



1930  
2020

Promoting monetary  
and financial stability

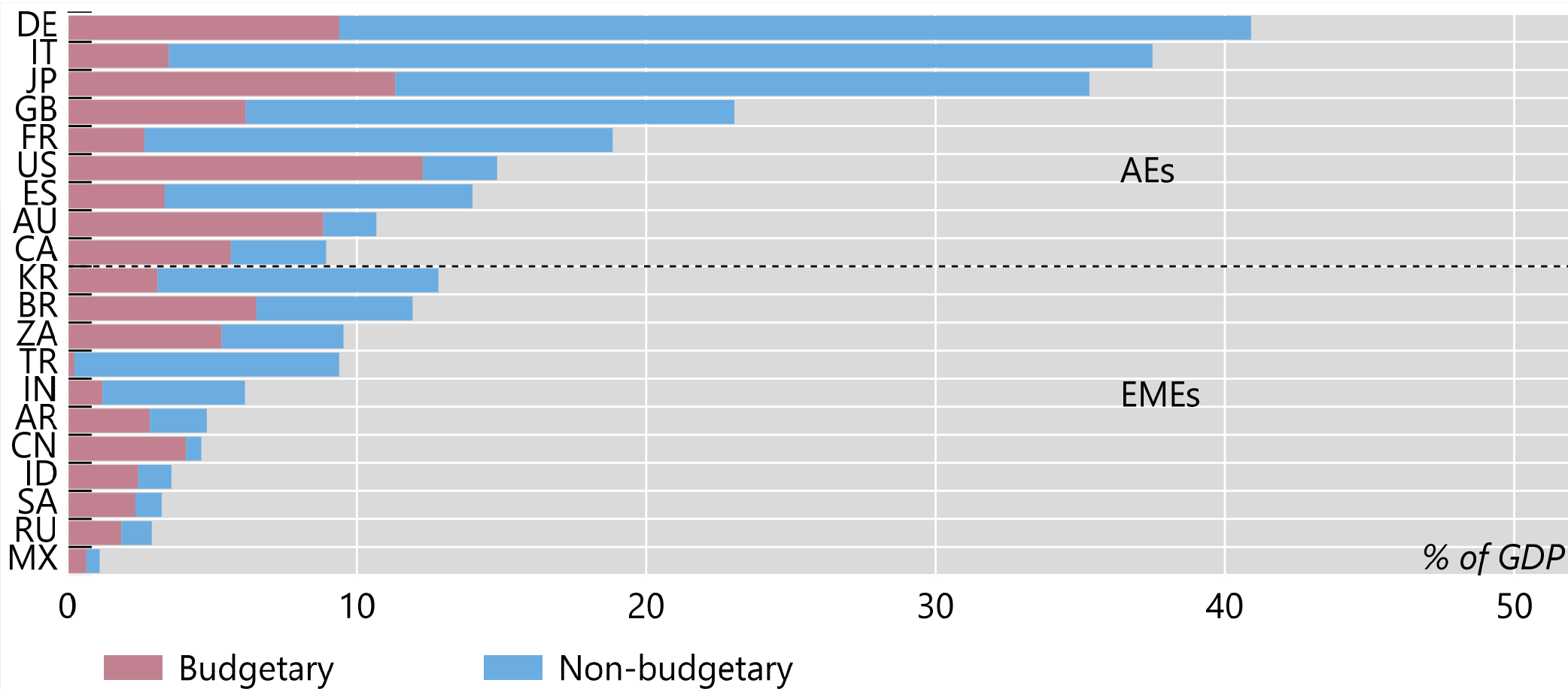
# Overcoming Original Sin

Sovereign Debt Research and Management Conference, 17 September 2020

Hyun Song Shin\*, Economic Adviser and Head of Research, BIS

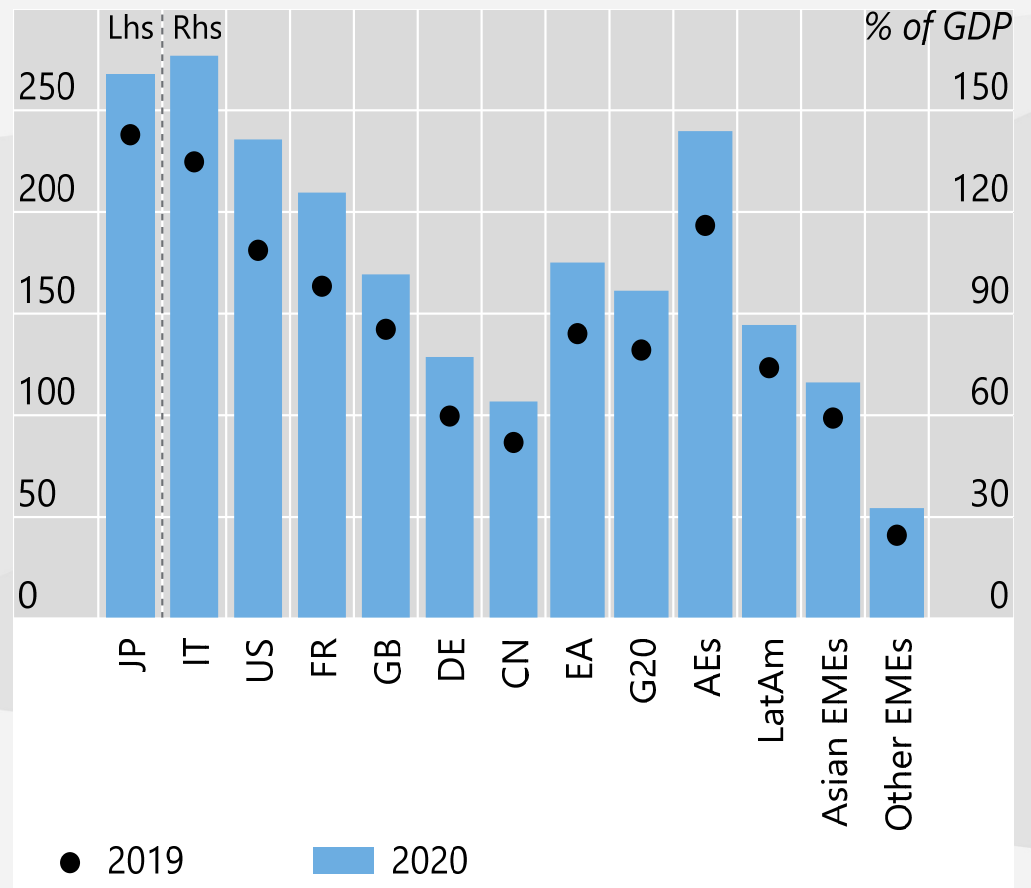
\*The views expressed here are mine and not necessarily those of the Bank for International Settlements

## Pledged fiscal packages



Sources: IMF, *Fiscal Monitor*; IMF, *World Economic Outlook*; national data; BIS calculations.

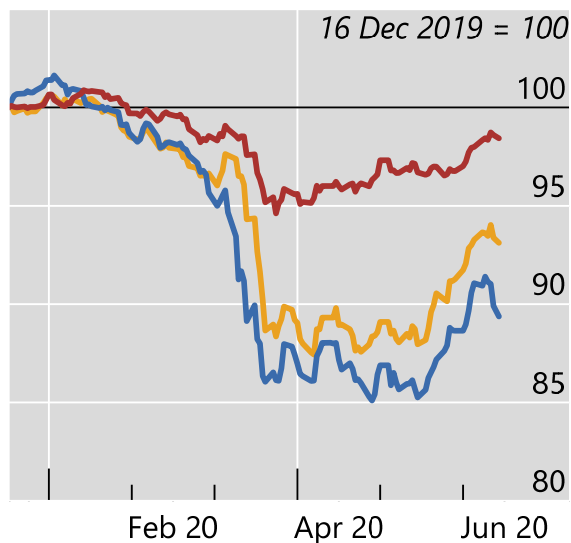
## Fiscal deficits and public debt



Sources: IMF, *World Economic Outlook*, June 2020; BIS calculations.

## Focus on emerging market economies

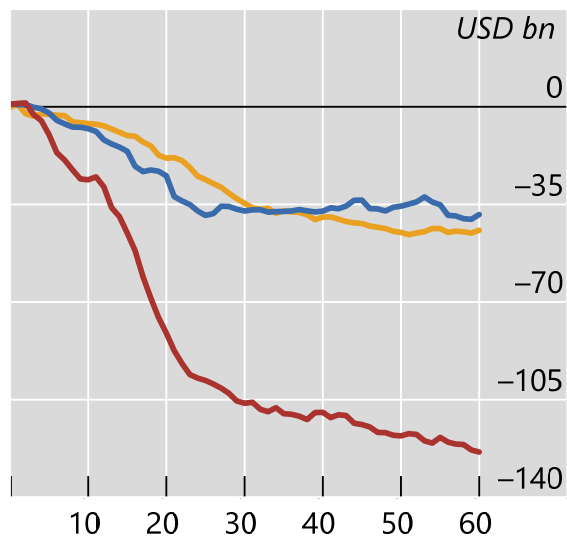
Exchange rate / US dollar



— Asian EMEs — Latin America  
— Other EMEs

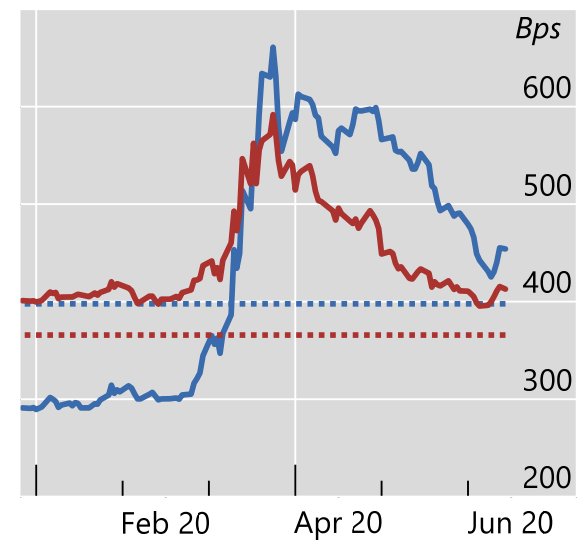
A decrease indicates an appreciation of the US dollar.

Cumulated non-resident portfolio flows to EMEs



— Covid-19 (19 Feb 2020)  
— Taper tantrum (22 May 2013)  
— Lehman bankruptcy (15 Sep 2008)

Sovereign bond spreads for EMEs

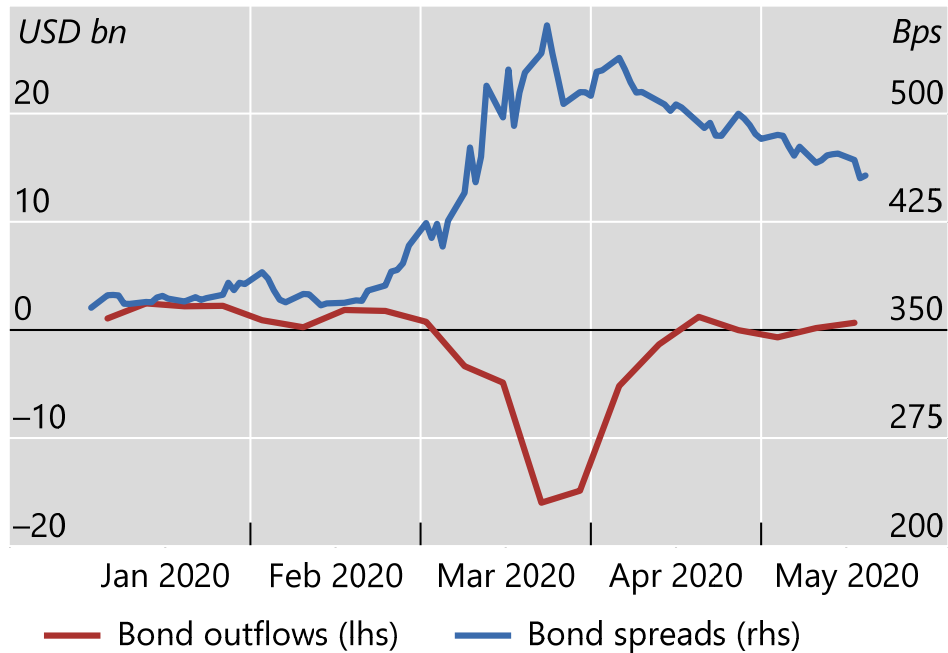


Local currency: — Spread — Foreign currency:  
— Historical mean —

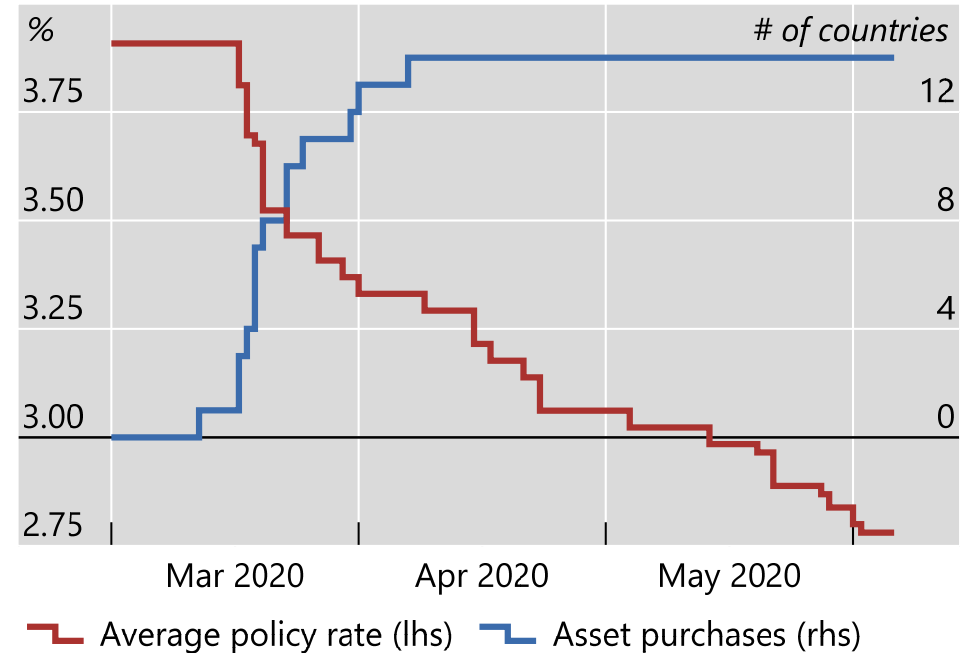
Sources: Bloomberg; Institute of International Finance; JPMorgan Chase; national data; BIS calculations.

## EME central bank actions and bond markets

### Bond fund flows and bond spreads



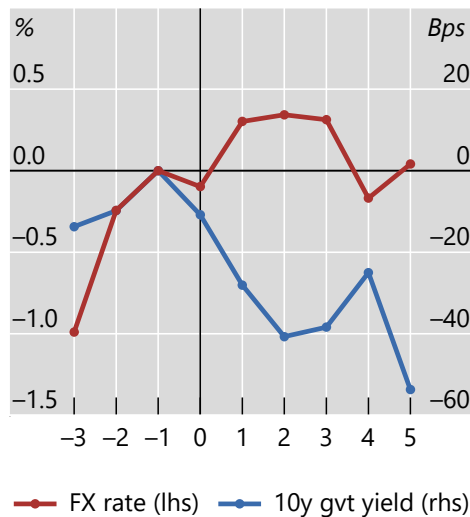
### Policy rate and bond purchase announcements



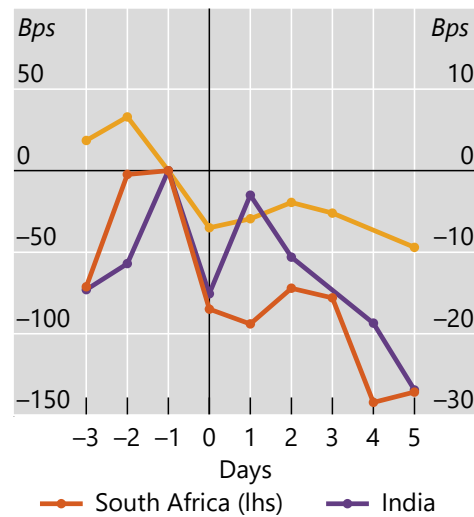
Source: Arslan, Drehmann and Hofmann (2020), BIS Bulletin 20

## Announcements reduce yields with little effect on exchange rates

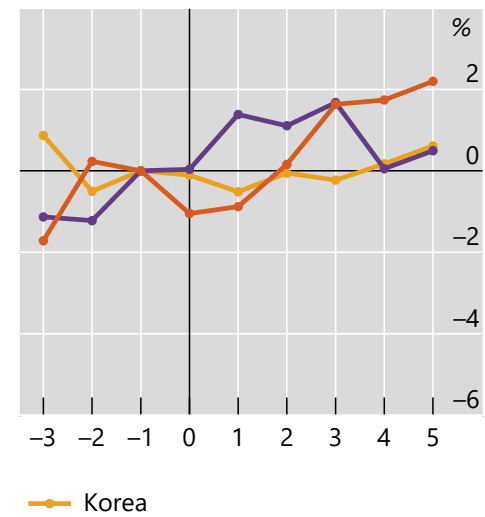
Average response



10-year government yields response



Exchange rate response

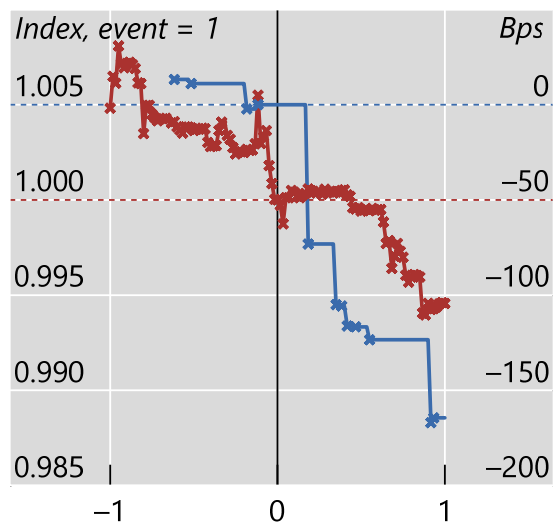


Responses calculated as the cumulative difference (10-year yields) or growth (FX) relative to the day prior to the announcement. Day zero is the day of the announcement. An increase in the exchange rate denotes an appreciation of the US dollar.

Source: Arslan, Drehmann and Hofmann (2020), BIS Bulletin 20

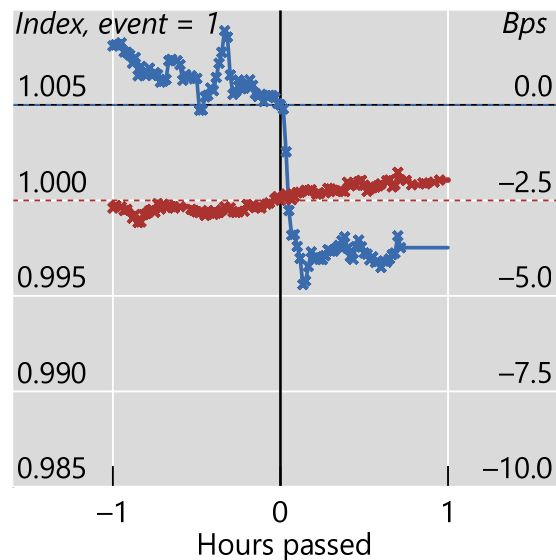
## High-frequency responses to bond purchase announcements

### South Africa



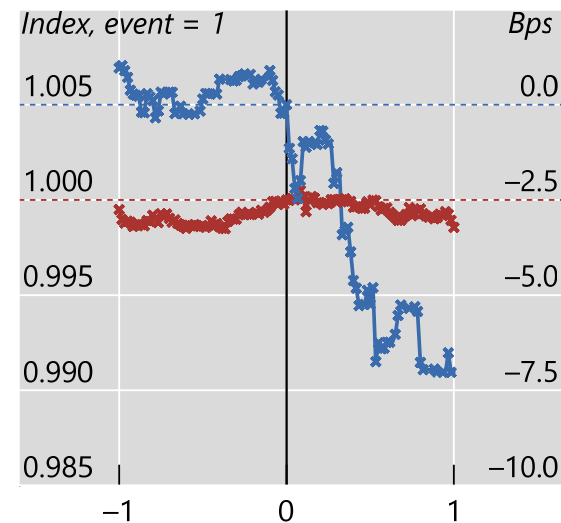
Announced on 25 March 2020

### India



Announced on 20 March 2020

### Korea



Announced on 9 April 2020

Exchange rates versus the US dollar are standardised to one, and 10-year government bond yields are standardised to zero at the time of the announcement. Crosses denote active quotes. An increase in the exchange rate denotes an appreciation of the US dollar.

Source: Arslan, Drehmann and Hofmann (2020), BIS Bulletin 20



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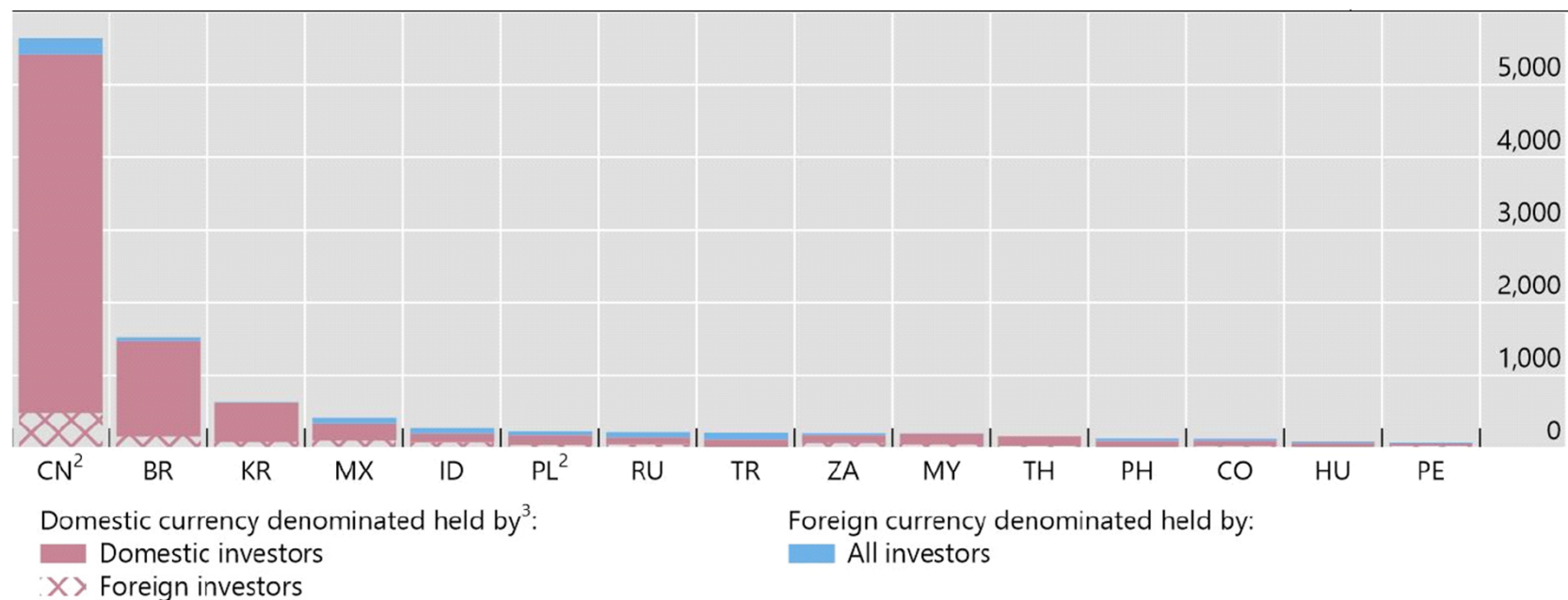
Promoting monetary  
and financial stability

*"Original Sin Redux"*  
Carstens and Shin, *Foreign Affairs*, 2019



## Central government debt securities<sup>1</sup>: overview

Amounts outstanding, at end-December 2019, in billions of US dollars



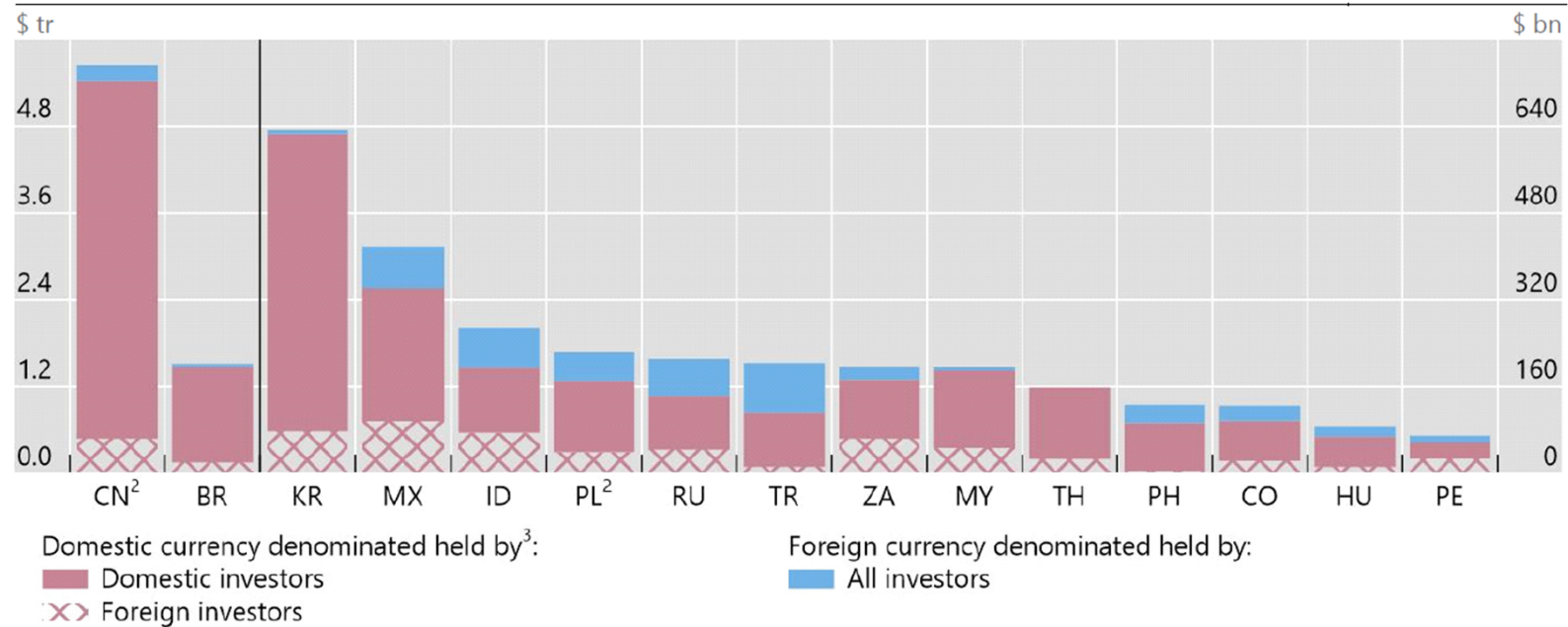
<sup>1</sup> Issued on domestic and international markets (heterogeneous sources of data). Domestic bonds exclude money market instruments.

<sup>2</sup> General government. <sup>3</sup> Breakdown by type of investor is calculated by applying quarterly estimates derived by Arslanalp et al (2014) on domestic currency denominated aggregates shown. KR is an exception, where The Bank of Korea estimates are used.

Sources: S Arslanalp and T Tsuda, "Tracking Global Demand for Emerging Market Sovereign Debt", *IMF Working Paper*, no WP/14/39, March 2014; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS calculations.

## Central government debt securities<sup>1</sup>: overview

Amounts outstanding, at end-December 2019

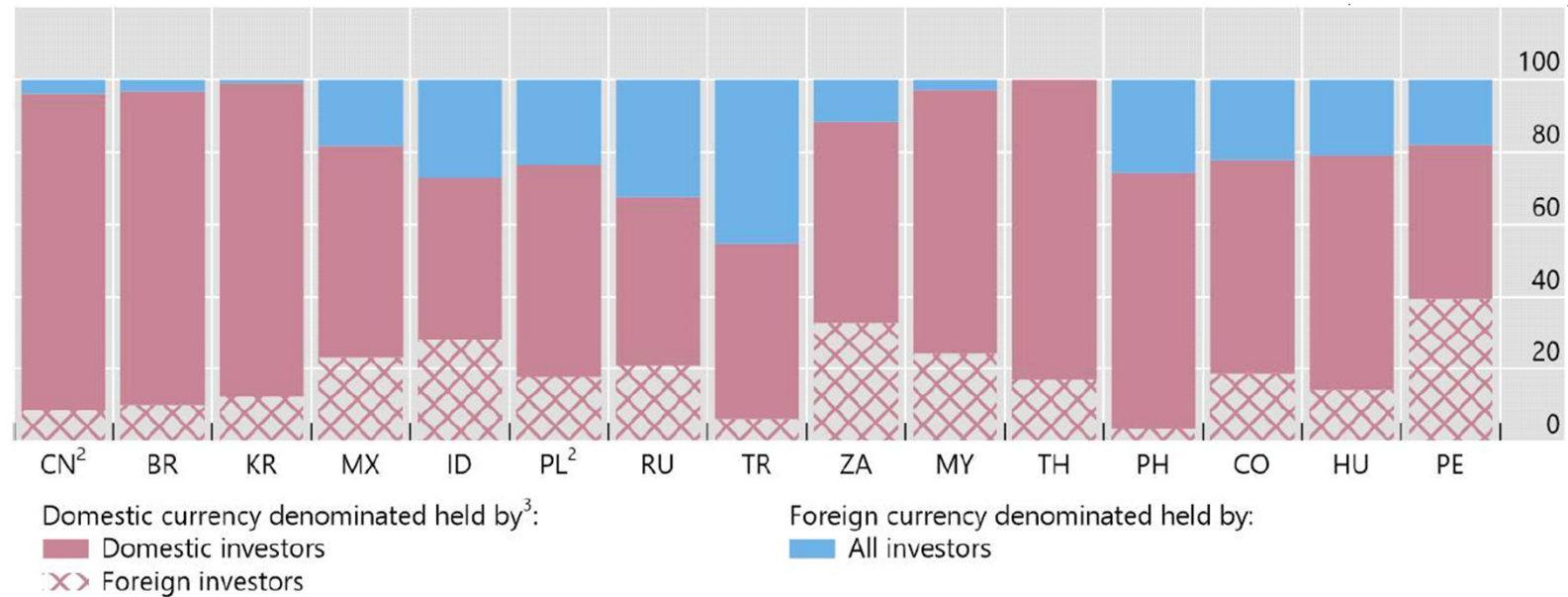


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## Central government debt securities<sup>1</sup>

As a percentage of total amounts outstanding, at end-December 2019



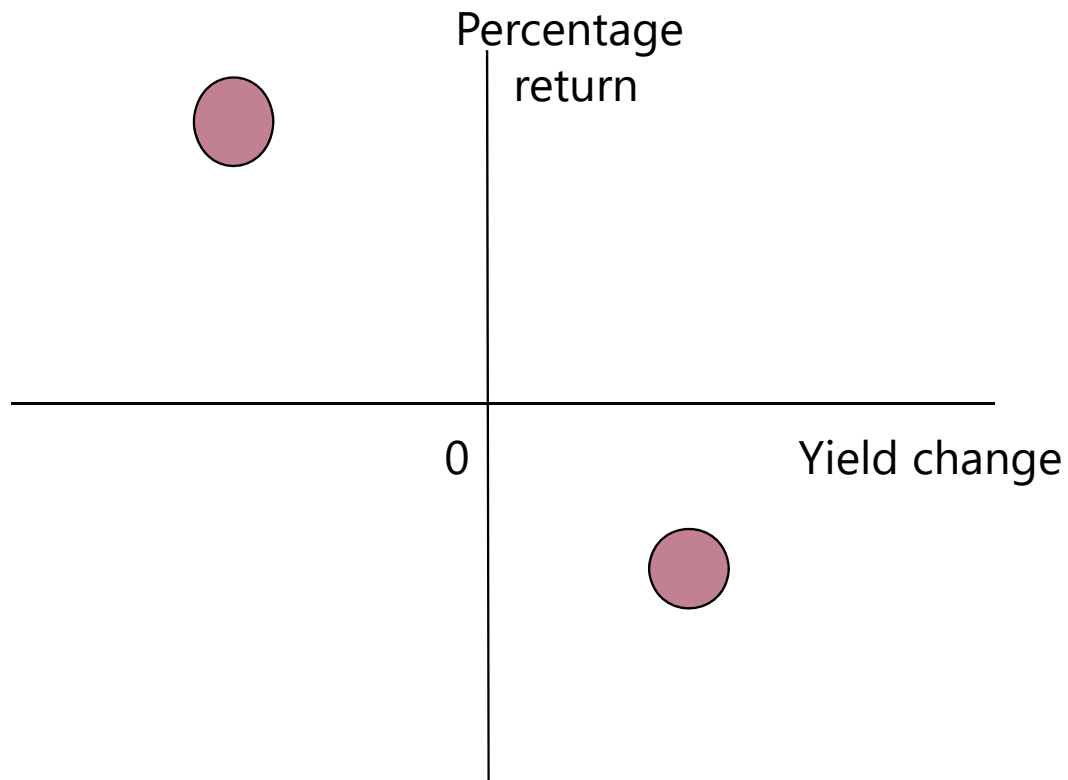
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## Two duration measures

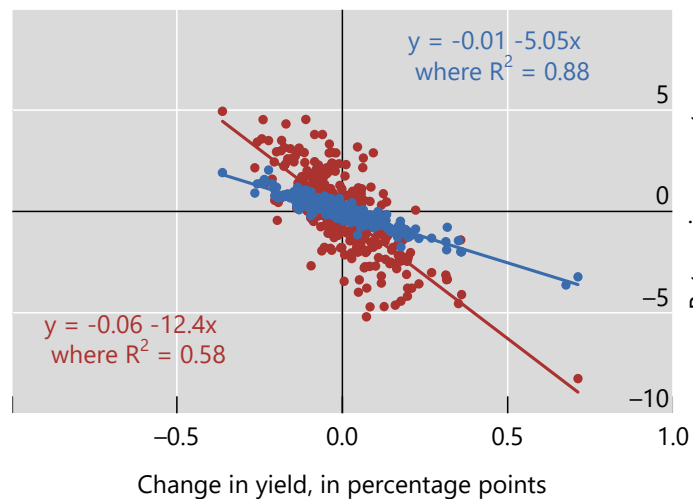
$$\text{Duration} = -\frac{dP/P}{dr}$$

- Compare duration measures with:
  - Percentage return in local currency terms
  - Percentage return in dollar terms



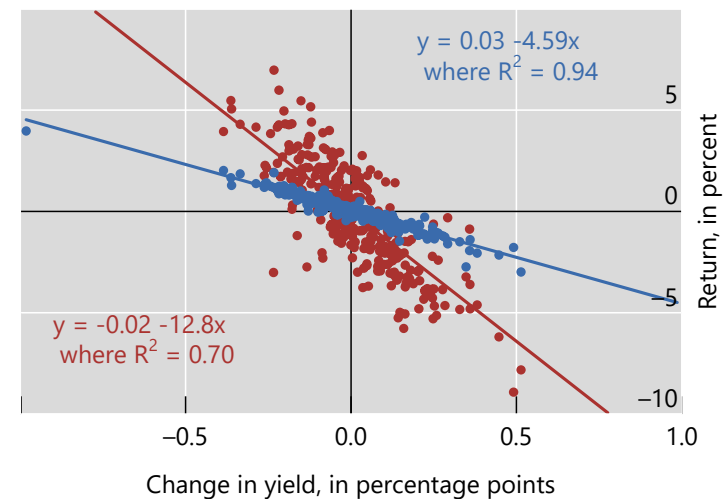
## EMEs local currency sovereign bond returns<sup>1</sup>, January 2013 – October 2018

Mexico



• Local currency return

South Africa



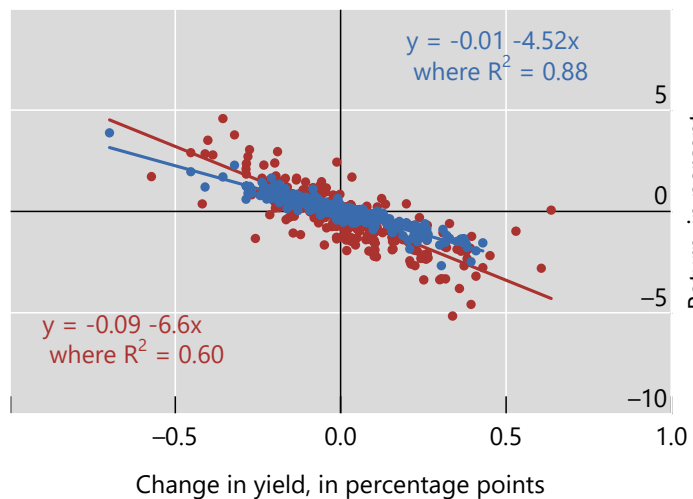
• US dollar return

<sup>1</sup>Total return on bonds denominated in local currency as weekly change in JPMorgan GBI-EM principal return index in local currency and US dollar.

Sources: JPMorgan Chase; BIS calculations.

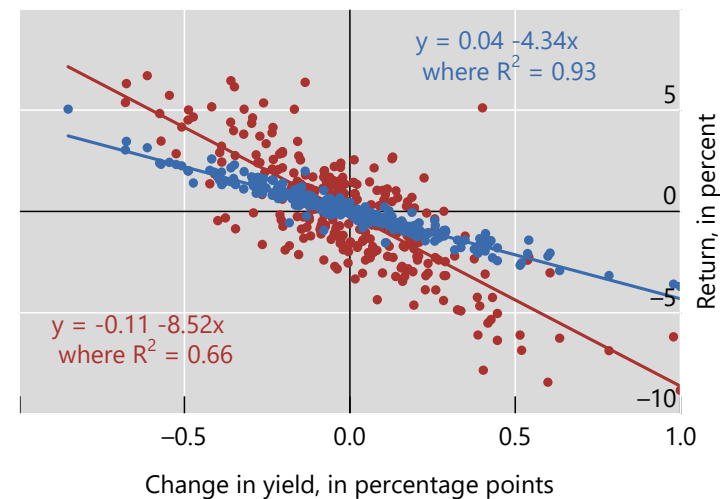
## EMEs local currency sovereign bond returns<sup>1</sup>, January 2013 – October 2018

Indonesia



• US dollar return

Brazil



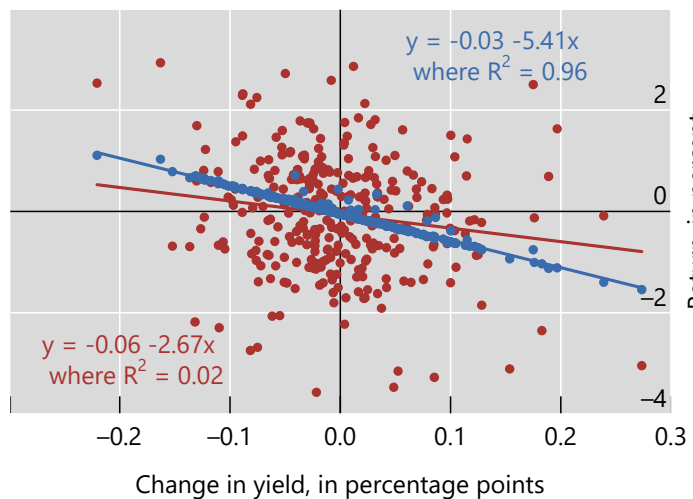
• US dollar return

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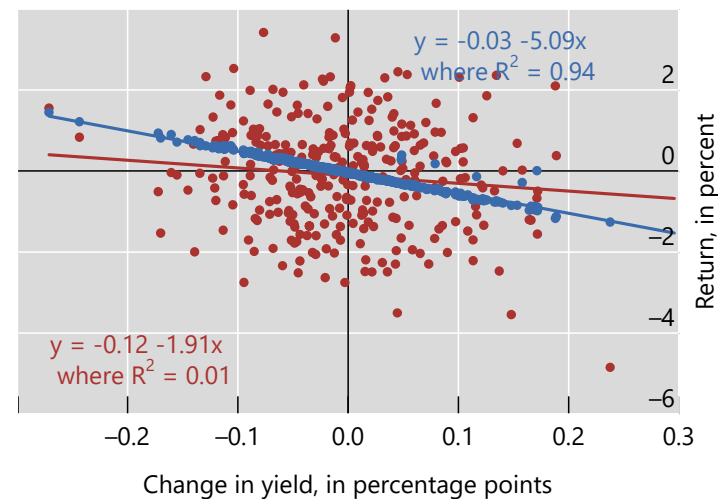
# Advanced economies sovereign bond returns<sup>1</sup>, January 2013 – October 2018

France



• Local currency return

Sweden



• US dollar return

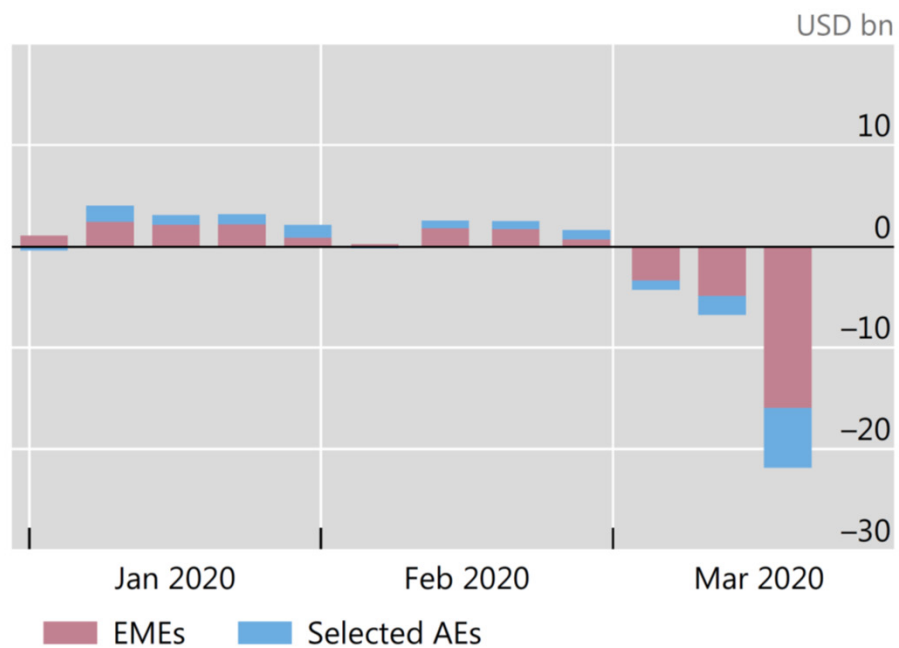
<sup>1</sup> GBI Global Country 5 to 7 year maturity indices for the selected economies.

Sources: JPMorgan Chase; BIS calculations.

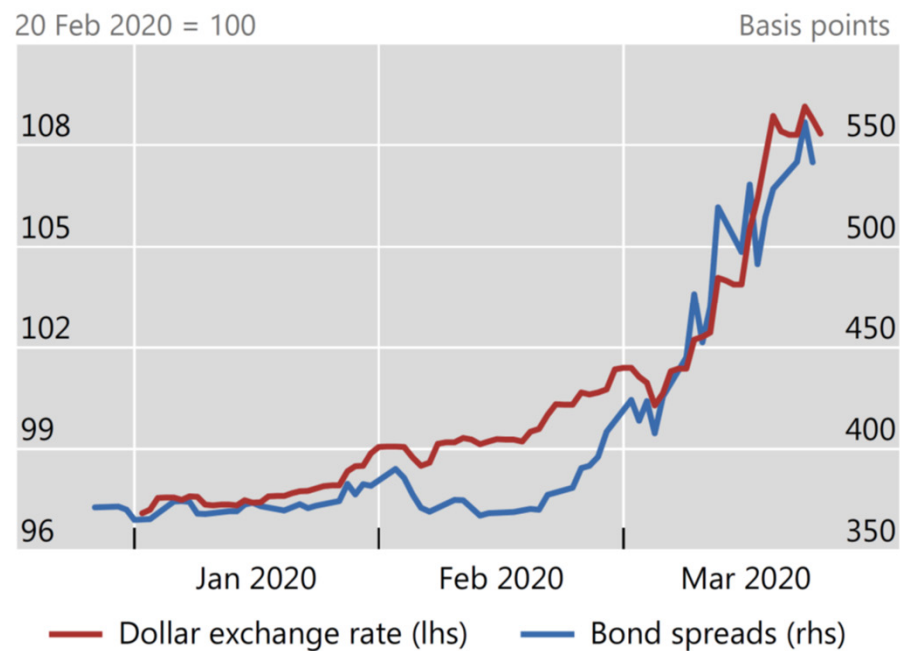


# Covid-19 shock

### Bond fund flows

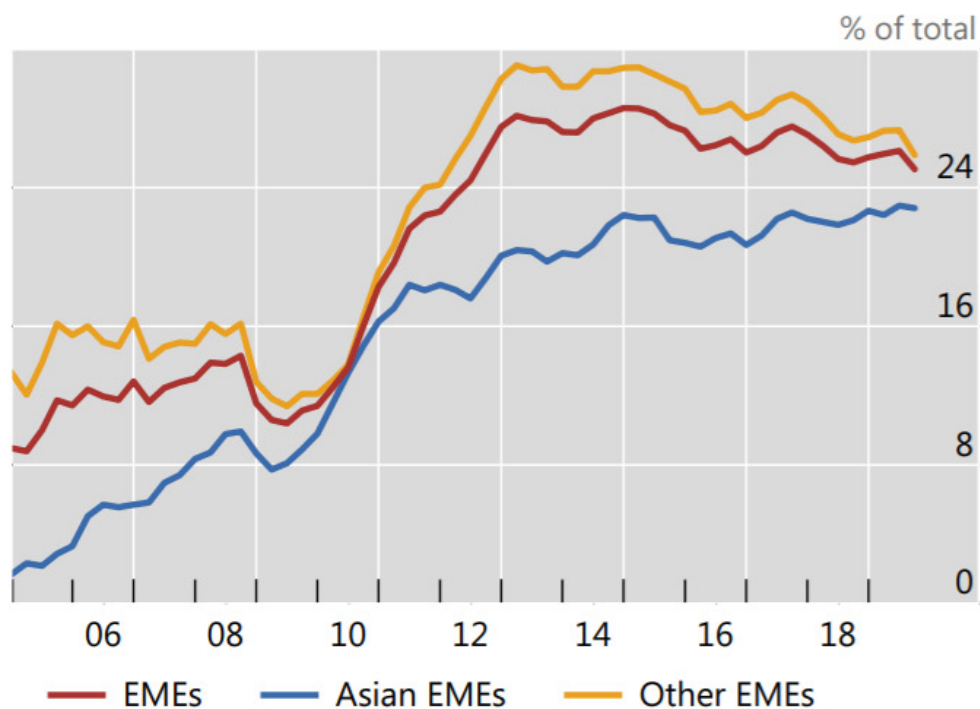


### Dollar exchange rate and bond spreads

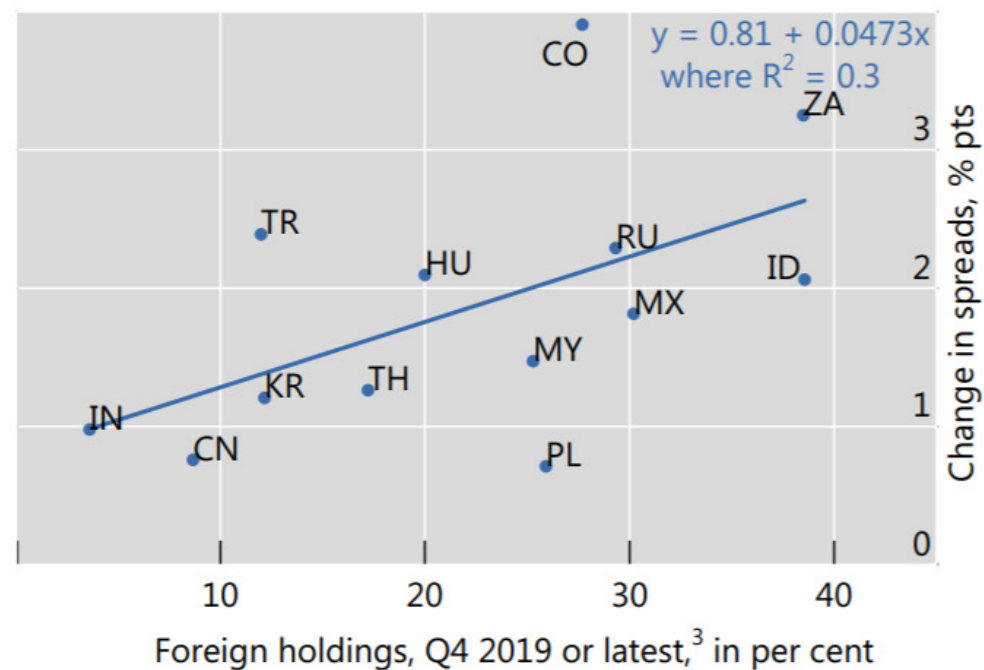


## Foreign ownership in EME local currency bond markets

Foreign ownership in local currency sovereign bond markets



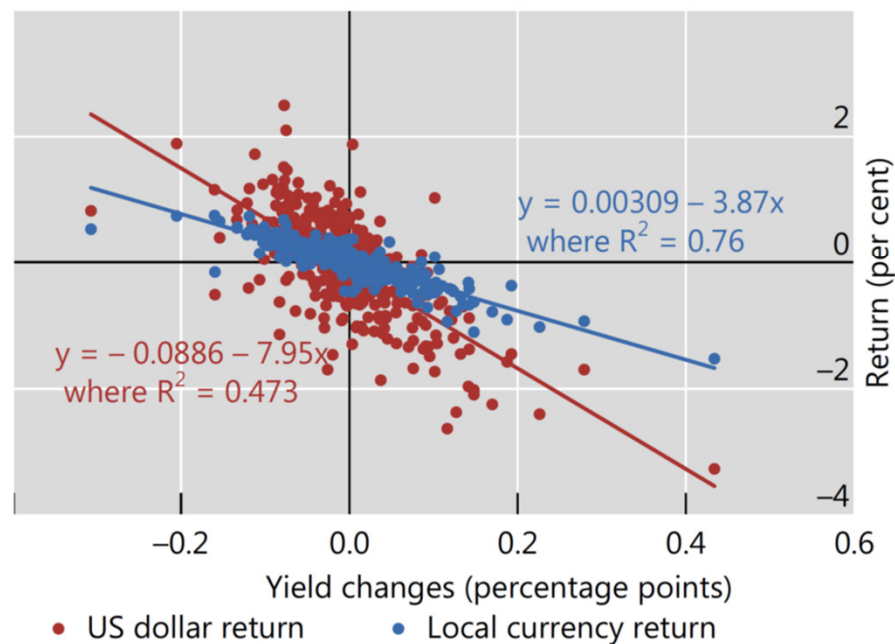
Scatter plot of changes in local currency yield spreads versus the level of foreign holdings



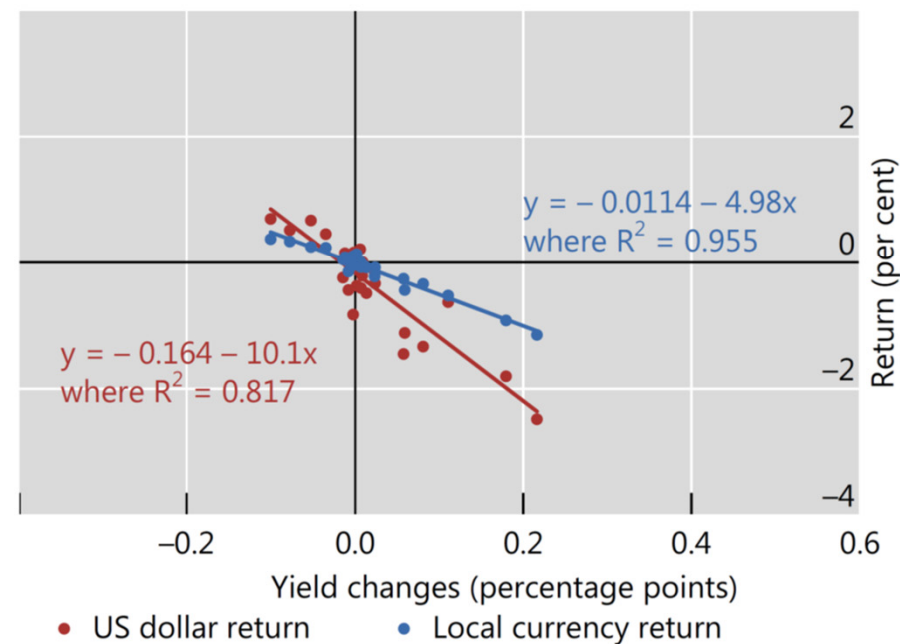
# US dollar and local currency returns vis-à-vis yield changes

## Emerging market economies

Pre-Covid-19 period



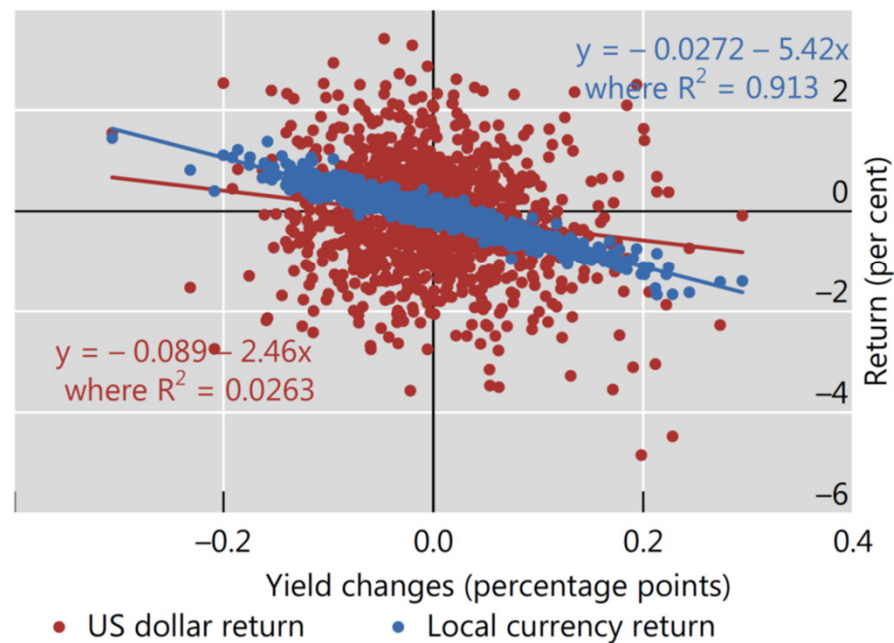
Covid-19 period



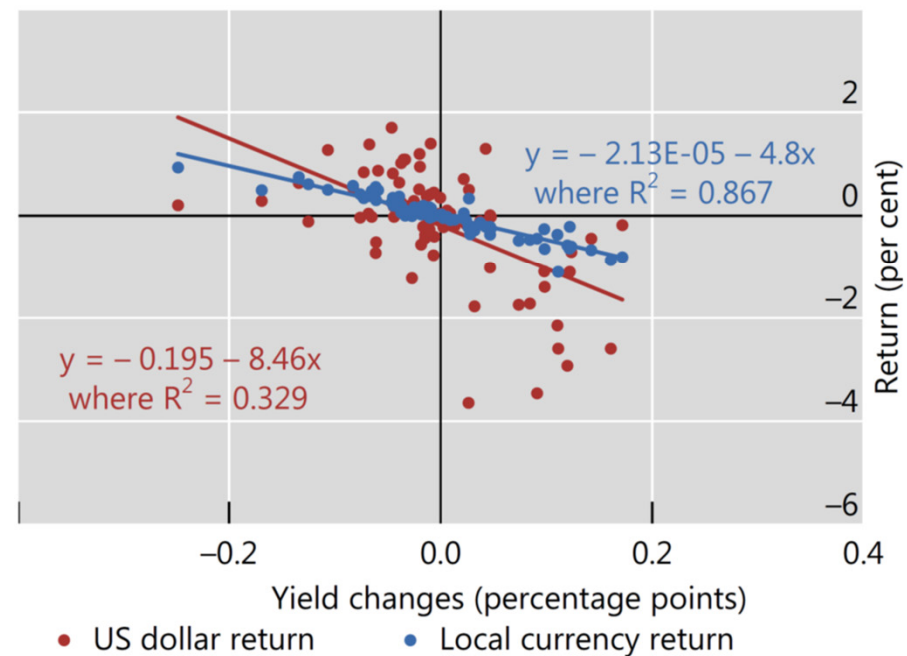
# US dollar and local currency returns vis-à-vis yield changes (cont)

## Advanced economies

Pre-Covid-19 period



Covid-19 period



## Monetary policy frameworks in EMEs: *BIS Annual Economic Report 2019, Chapter II*

