



**ASIA AND PACIFIC  
DEPARTMENT**

# **THE GLOBAL AND ASIA ECONOMIC CONTEXT**

**SEACEN CENTRAL BANK GOVERNORS MEETING**

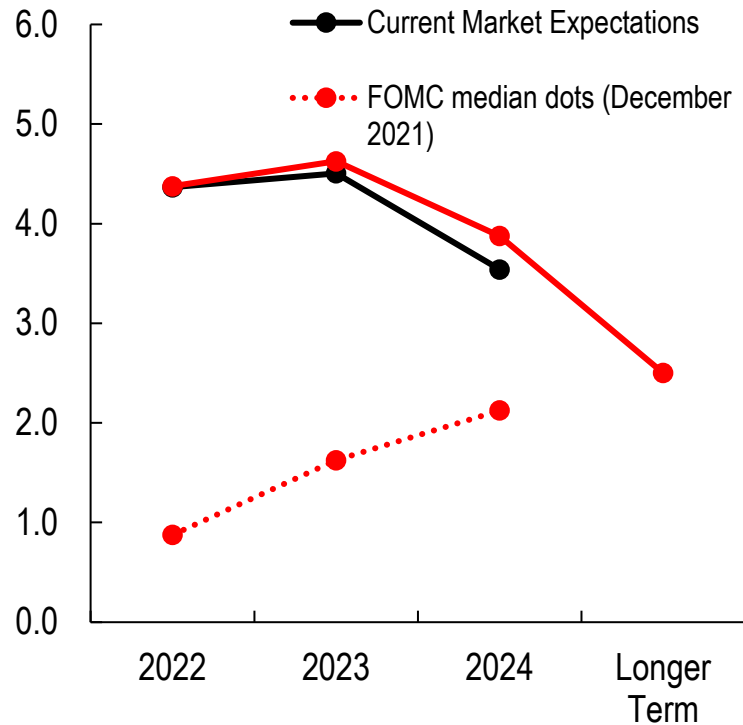
**Sanjaya Panth**

**December 5, 2022**

# Three headwinds facing Asia and the Pacific

## 1. Tightening global financial conditions

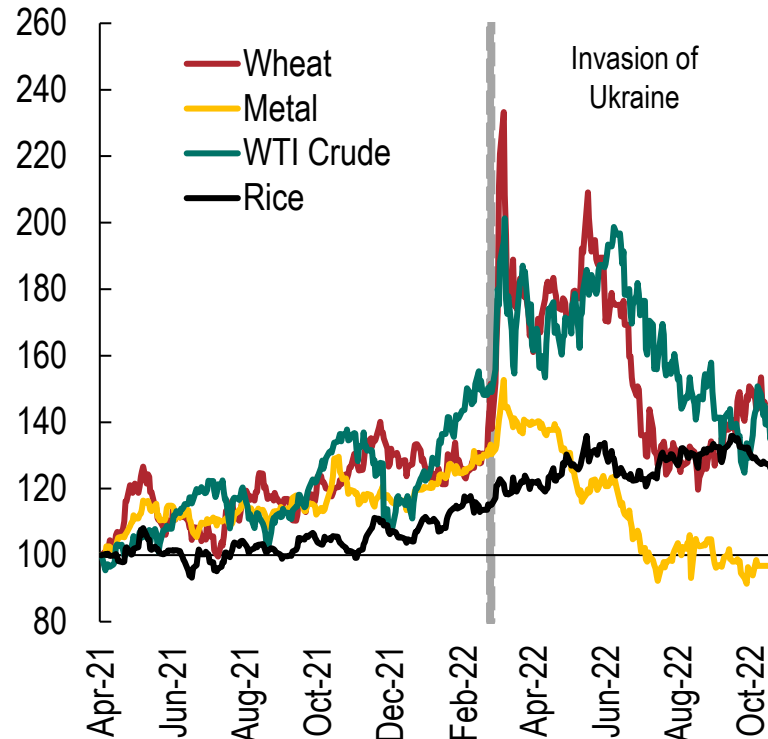
**Federal Funds Rate**  
(In percent; y-o-y)



Sources: Bloomberg Finance L.P.; and IMF staff calculations. Data through November 14, 2022.

## 2. The War in Ukraine

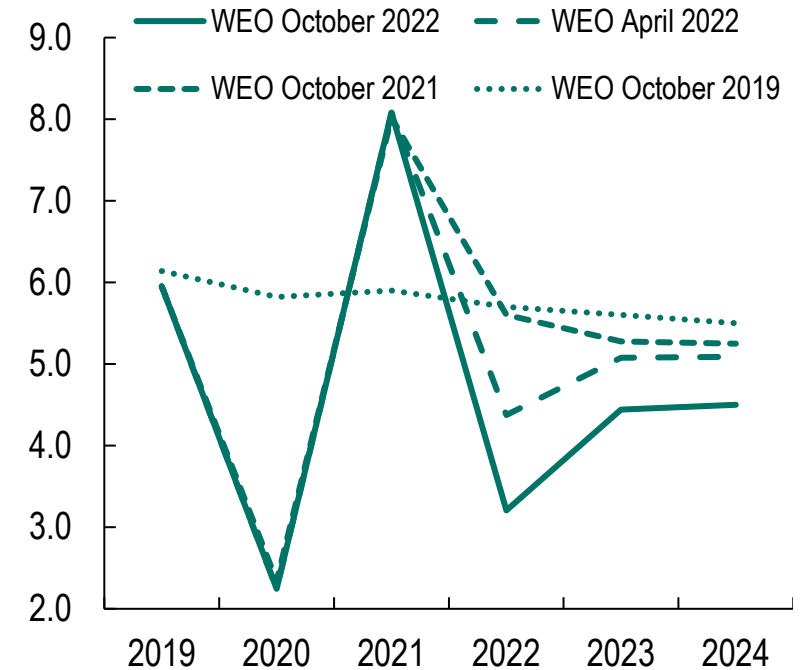
**Commodity Prices**  
(Index = 100 April 2021)



Source: Bloomberg Finance L.P. and IMF staff calculations.  
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%).

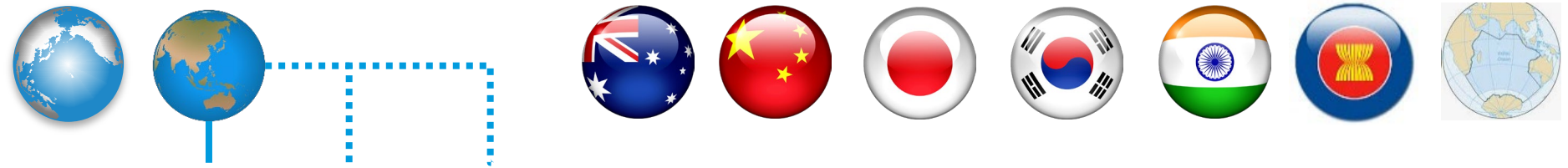
## 3. Slowdown in China

**Revisions to China's Growth**  
(Percent)



Source: IMF World Economic Outlook.  
Note: WEO = World Economic Outlook.

# GDP growth forecasts



World    Asia    AEs    EMDEs    Australia    China    Japan    Korea    India    ASEAN    PICs

2021	6.0	6.5	3.7	7.2	4.9	8.1	1.7	4.1	8.7	3.1	-1.9
2022	3.2	4.0	2.3	4.4	3.8	3.2	1.7	2.6	6.8	5.0	0.8
Revisions since Apr. 2022 WEO	-0.4	-0.9	-0.4	-1.0	-0.4	-1.2	-0.7	0.1	-1.4	-0.1	-1.1
2023	2.7	4.3	2.0	4.9	1.9	4.4	1.6	2.0	6.1	4.7	4.2
Revisions since Apr. 2022 WEO	-0.9	-0.8	-0.7	-0.7	-0.6	-0.7	-0.7	-0.9	-0.8	-0.9	-0.7

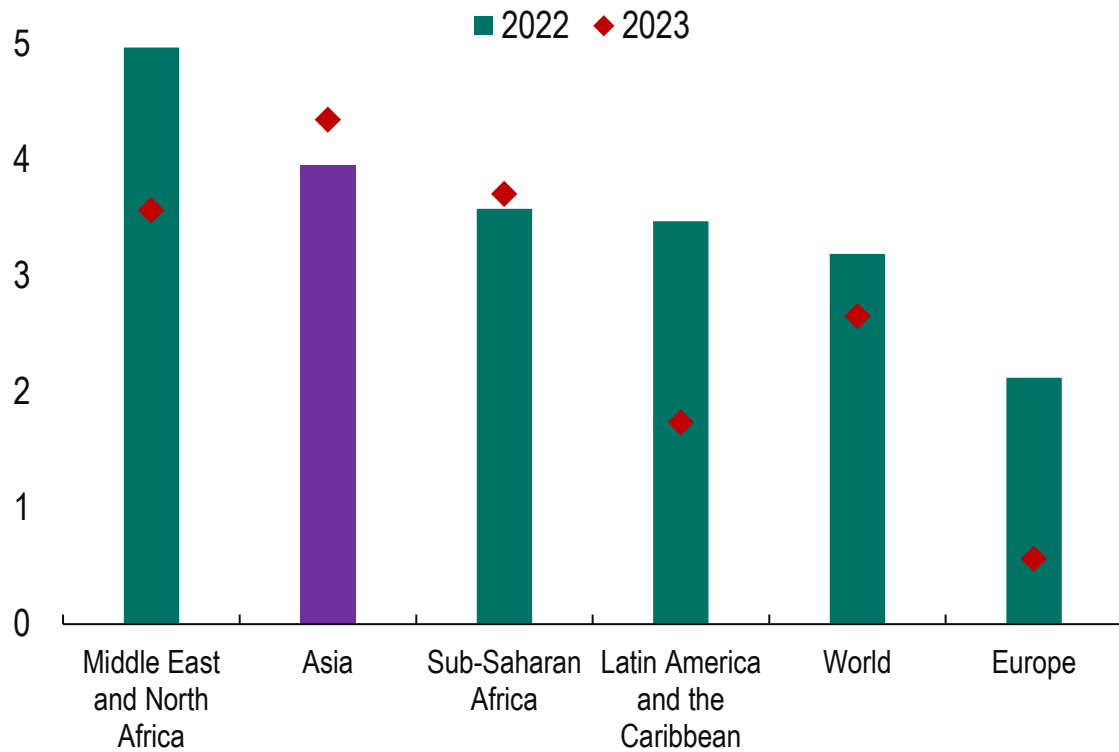
Source: IMF October 2022 *World Economic Outlook*.

# Asia is a relative bright spot in the global economy

Growth is higher in Asia than in the rest of the world...

Real GDP growth forecast for 2022 and 2023

(In percent; y-o-y)

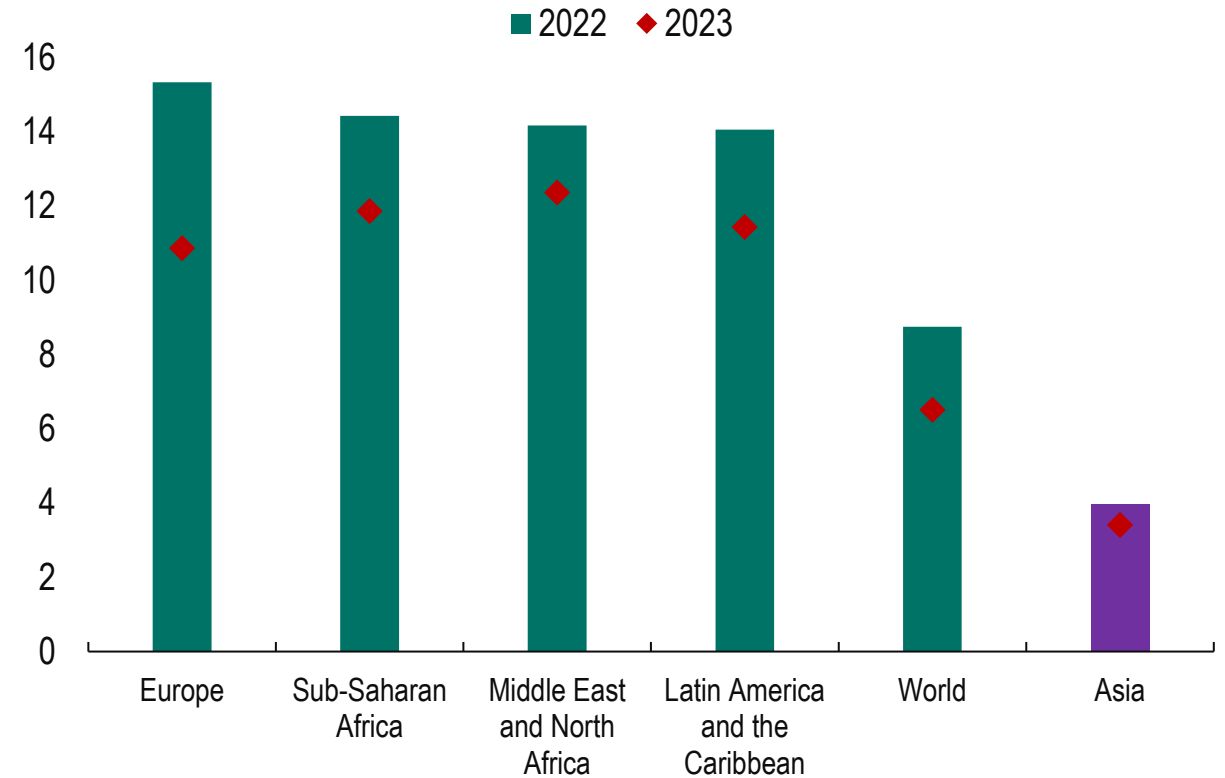


Sources: October 2022 World Economic Outlook.

... while inflation is more moderate

Inflation forecast for 2022 and 2023

(Period average)

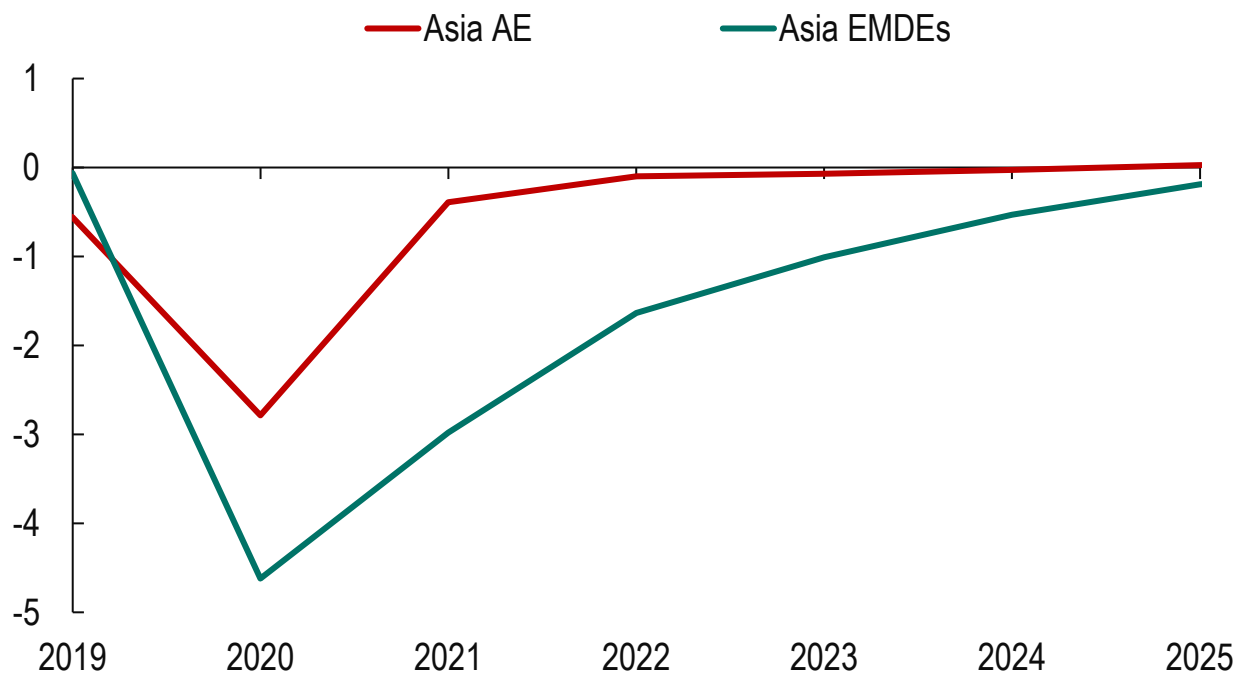


Sources: October 2022 World Economic Outlook.

# The recovery is underway but remains incomplete in EMDEs

Substantial output gaps remain in many economies...

Deviation of real output from potential  
(Percentage)

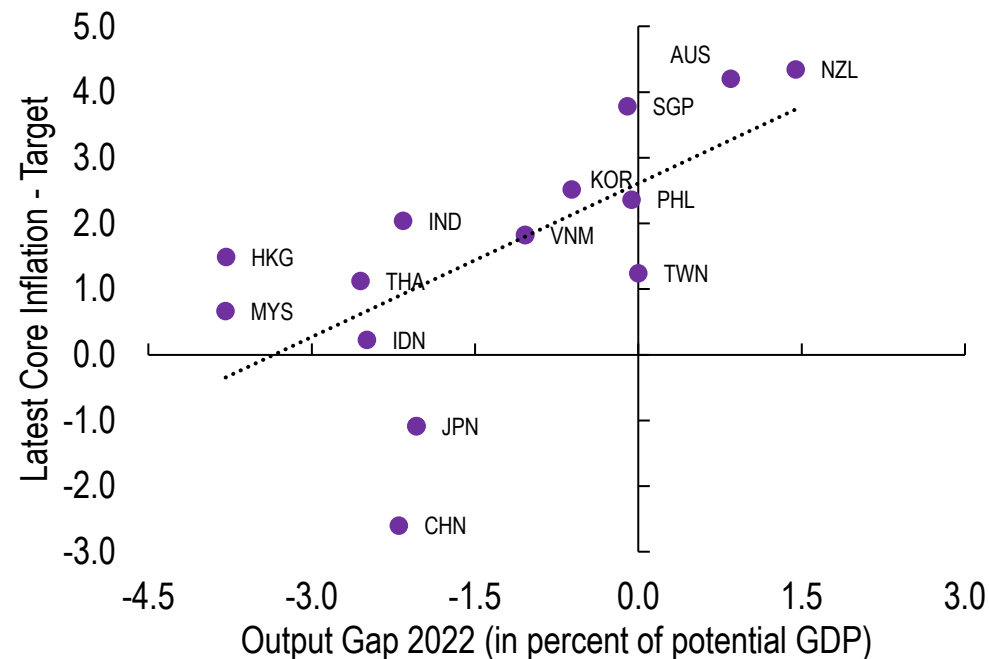


Sources: World Economic Outlook; and IMF staff calculations.

Note: Asia AE includes AUS, JPN, KOR, NZL, SGP, and TWN. Asia EMDEs includes CHN, IND, IDN, MYS, PHL, THA, and VNM.

... with a tight link between slack and core inflation

Core Inflation and Output Gaps  
(Percent)



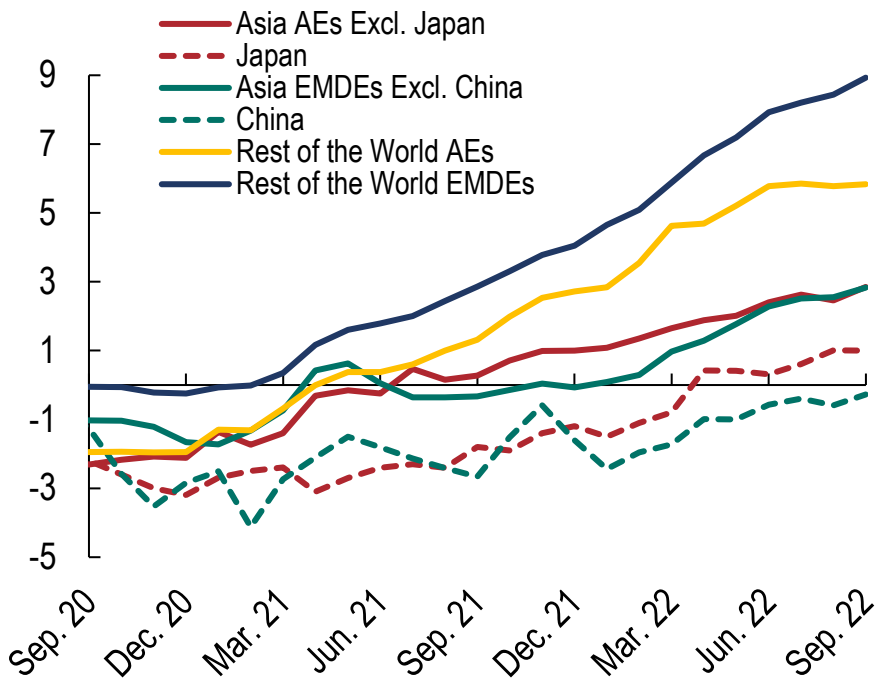
Source: Haver Analytics, World Economic Outlook, and IMF staff calculations.

Note: For inflation targeting economies, deviation from target or midpoint of the inflation target range is used. For economies without an inflation target (Hong Kong SAR, Malaysia, Taiwan Province of China, and Singapore), deviations are taken from the long-term average over 2010 -- 19. Dotted line is from fitted linear regression. Economies abbreviations are International Organization for Standardization codes.

# Inflation on the rise but expected to fall in 2023

**Inflation is rising across Asia, but not as much as elsewhere...**

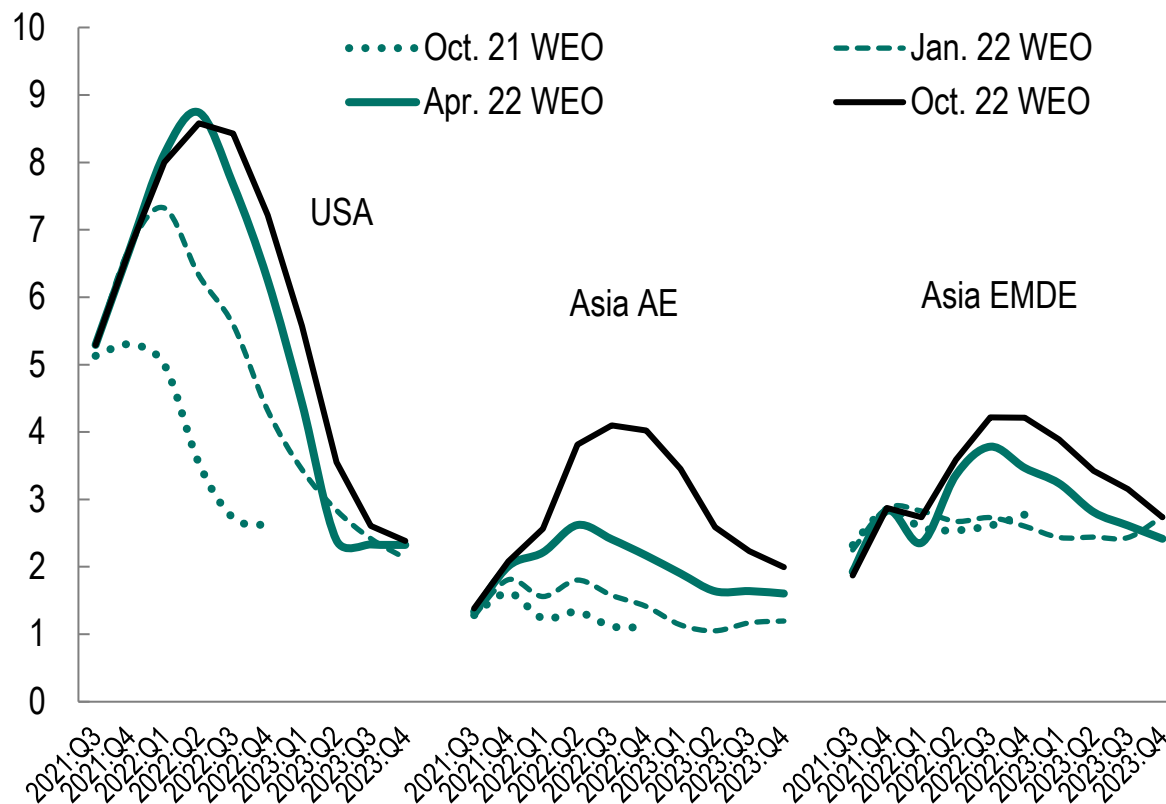
**Headline Inflation: Deviation from target**  
(Percentage)



Sources: Haver Analytics; and IMF staff calculations.  
Note: Asia AE Excl. Japan includes AUS, HKG, KOR, MAC, NZL, SGP, and TWN. Asia EMDEs Excl. China includes IND, IDN, MYS, PHL, THA, and VNM. Rest of world AEs include CAN, CHE, DEU, ESP, FRA, GBR, ITA and USA. Rest of the world EMDEs include BRA, COL, CHL, CZE, HUN, MEX, PER, and ZAF.

**... and while we are revising up our forecast substantially, we expect inflation to peak in late 2022**

(Percent, year over year)

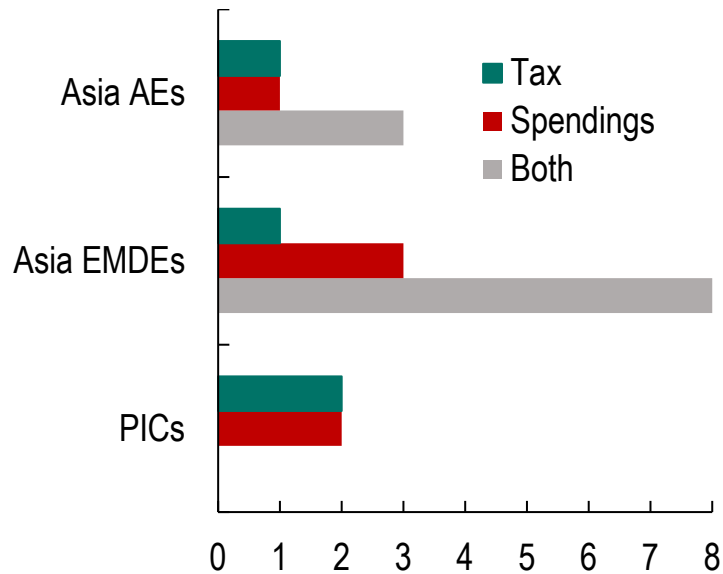


Note: Weighted average. Asia advanced economies includes Australia, New Zealand, Japan, Hong Kong SAR, Korea, Taiwan Province of China, and Singapore. Asia emerging market and developing economies includes China, India, Indonesia, Malaysia, Philippines, Thailand, and Vietnam. WEO = World Economic Outlook; AE = advanced economies; EMDE = emerging market and developing economies.

# Fiscal response to support vulnerable households

Many Asia and Pacific countries have introduced fiscal support for households...

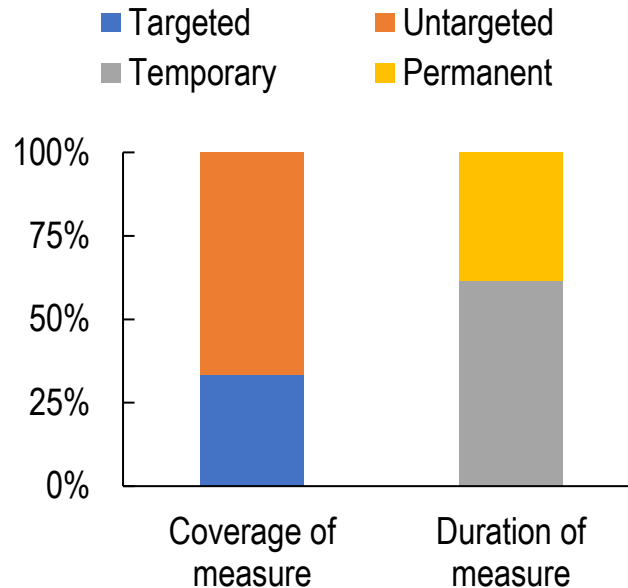
**New fiscal measures in response to energy and food price shock**  
(Number of economies)



Sources: IMF desk survey and IMF staff calculations.  
Note: Based on a survey of 16 Asian economies. Bars show the number 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.

...many of which are untargeted and permanent...

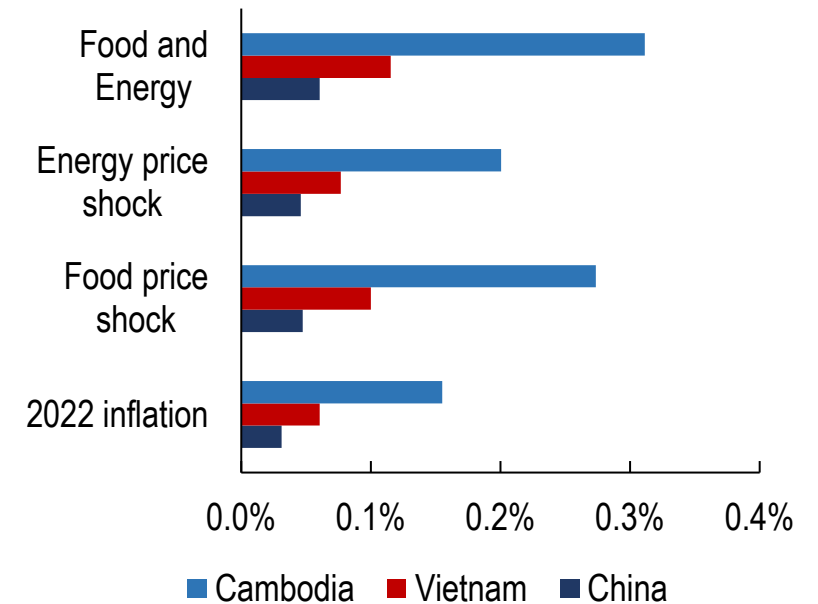
**Coverage and duration of new fiscal measures**  
(Share of economies)



Sources: IMF desk survey and IMF staff calculations.  
Note: Based on a survey of 16 Asian economies.

... and the fiscal cost of shielding vulnerable households from these shocks is large, particularly for LICs

**Cost of shielding vulnerable households**  
(Percent of 2021 GDP)



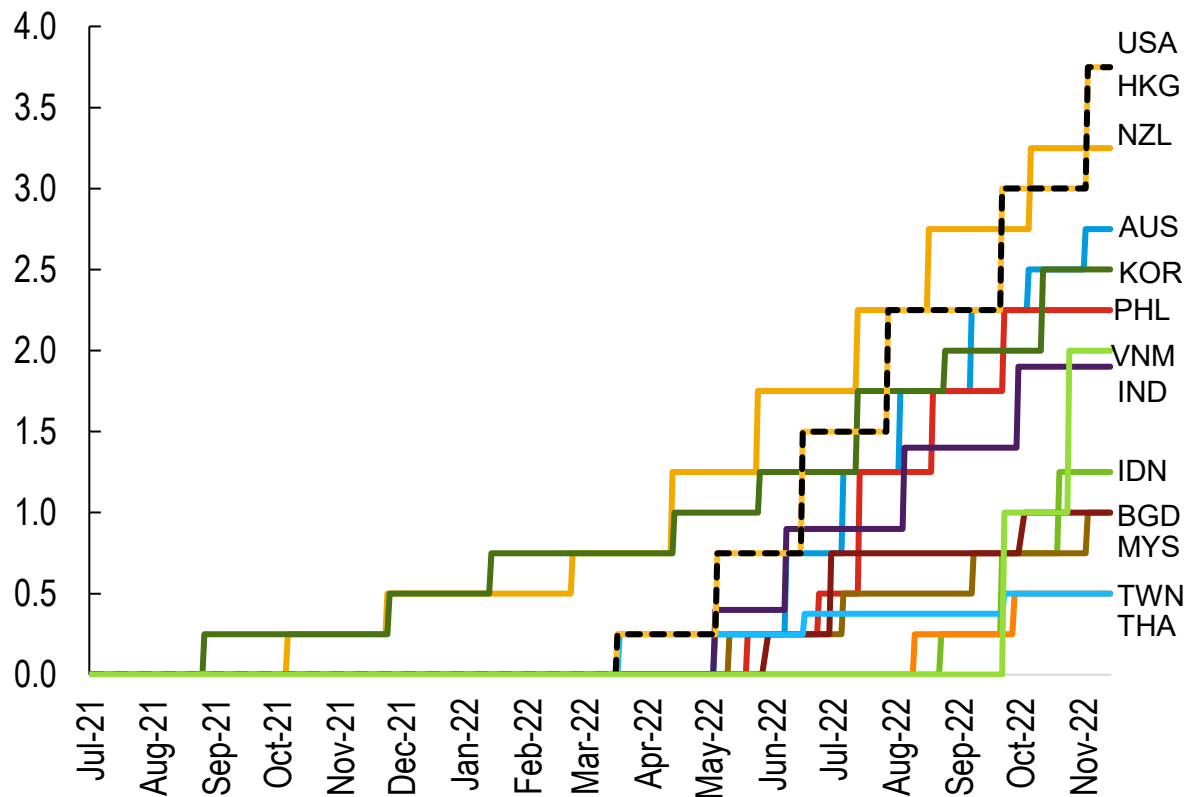
Sources: IMF staff calculations based on national household surveys.

# Monetary policy is tightening, but shallow cycle expected

Asian central banks are in a highly synchronized hiking cycle...

## Policy Rates

(Change since June 2021, percentage points)

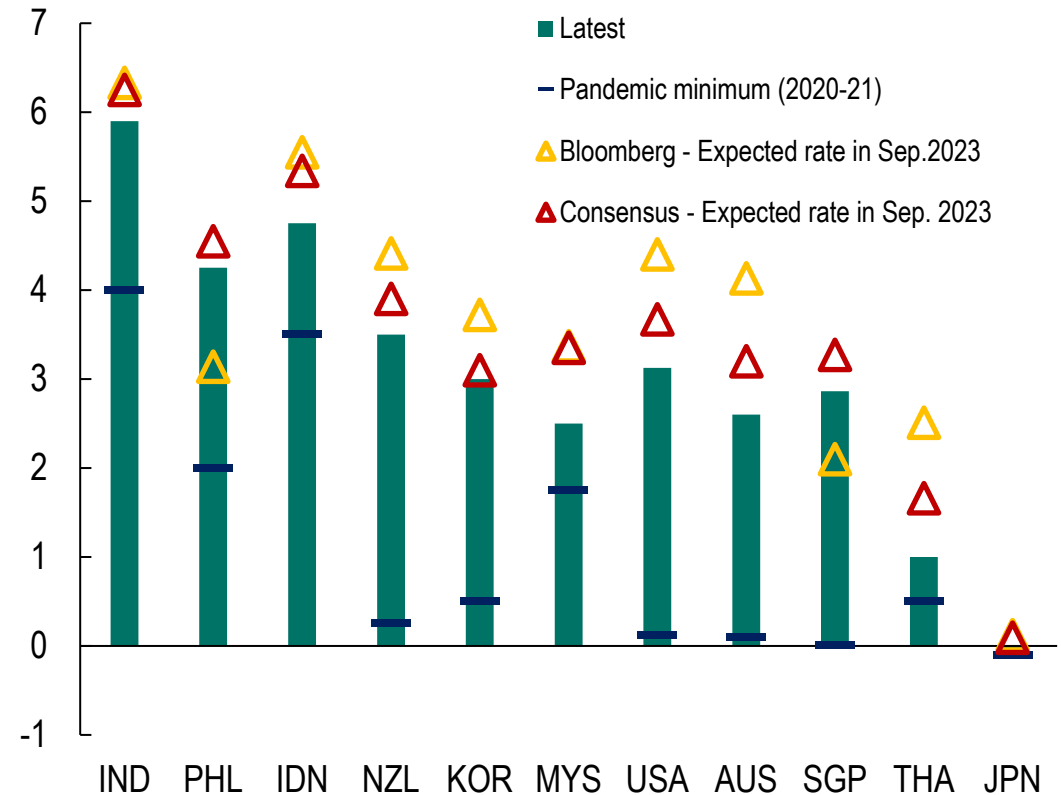


Source: Bloomberg L.P.; Haver Analytics; Consensus Forecasts; and IMF staff calculations.  
Note: Data through November 14, 2022.

... which is expected to be relatively shallow, with rate hikes generally smaller than the Federal Reserve

## Short-Term Interest Rates

(In percent; end of period)



Source: Bloomberg L.P.; Haver Analytics; Consensus Forecasts; and IMF staff calculations.

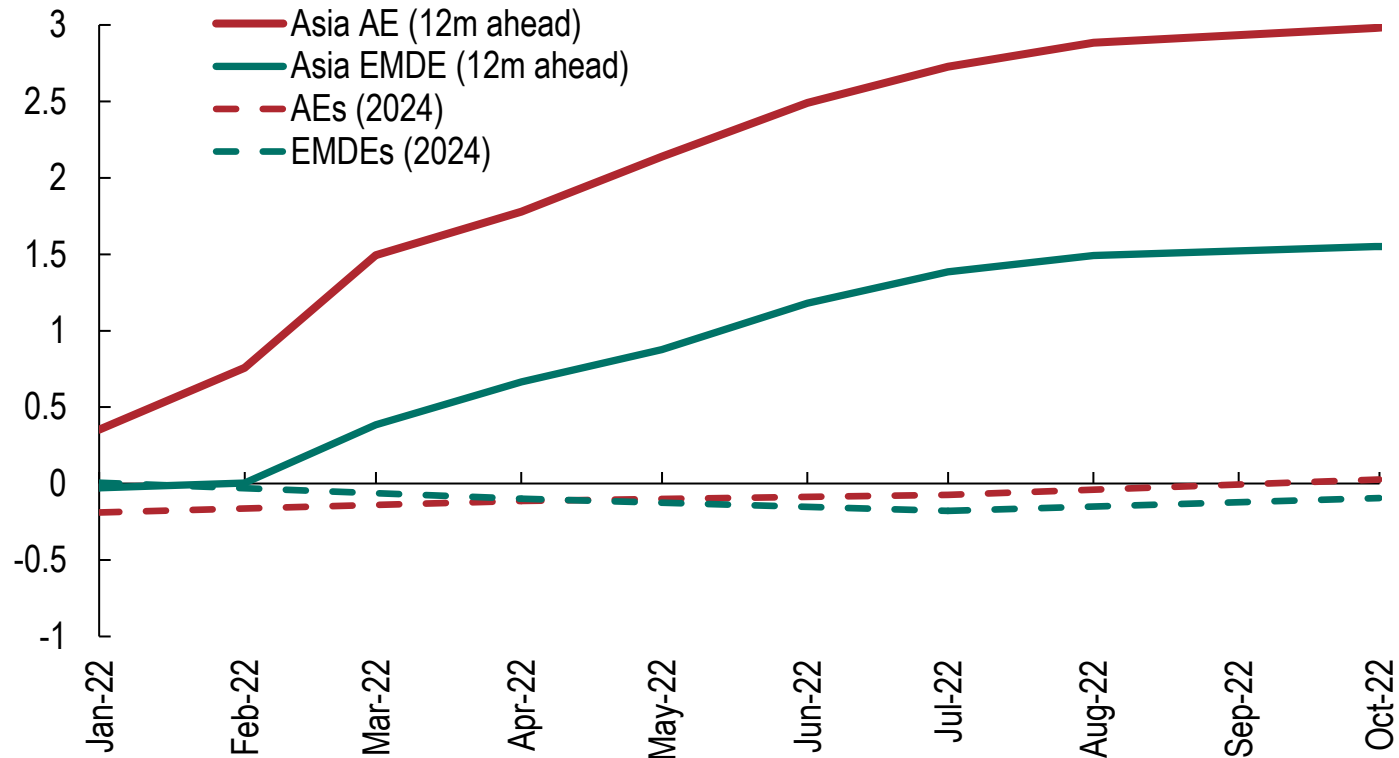
Note: Data through October 26, 2022.



# Inflation expectations aligned with CB targets despite real rates staying negative

Inflation running well above target, but expected to return to target by 2024...

**Professional forecasts of inflation in Asia**  
(Deviation from target; year-on-year)

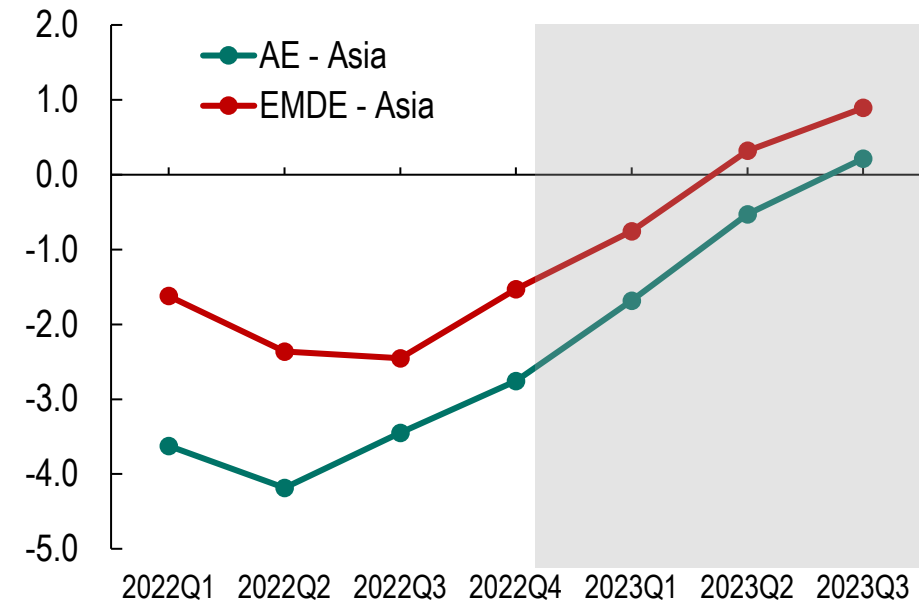


Sources: Consensus Forecasts and IMF staff calculations.

Note: Asia AE includes Australia, Japan, Korea, New Zealand, Singapore, and Taiwan Province of China. Asia EMDE includes China, India, Indonesia, Malaysia, Philippines, Thailand, and Vietnam.

...despite market-implied real policy rates remaining mostly negative

**Ex-post Real Interest Rates**  
(In percent)



Source: Bloomberg Finance L.P.; Haver Analytics; World Economic Outlook October 2022 and IMF staff calculations.

Note: Ex-post real interest rate is the difference between the implied policy rate at 3M, 6M and 1Y and the projected year-on-year inflation rate.

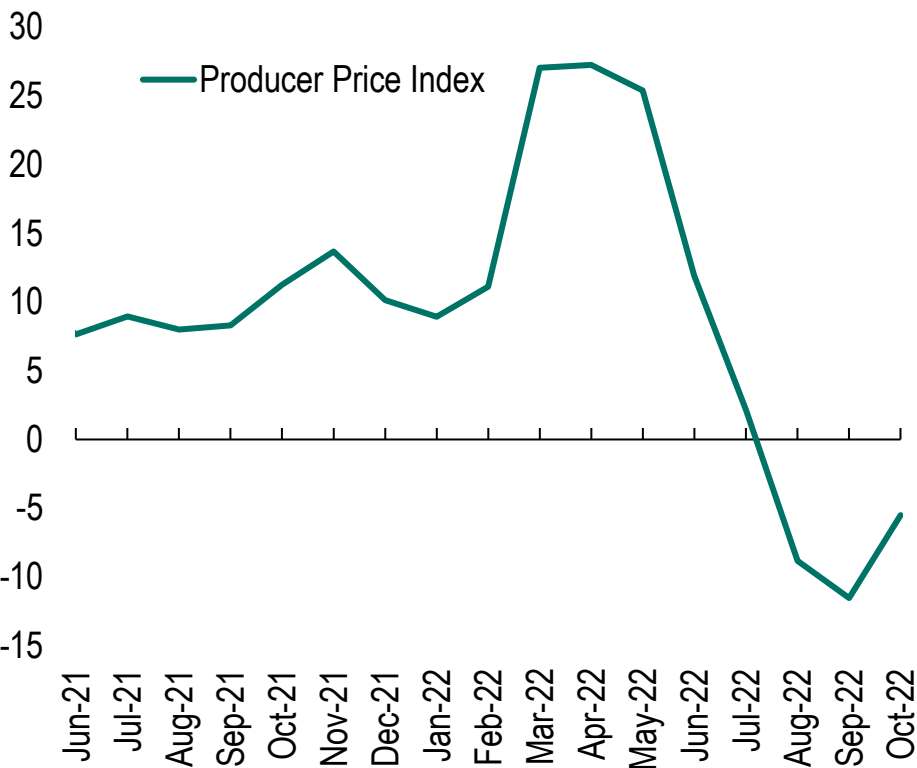
AE-Asia includes Australia, New Zealand, Japan, and Korea. EMDE-Asia includes China, India, Malaysia, Philippines, and Thailand. AE = advanced economy; EMDE = emerging market economy.

# Headline inflation momentum has been easing, but will core follow suit?

Producer prices have moderated recently...

## Producer price index inflation

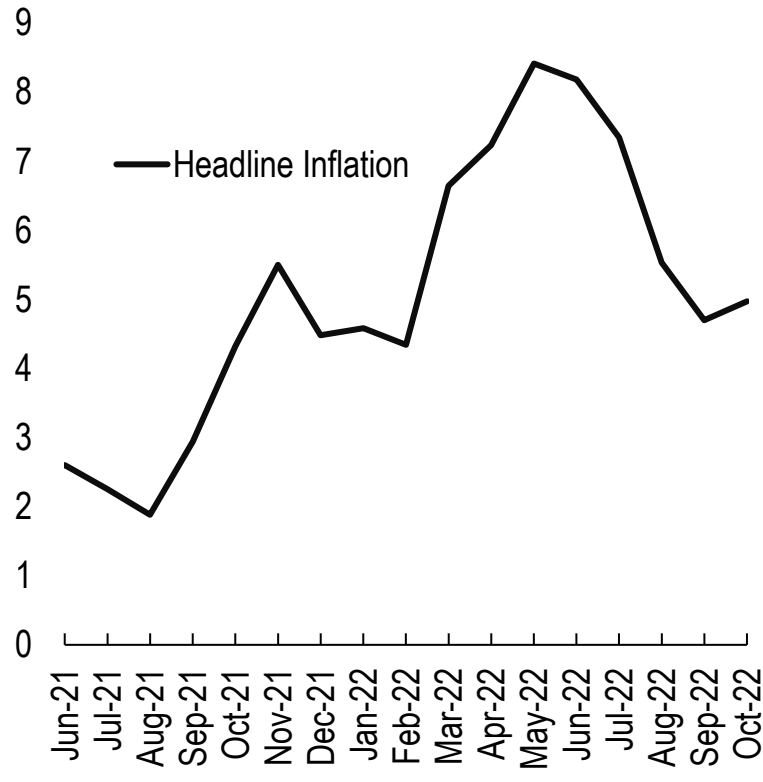
(Percentage; month-on-month annualized rate; 3 month MA)



Source: Haver Analytics; and IMF staff calculations.  
Note: Simple average of KOR, JPN, IDN, PHL, MYS, THA, SGP, IND.

...and lower commodity prices have helped moderate headline inflation...

## Headline inflation (Percentage; month-on-month annualized rate; 3 month MA)

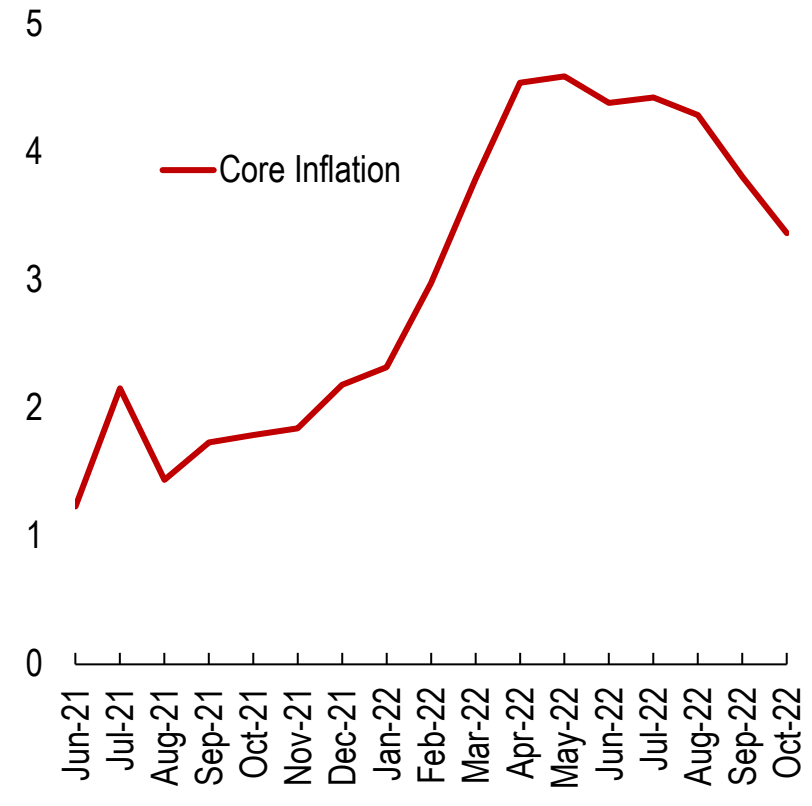


Sources: Haver Analytics; and IMF staff calculations.  
Note: Simple average of KOR, IDN, PHL, MYS, THA, SGP, IND.

...while core inflation remains stronger.

## Core inflation

(Percentage; month-on-month annualized rate; 3 month MA)



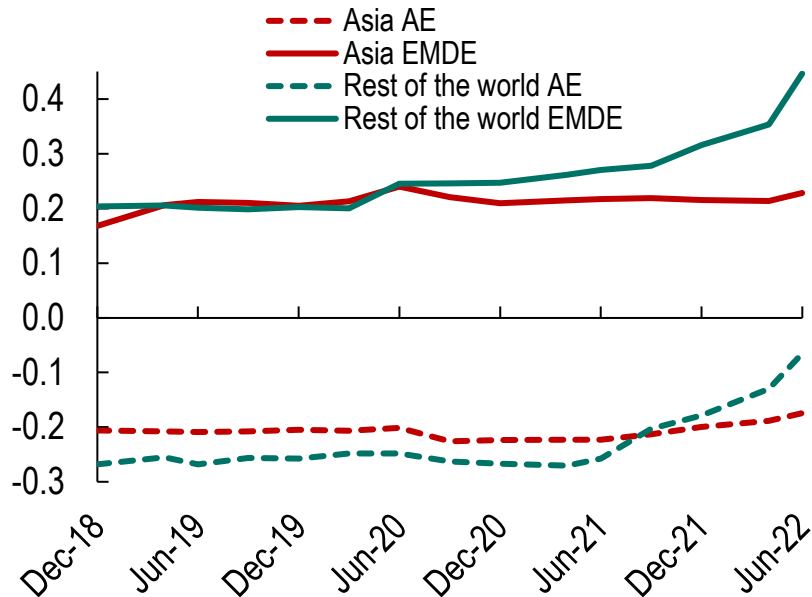
Source: Haver Analytics; and IMF staff calculations.  
Note: Simple average of KOR, JPN, IDN, PHL, MYS, THA, SGP, IND.

# Asian core inflation: some unpleasant arithmetic

Historically, Asian inflation has tended to be quite persistent...

## Persistence of Inflation

(Coefficient on autoregressive term in Phillips Curve; deviation from global mean)



Source: IMF staff calculations.

Note: Asia AE include AUS, JPN, KOR, HKG, NZL, SGP and TWN.

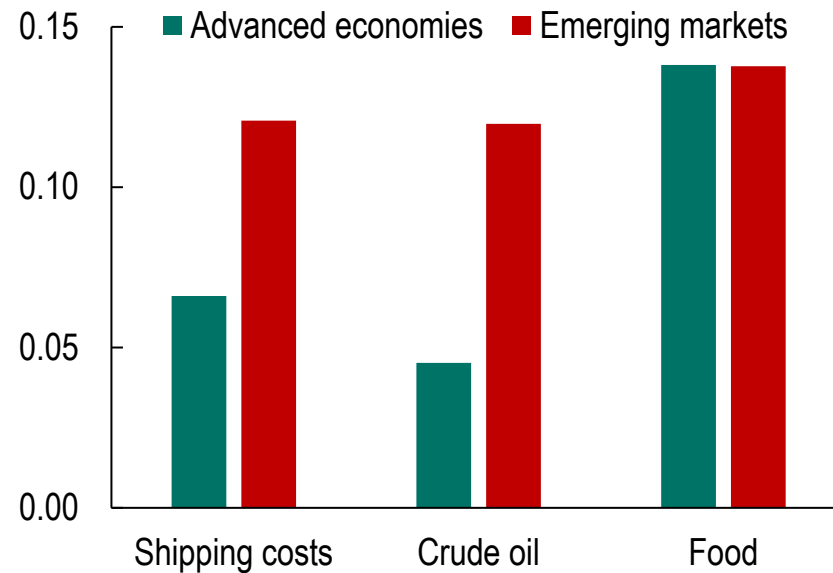
Asia EMDE include CHN, IDN, IND, MYS, PHL and THA.

Rest of the world AE include CAN, GBR, DEU, FRA, CHE, USA. Rest of the world EMDE include BRA, COL, CHL, CZE, PER, MEX, HUN, POL and ZAF.

...and core inflation responds strongly to external shocks to non-core prices

## Response of Asian core inflation to global shocks

(Percentage points)



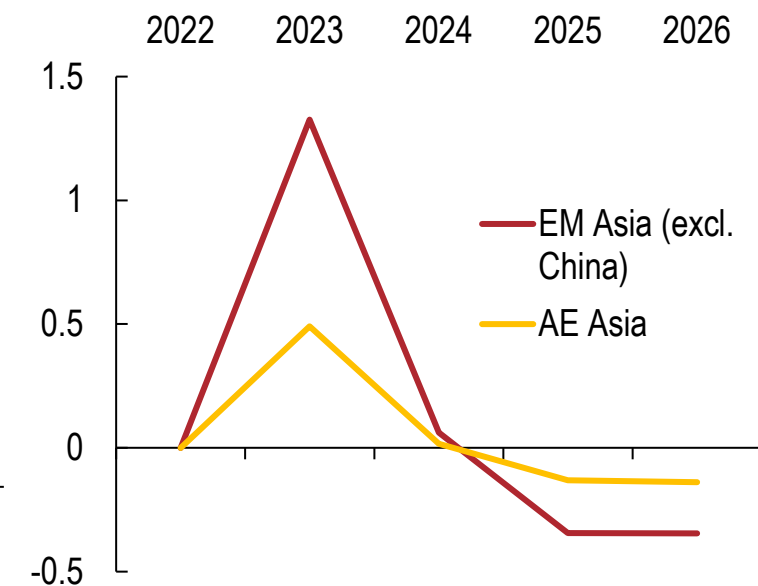
Source: IMF staff calculations; Haver Analytics.

Note: Estimations documented in Carrière-Swallow and others (2022), "Shipping Costs and Inflation". Bars show the maximum response of core inflation (year-on-year) following a 1-standard-deviation increase in each global variable.

In a scenario where core inflation stays high, monetary policy would need to tighten further

## Impact on Policy Interest Rate

(Percentage points)



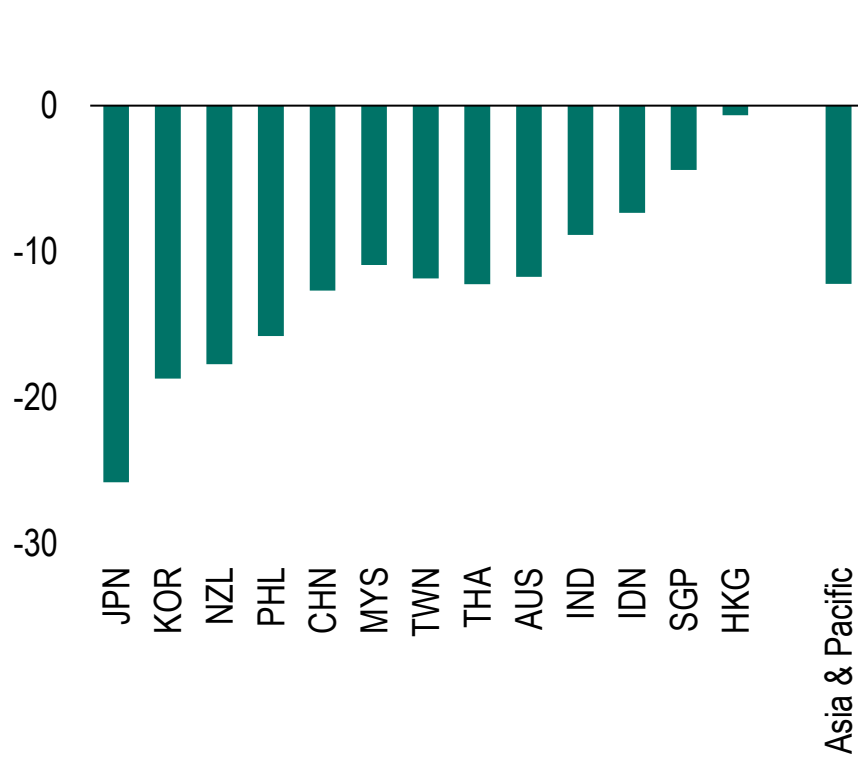
Source: IMF staff calculations.

Note: EM = emerging market economies; AE = advanced economies.

# Recent pressure on exchange rates reflects fundamentals

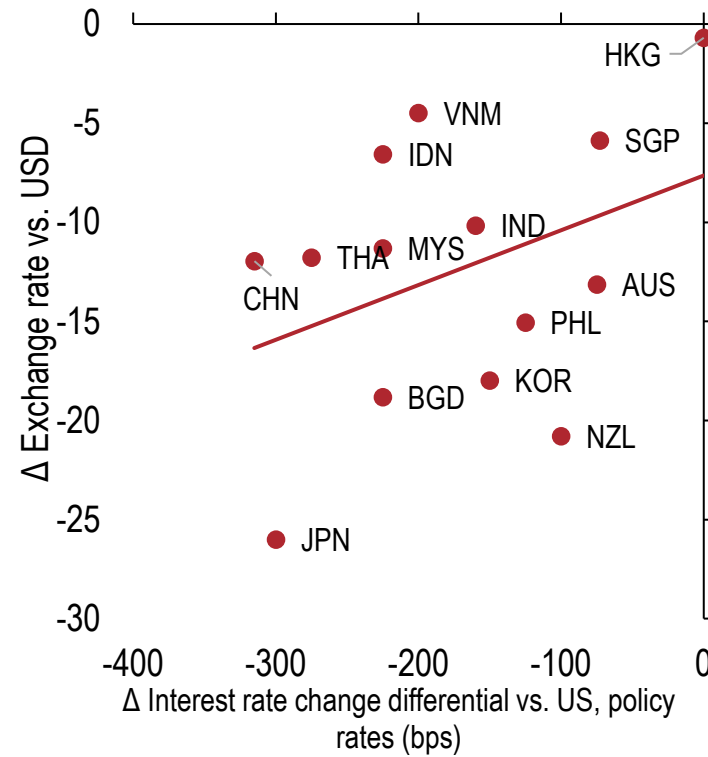
Asian currencies depreciating sharply amid global dollar strength...

**Change in Nominal Exchange Rate in 2022**  
(Percent; local currency per US dollar)



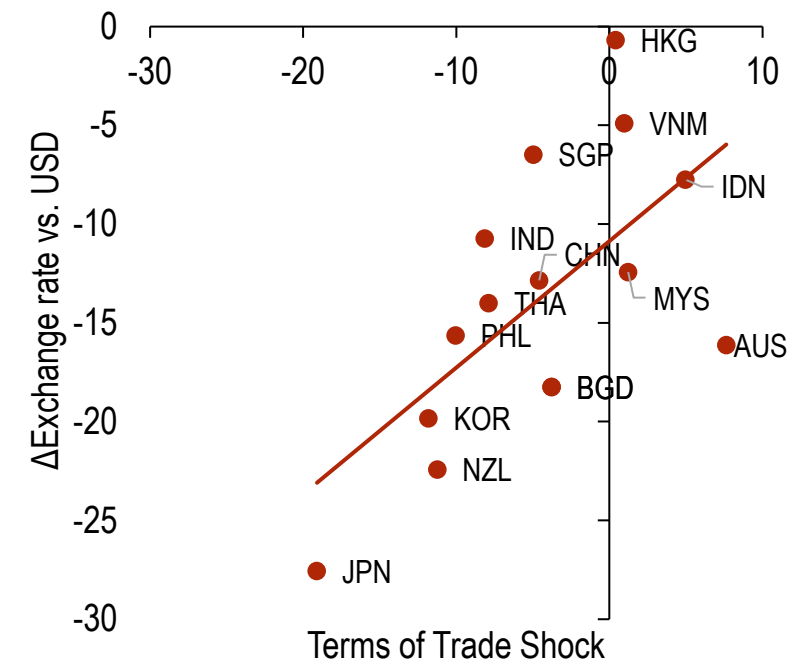
...with depreciation reflecting interest rate differentials...

**Depreciation vs. interest rate differential**  
(Percent change, year to date)



...and the deterioration of the terms of trade

**Depreciation vs. commodity terms of trade**  
(Percent change, year to date)



Sources: Information Notice System and IMF staff calculations.  
Note: Year-to-date percent change. Monthly average through October.

Sources: Bloomberg Finance L.P.; and IMF staff calculations.  
Data thru October 12.

Sources: Bloomberg Finance L.P.; Gruss and Kebhaj (2019), and IMF staff calculations. Data thru October 12.

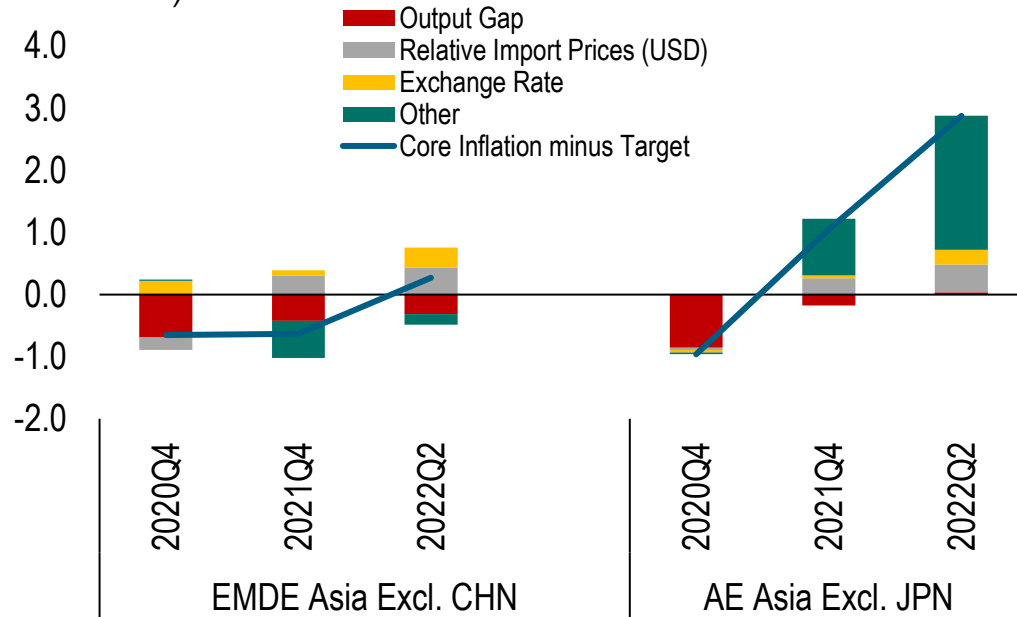
# Pass-through to inflation has been limited so far, but poses a risk going forward

Estimations find that core inflation rising due to import prices, shrinking output gaps, and to some extent currency depreciation...

... but pass-through could rise as the level of inflation increases

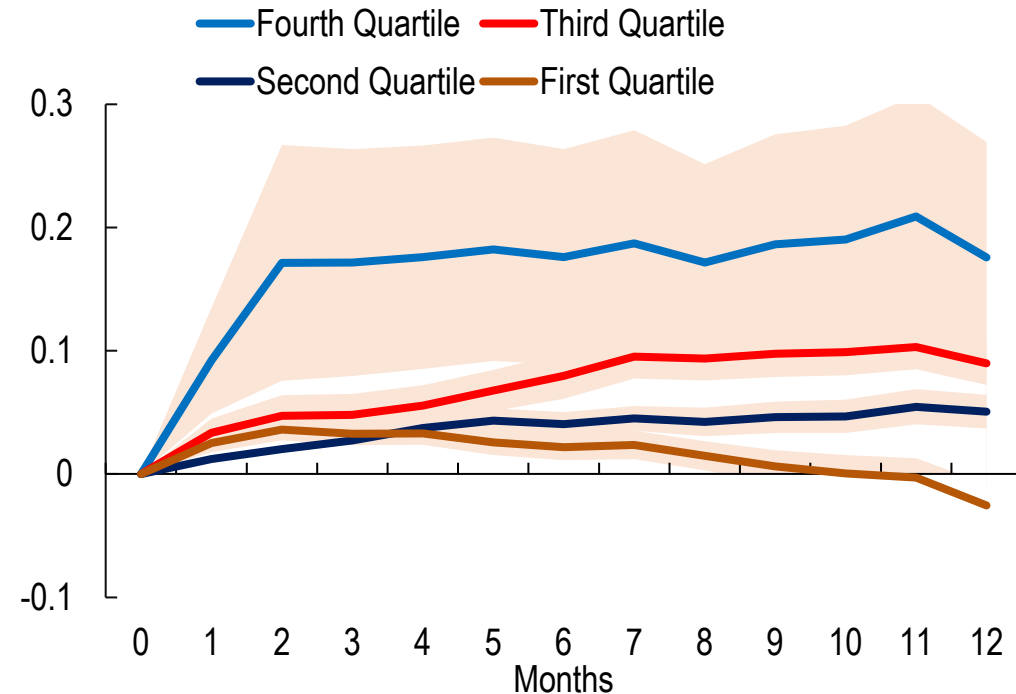
## Drivers of Core Inflation

(Percent; Deviation from target; Rolling Window Estimation)



## Exchange Rate Pass-Through by Level of Inflation

(Percent)



Source: IMF staff calculations.

Note: AE Asia includes AUS, KOR, NZL, SGP.

EMDE Asia includes IDN, IND, MYS, PHL, THA. Decomposition is based on country-by-country Phillips Curve estimations using data since early 1990s. The figure shows simple average of contributions within country groups.

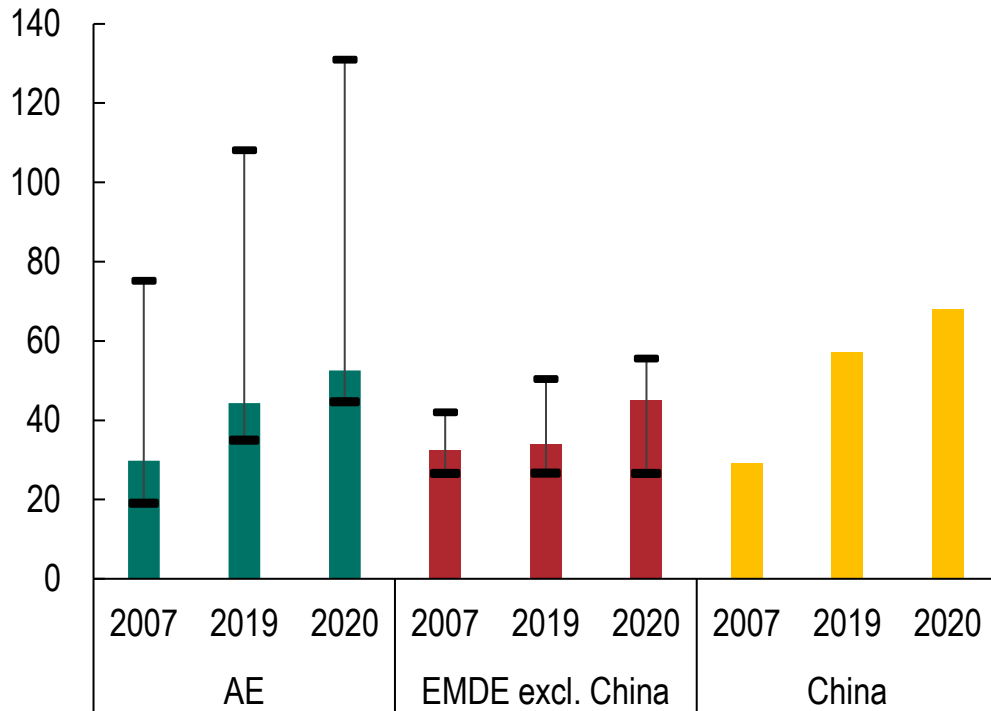
Sources: IMF staff calculations.

Note: Estimates show the response of headline CPI following a one standard deviation increase (depreciation) in local currency/USD in each quartile of the inflation distribution. Error bars denote the confidence intervals at 90% significance. Standard errors are clustered at country level.

# Macrofinancial concerns: Leverage has risen in Asia...

Public debt has been on the rise across Asia, spiking further during pandemic...

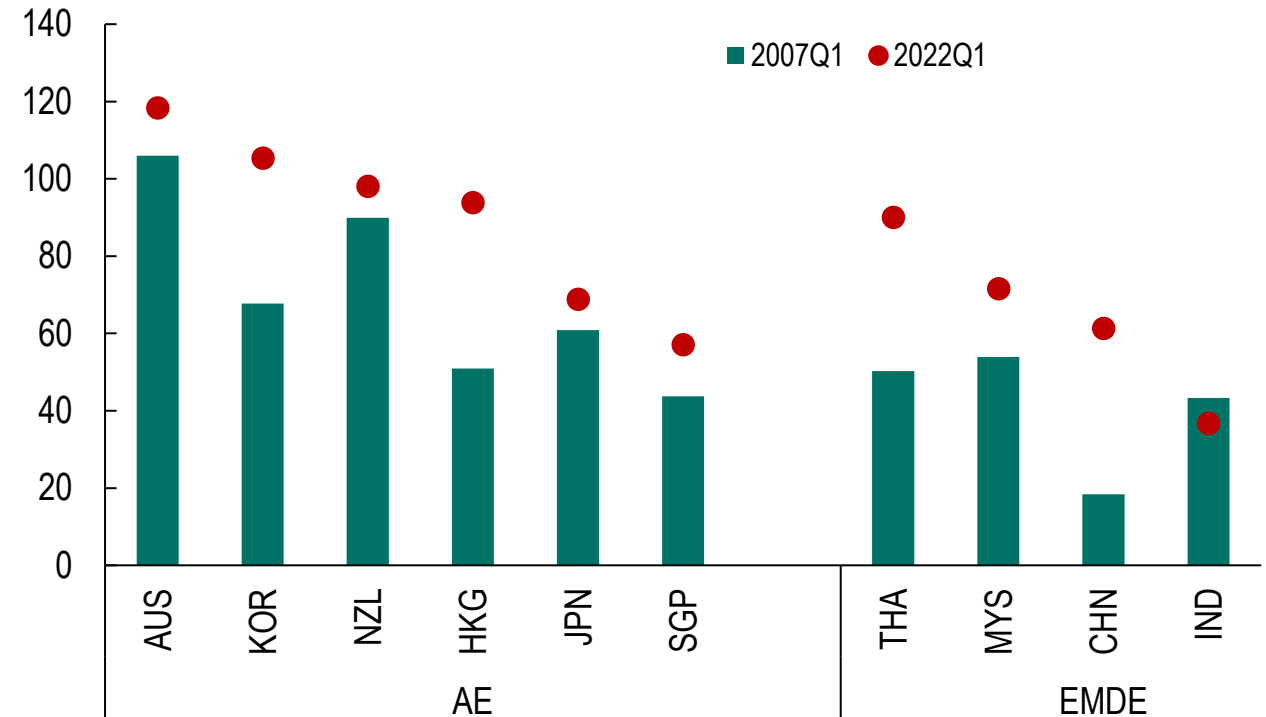
Asia: General Government Debt  
(Percent of GDP)



Source: IMF Global Debt Database; and IMF staff calculations.  
Note: Upper (lower) horizontal lines represent the 75th (25th) percentiles of the distribution. Bars represent the 50th percentile. AE= advanced economy; EMDE = emerging market developing economy.

..with household debt rising substantially in many economies as well

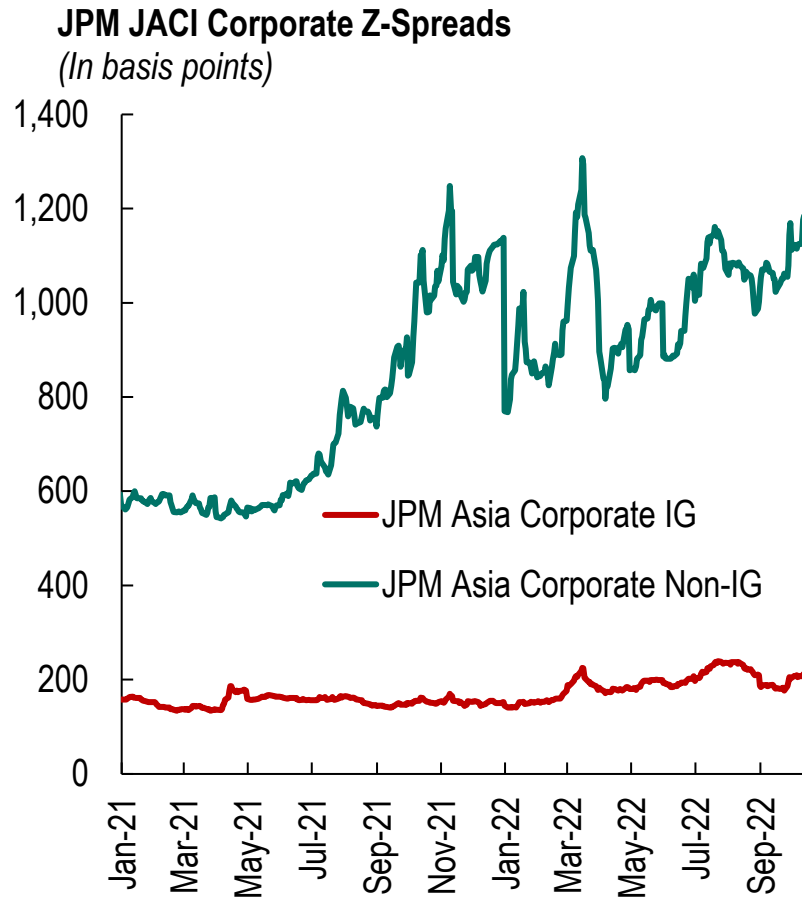
Asia: Household Debt  
(Percent of GDP)



Source: Bank for International Settlements and IMF staff calculations.

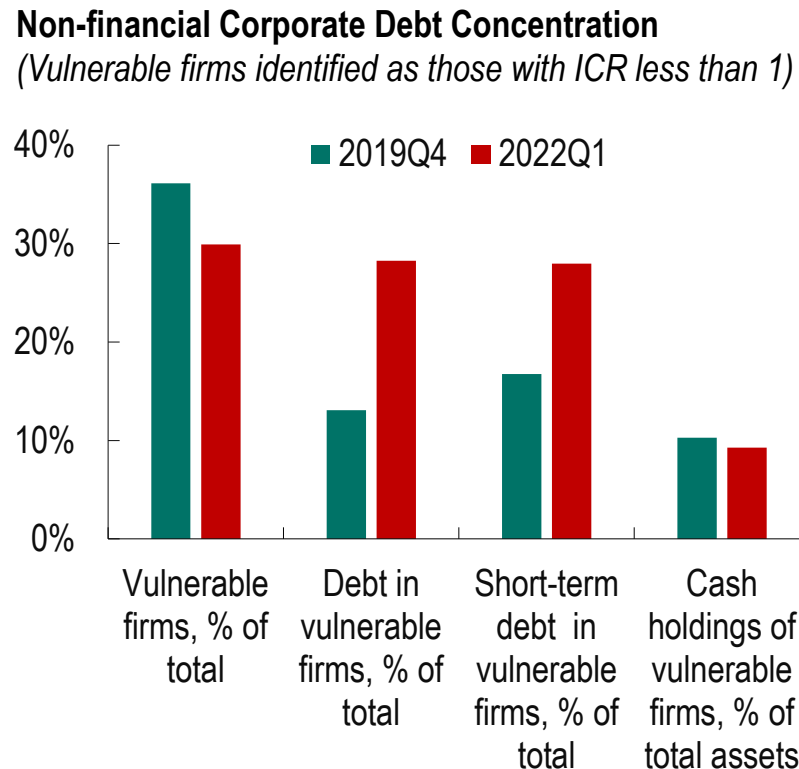
# ...along with financial vulnerability to interest rate hikes

Financial conditions have tightened for high-yield corporates...



Source: Thomson Reuters Datastream.

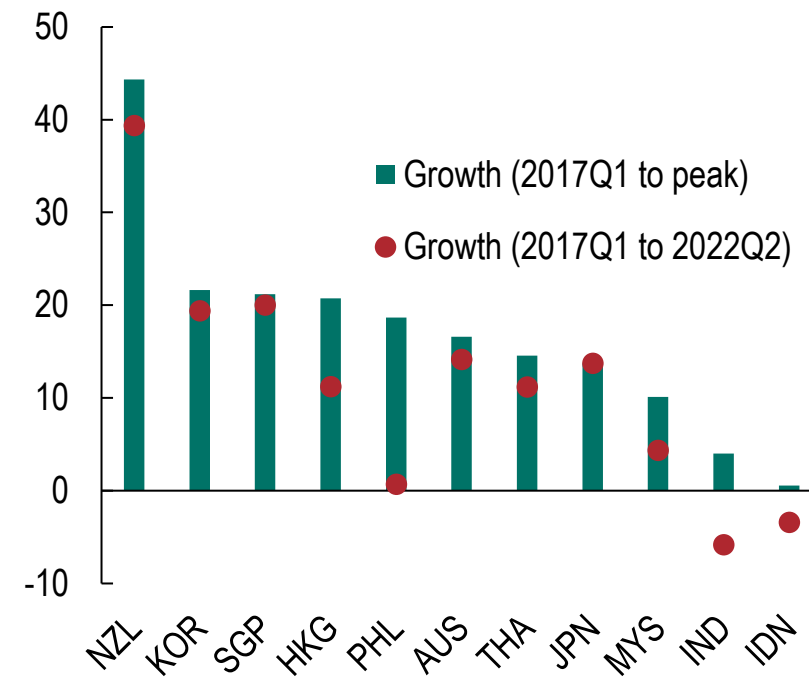
... and a rising share of corporate debt is held by vulnerable firms...



Source: IMF staff calculations based on Capital IQ data.  
Note: Based on latest available quarterly data for Asian firms. ICR = Interest Coverage Ratio; Short-term debt is debt with less than 1-year remaining maturity.

Real estate markets in advanced economies are showing signs of cooling

**Real Residential Property Prices**  
(Inflation deflated; Percent)



Source: Bank for International Settlements and IMF staff calculations.

Note: Country abbreviations are International Organization for Standardization country codes.

# What keeps us awake at night?

