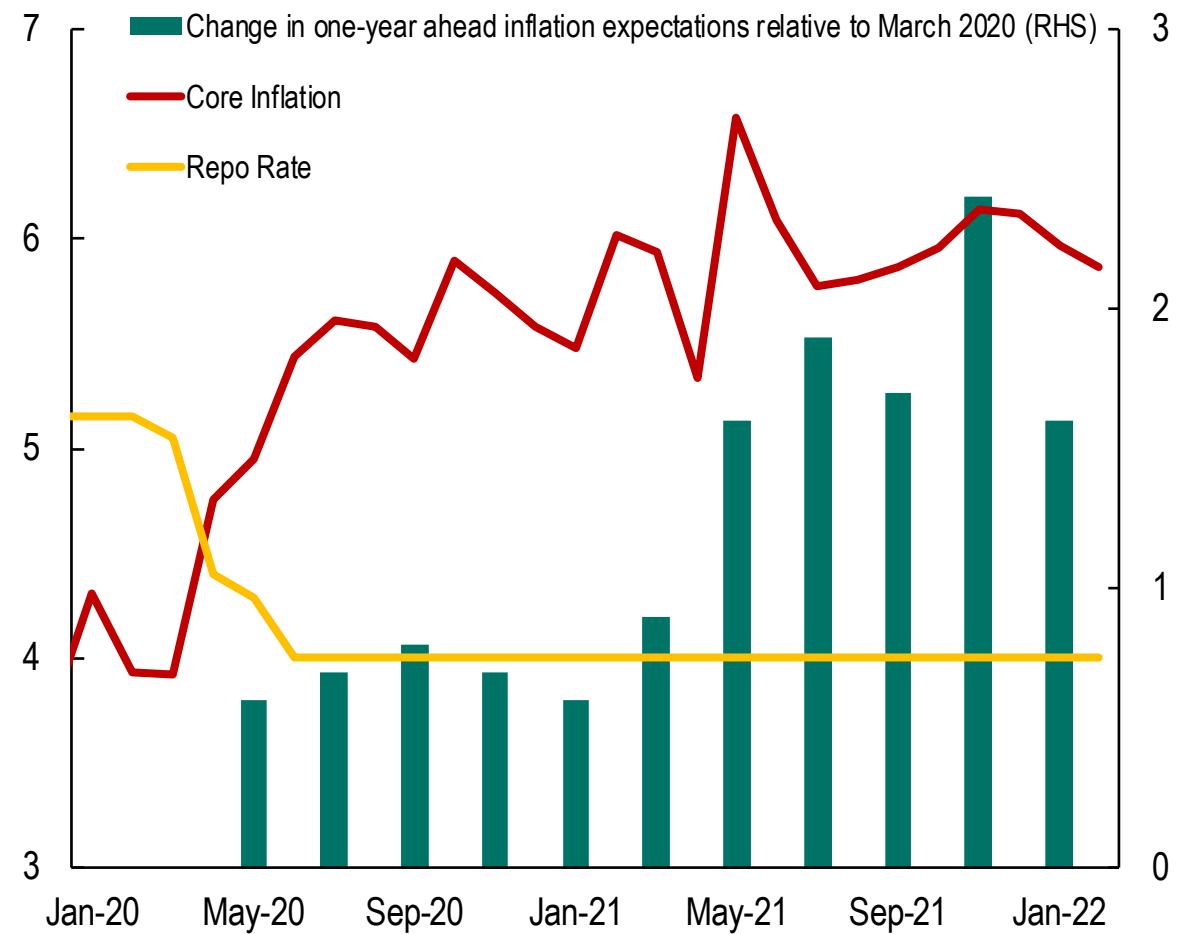
Contribution to real GDP growth
(Percent, year-on-year)

Legend:
- Private Consumption
- Public Consumption
- Gross Fixed Capital Formation
- Change in Stocks
- Net Exports
- Statistical Discrepancy
- Real GDP growth [January 2022 WEO]
- Real GDP growth [April 2022 WEO]

9%
8.2%

2017 2018 2019 2020 2021 2022

Inflation, expectations and policy rate
(Percent)

Legend:
- Change in one-year ahead inflation expectations relative to March 2020 (RHS)
- Core Inflation
- Repo Rate

Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 Jan-22

Sources: Haver Analytics, and IMF staff calculations.

Sources: Haver Analytics and IMF staff calculations.
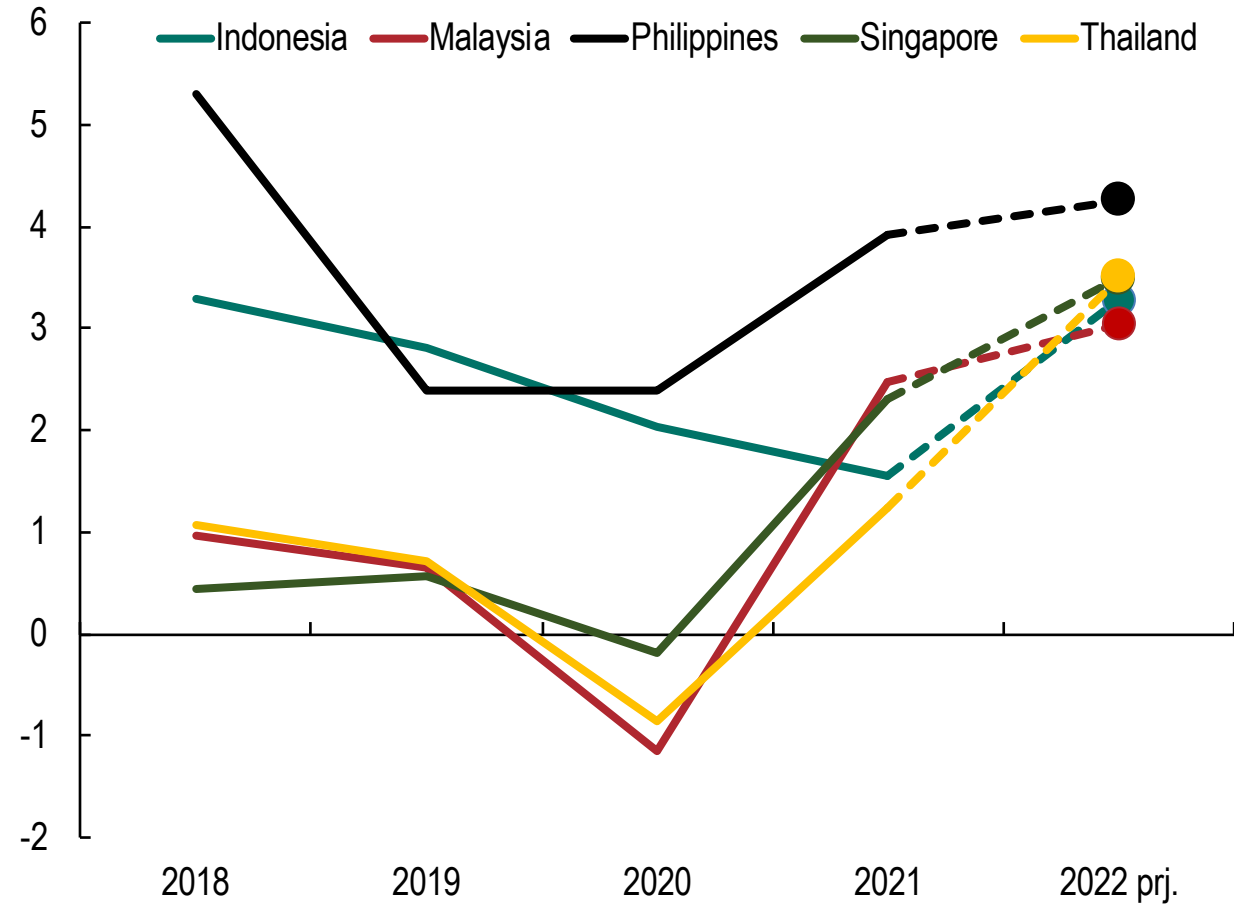Note: Inflation expectations are one-year-ahead as reported in RBI survey of Indian households.

ASEAN-5: War in Ukraine has increased the uncertainty about the pace of the recovery while exacerbating inflationary pressures

Real GDP growth
(In percent)

Legend:
- WEO April 2022
- WEO January 2022
- WEO October 2022
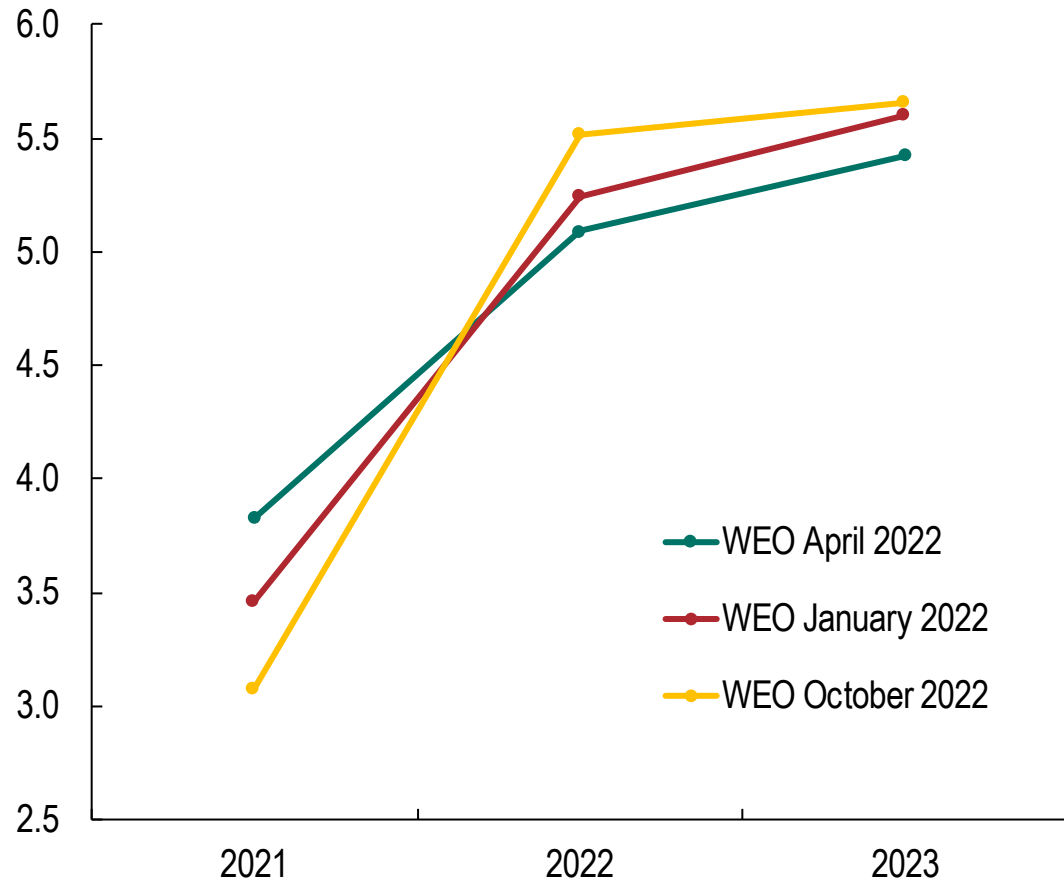
Source: World Economic Outlook Database.

Inflation
(In percent)

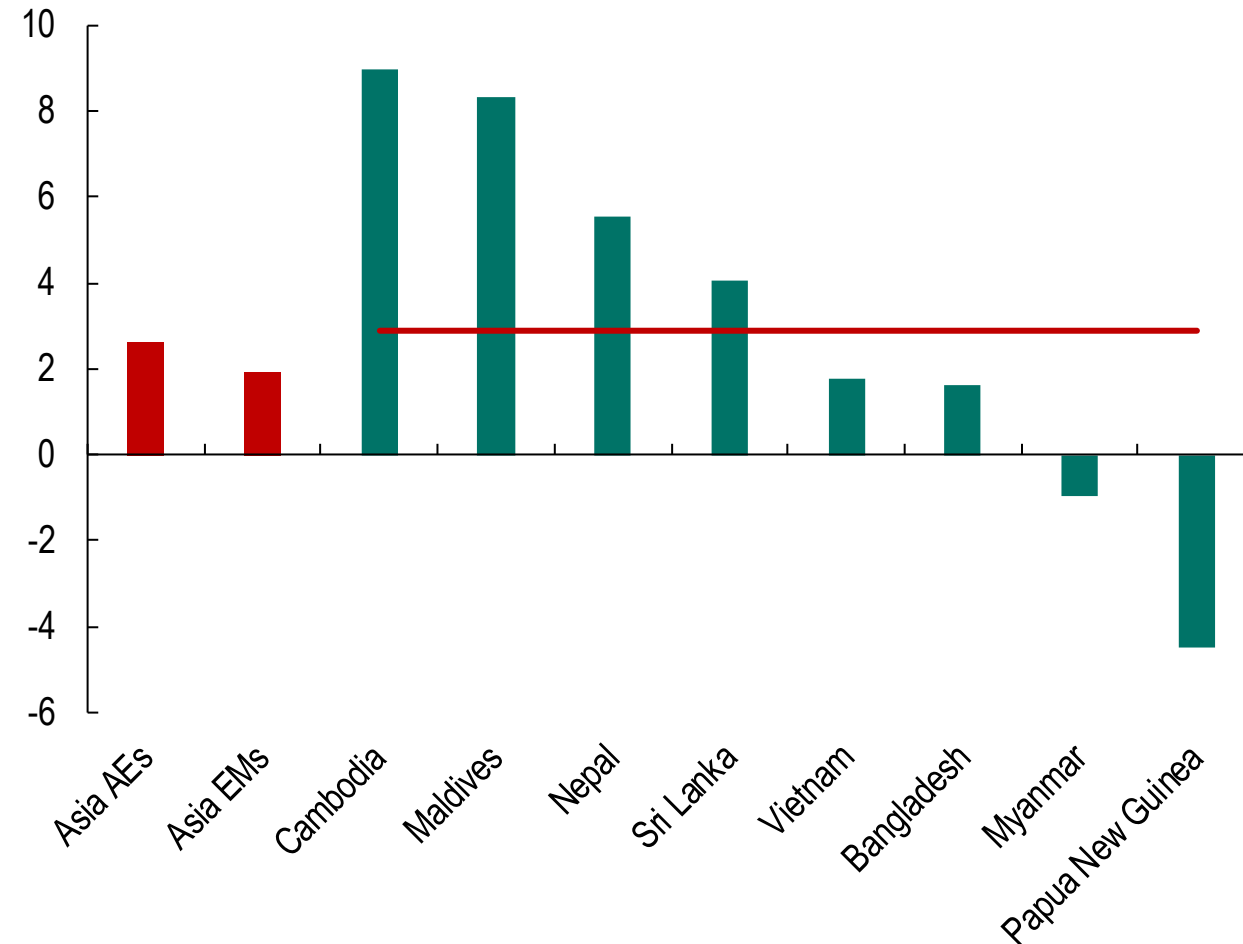Legend: Indonesia, Malaysia, Philippines, Singapore, Thailand

Source: World Economic Outlook, April 2022.
Note: Projections for 2022.

Frontier countries and LICs: Higher food and fuel prices adding to inflation and external pressures, with adverse distributional effects

CPI weights, food
(Percent, 2022)
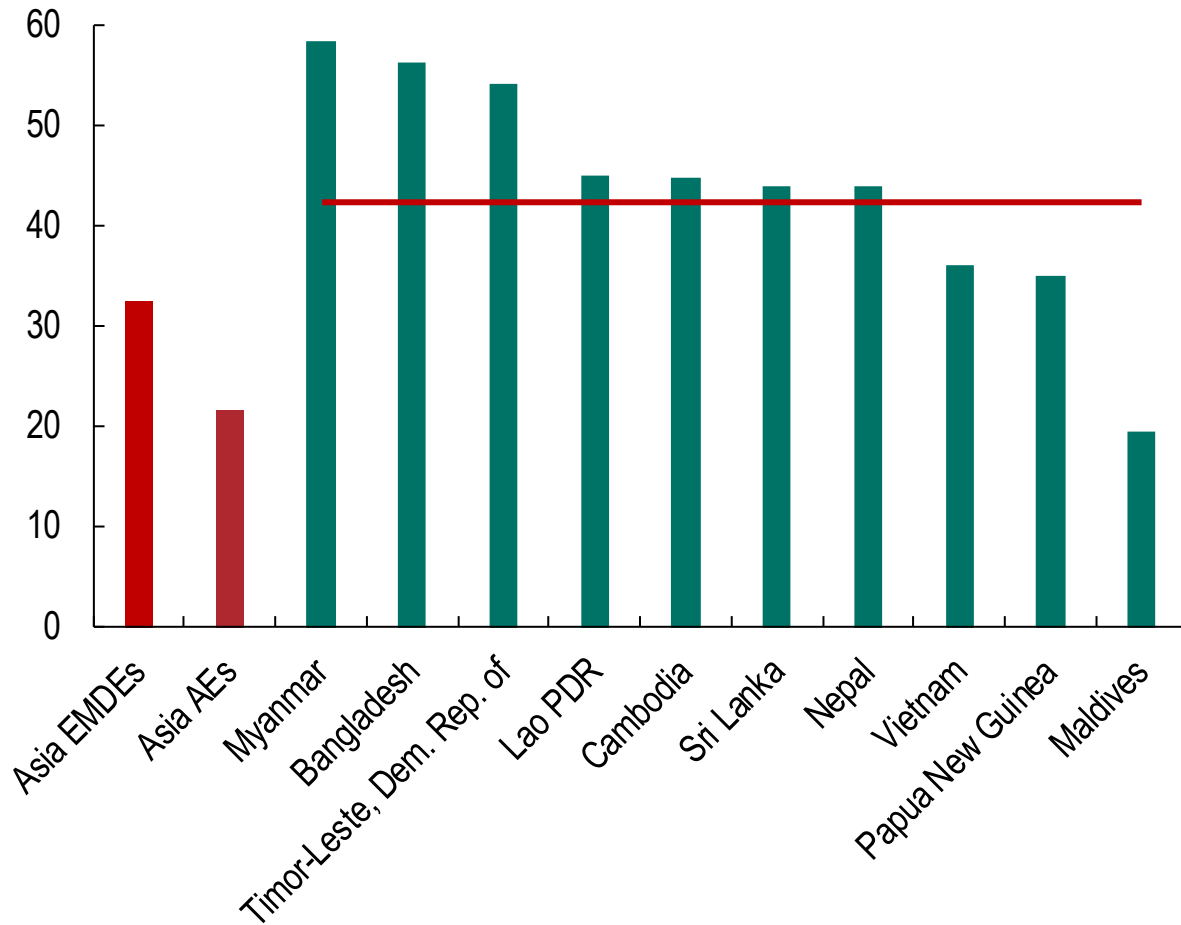
Net imports of oil and gas
(Percent of GDP, 2019)

Source: IMF, country authorities, CEIC and IMF staff estimates
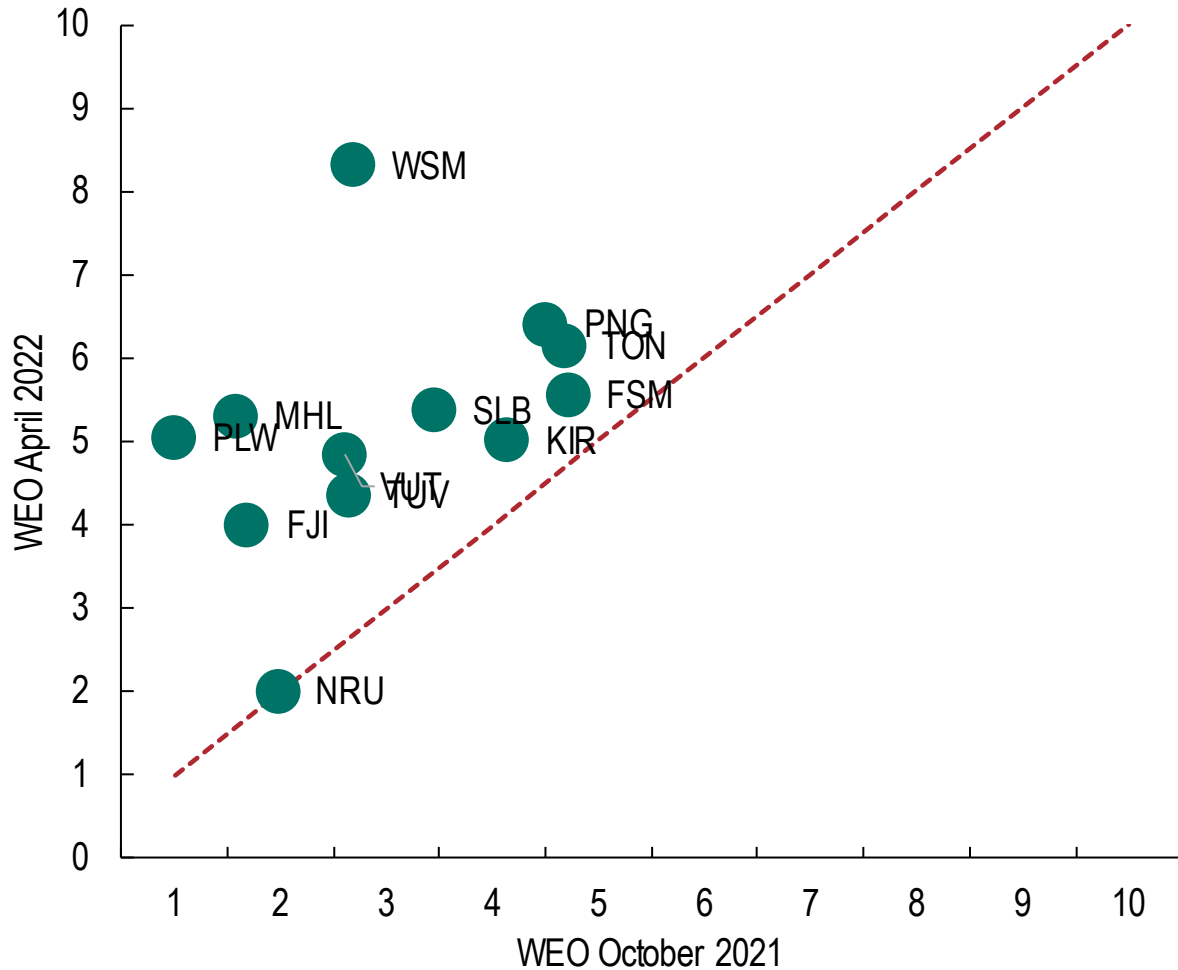Note: Horizontal line represents average weight of the ten countries.

Source: IMF Country Desk Survey and IMF staff estimates.
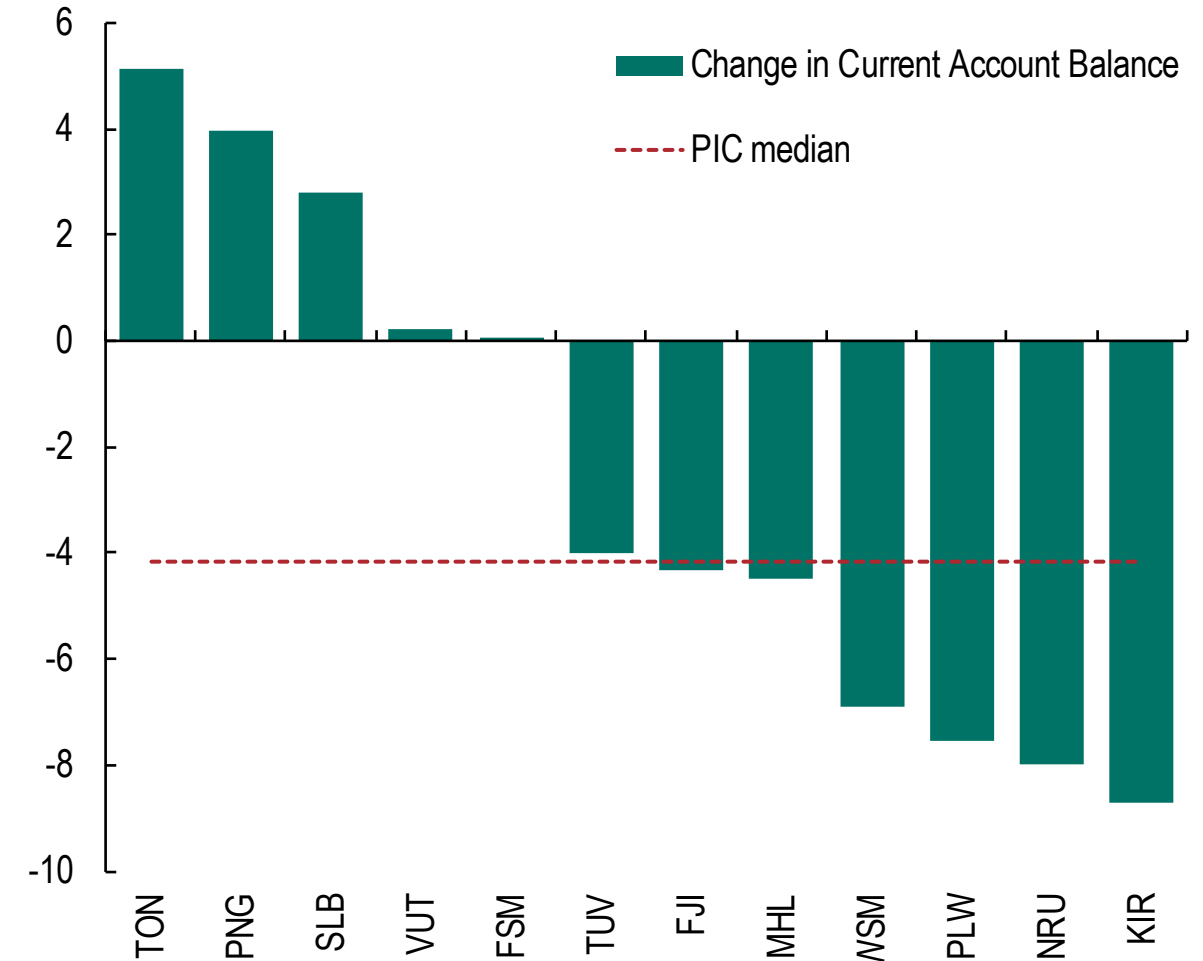
Inflation projections
(In percentage points)

Source: World Economic Outlook.

Changes in current account balance, 2022
(In percent of GDP)

Source: World Economic Outlook.

Thank You