



# BIS Bulletin

No 88

Resilience in emerging markets: what makes it, what could shake it?

Bryan Hardy, Deniz Igan and Enisse Kharroubi

6 June 2024

BIS Bulletins are written by staff members of the Bank for International Settlements, and from time to time by other economists, and are published by the Bank. The papers are on subjects of topical interest and are technical in character. The views expressed in them are those of their authors and not necessarily the views of the BIS. The authors are grateful to Adam Cap and Emese Kuruc for excellent analysis and research assistance, to Blaise Gadanecz and Christian Upper for their comments and to Danielle Ritzema for administrative support.

The editor of the BIS Bulletin series is Hyun Song Shin.

This publication is available on the BIS website ([www.bis.org](http://www.bis.org)).

© *Bank for International Settlements 2024. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISSN: 2708-0420 (online)

ISBN: 978-92-9259-767-2 (online)

## Resilience in emerging markets: what makes it, what could shake it?

### Key takeaways

- *Emerging market economies broke with the past by showing resilience in the face of rapid monetary tightening in advanced economies. Structural factors were at play, with better monetary policy and prudential frameworks being key.*
- *Conjunctural factors also played a role. The commonality of the Covid-19 shock ameliorated policy trade-offs, while the strong showing in advanced economies supported financial market sentiment globally.*
- *Nevertheless, as with the rest of the world economy, emerging markets are not out of the woods. More persistent inflation, in particular in advanced economies, could keep global financial conditions tighter for longer and test emerging market resilience going forward.*

In earlier decades, it was not uncommon for monetary tightening in advanced economies to usher in a period of stress in emerging market economies (EMEs). During the late 1970s and early 1980s which featured tighter monetary policy in the United States and elsewhere, many EMEs experienced financial stress and a collapse in GDP growth (Graph 1.A). A similar wave unfolded following the 1994–95 tightening cycle. By comparison, the experience since 2000 has been much more benign.<sup>1</sup> The “taper tantrum” in May 2013 was only a partial exception: the mere anticipation of such tightening was sufficient to cause severe strains in EME financial markets (Graph 1.B), but these were short-lived and did not hit GDP.

Based on these historical antecedents, the exceptionally sharp tightening of monetary policy in the post-pandemic inflationary surge could have been expected to lead to significant stress and dislocations. Yet, despite some countries – especially the commodity importers – performing relatively poorly, EMEs as a group have so far managed to avoid major accidents (Graph 1.C). This bulletin takes stock of this performance from a longer-term perspective and discusses the factors that might account for it. It concludes with a discussion of possible risks ahead.

### Structural improvements contributing to EME resilience

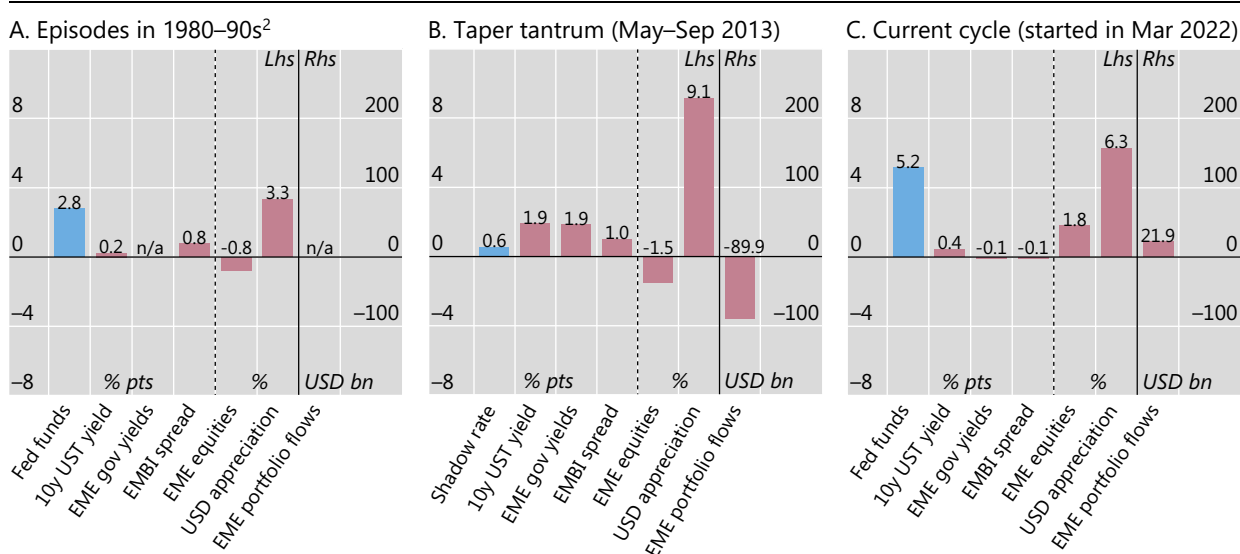
The frequency of financial crises in EMEs has declined over time as well as relative to that in their advanced economy (AE) peers (Graph 2.A). A set of structural factors can shed light on the big difference between the disruptive tightening episodes of the 1980s and 1990s and the experience since the 2000s.

<sup>1</sup> The turbulence in 2015–16 was another episode of EME stress, but it coincided with the end of the commodity super cycle and devaluation of the renminbi, rather than being triggered by higher US interest rates.

## EMEs have shown resilience to the current tightening of US monetary policy

Changes during the tightening cycle, scaled by corresponding policy rate increase<sup>1</sup>

Graph 1



<sup>1</sup> Changes relative to the month prior to the first policy rate hike. End of the cycle is defined as the month prior to the first policy rate cut; Mar 2024 is treated as the end of the current cycle. Changes to the end of the cycle, scaled by the corresponding increase in the policy rate (except for the policy rate itself); for the “taper tantrum” episode, scaled by the increase in the Wu-Xia Shadow Federal Funds Rate between April and June 2013. Exchange rate calculated as the PPP-GDP-weighted average of the bilateral exchange rates of 18 EMEs against the US dollar; an increase indicates an appreciation of the USD. Equities calculated as the equally weighted average of broad local currency equity market indices of 21 EMEs. <sup>2</sup> Simple averages across selected past US tightening cycles: Mar 1983, Mar 1988, Feb 1994 and Jun 1999. Data available for EMBI USD denominated EME government bond spreads since 1991, equities since 1992, EME local currency government yields (JP Morgan GBI-EM broad traded index) since 2002 and EME portfolio flows since 2003.

Sources: EPFR; JP Morgan Chase; LSEG Datastream; national data; BIS.

The first structural factor is better monetary policy frameworks, as reflected in the shift towards inflation targeting and greater exchange rate flexibility (Graph 2.B). Floats have become the norm, with varying degrees of foreign exchange intervention (FXI), supported by foreign exchange (FX) reserves (Graph 2.C).<sup>2</sup> At the same time, monetary policy has become more transparent, enhancing credibility among market participants (Graph 3.A). As a result, inflation expectations have become more stable (Graph 3.B) and the pass-through of the exchange rate to inflation has declined (Graph 3.C).

The second factor is stronger prudential regulation and supervision, at both micro- and macroprudential levels. Prudential measures have been widely deployed over the past two decades (Graph 4.A). These improvements, illustrated in higher bank capital ratios, have helped to strengthen the banking system’s resilience.

The third factor is improvement in fiscal policy frameworks, although progress on this front has been uneven. Advances in fiscal frameworks are evident in, for instance, the growing number of fiscal rules adopted since the 2000s (Graph 4.B). Coupled with other policy and structural adjustments, this has led to greater market tolerance for government indebtedness (Graph 4.C). Nevertheless, the much higher debt levels and wider deficits remain a possible Achilles heel going forward.<sup>3</sup>

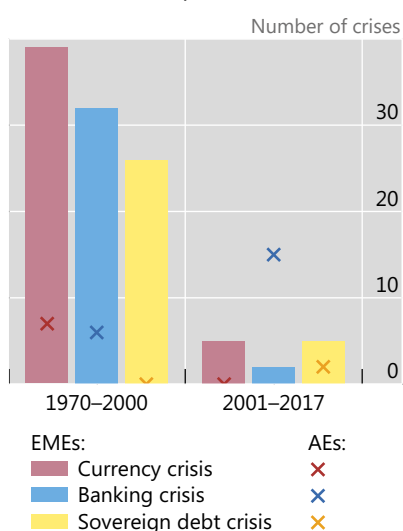
<sup>2</sup> FXI may help mitigate dislocations arising from exchange rate swings, but it is effective only as part of a consistent macroeconomic policy stance that ensures macro-financial stability.

<sup>3</sup> Deficits have grown, most recently because of Covid-19. And the fiscal outlook is bleak, considering the spending pressure from the ageing population and climate change as well as the sluggish potential growth in quite a few cases.

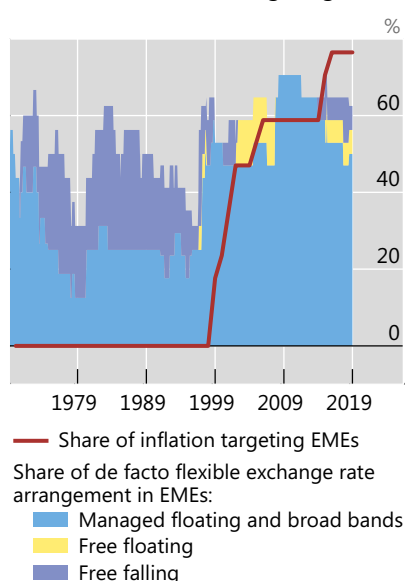
## A trend of resilience arises as monetary policy frameworks improve

Graph 2

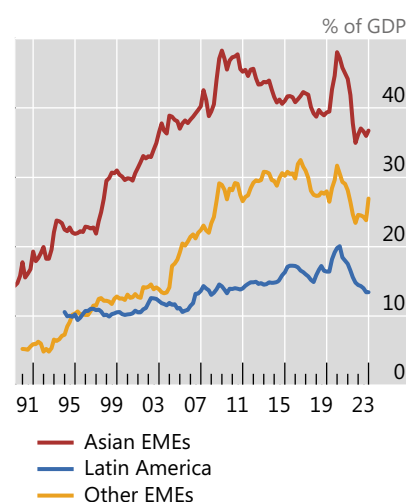
A. Financial crises in EMEs have become less frequent in the 2000s<sup>1</sup>



B. EMEs shift away from hard pegs and towards inflation targeting<sup>2</sup>



C. FX reserves have grown, especially in economies that conduct more FXI<sup>3</sup>



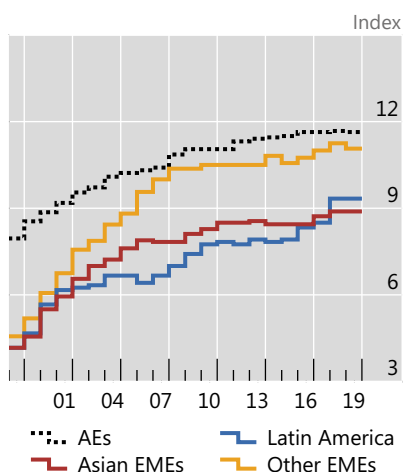
<sup>1</sup> Crises dating from Laeven and Valencia (2018). Totals for 24 EMEs and 19 AEs. <sup>2</sup> Based on data for 17 EMEs. <sup>3</sup> Simple average across nine Asian, six Latin American and eight other EMEs; where data are available.

Sources: Ilzetzki et al (2019); Laeven and Valencia (2018); IMF, *International Financial Statistics*; national data; BIS.

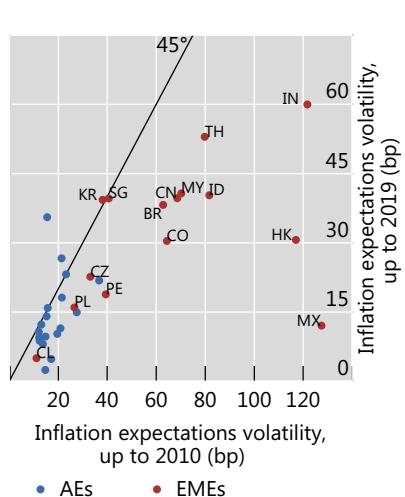
## Monetary policy framework improvements deliver results

Graph 3

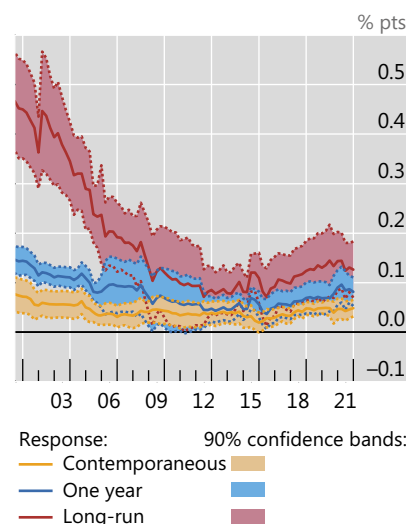
A. Monetary policy transparency has improved<sup>1</sup>



B. Inflation expectations have become more stable over time...<sup>2</sup>

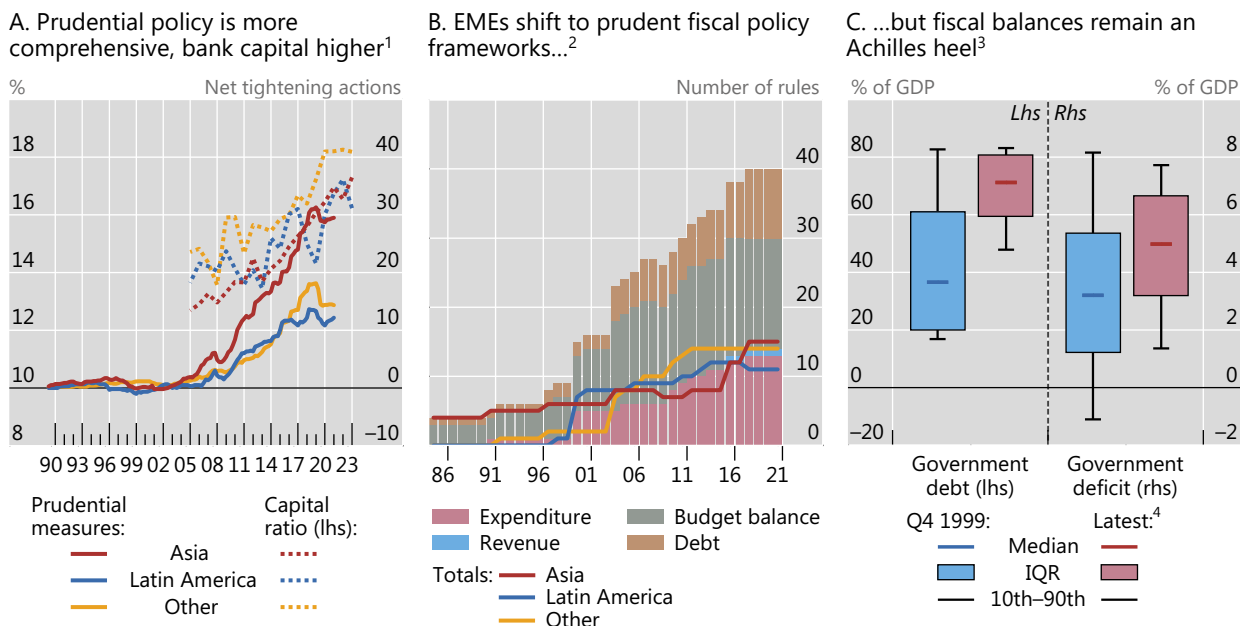


C. ...and exchange rate pass-through to inflation has declined<sup>3</sup>



<sup>1</sup> Simple average across nine Asian, six Latin American and eight other EMEs and 11 AEs. The index measures central banks' disclosure of monetary policy-relevant information based on five categories (political, economic, procedural, policy and operational transparency) and ranges from zero to 15. <sup>2</sup> The scatter plots the standard deviation of long-term inflation expectations that is not explained by realised inflation or short-term inflation expectations, estimated over 15-year windows until 2010 (x-axis) and 2019 (y-axis). For details, see Goel and Tsatsaronis (2022). <sup>3</sup> Inflation response to (effective) exchange rate depreciation estimated using benchmark panel regression (1) in Jašová et al (2016) for 19 EMEs. Results for six-year rolling window.

Sources: Dincer et al (2022); Jašová et al (2016); Goel and Tsatsaronis (2022); national data; BIS.



<sup>1</sup> Measure increments up by one when some prudential policy is made more restrictive and down by one when it is made less restrictive. Captures 17 different types of prudential policies. Simple average across 10 Asian, six Latin American and 12 other EMEs. Simple average of total capital ratios across 84 major banks, by region. <sup>2</sup> Total number of fiscal rules in place in 18 EMEs. <sup>3</sup> The sample includes 13 EMEs. Based on four-quarter moving averages, except for deficit, which is annual. <sup>4</sup> For debt, Q3 or Q4 2023 depending on data availability; for deficit, Q4 2023. IQR is the interquartile range, containing the middle half of the observations.

Sources: IMF, Integrated Macropudential Policy Survey database, Fiscal Rules Dataset and *World Economic Outlook*; OECD, *Economic Outlook*; Fitch; national data; BIS.

Not unrelated to these improvements in policy frameworks, EMEs have substantially reduced currency mismatches incurred by borrowers since the 1990s. This is particularly visible in sovereign bond markets, where a growing share of the debt has been in domestic currency (Onen et al (2023)), indicating that EMEs have largely overcome “original sin”, ie the inability to borrow from abroad in local currency.<sup>4</sup>

However, moving away from original sin, while useful, was no panacea in insulating the domestic economy from global shocks. This is because currency mismatches can then migrate from borrowers’ to lenders’ balance sheets, leading to a so-called “original sin redux” problem (Carstens and Shin (2019)). The period after the Great Financial Crisis (GFC) also coincided with a shift in the form of borrowing from loans to bonds (Hardy and von Peter (2023)). Foreign investors took on exchange rate risk to gain a yield pickup by purchasing local currency EME bonds. This partly changed the dynamics of market stress. At those times, currency depreciation (dollar appreciation) would go hand in hand with higher domestic currency bond yields. The simultaneous losses on the currency and interest rate exposures then raised the likelihood of disorderly outflows. The taper tantrum was a clear example of such dynamics. Over the past decade, however, the footprint of foreign investors in EME sovereign bond markets declined, transitioning to domestic investors in an orderly way. Consequently, the sensitivity of local currency bond spreads to movements in the US dollar has been much lower in the current cycle than it was earlier (for additional discussion, see Hofmann et al (2022)).<sup>5</sup>

<sup>4</sup> The picture for corporates is more mixed. While domestic financial systems have expanded, the low interest rate environment of the previous decade led to large increases in dollar credit from abroad (Hardy and von Peter (2023)).

<sup>5</sup> This is consistent with the improvement in policy frameworks generally as well as with further financial market deepening, including greater hedging possibilities (see Caballero et al (2022) and Doornik et al (2024)).

## Conjunctural factors contributed to EME resilience

In addition to the aforementioned structural factors, several conjunctural developments contributed to EME resilience in the most recent episode.

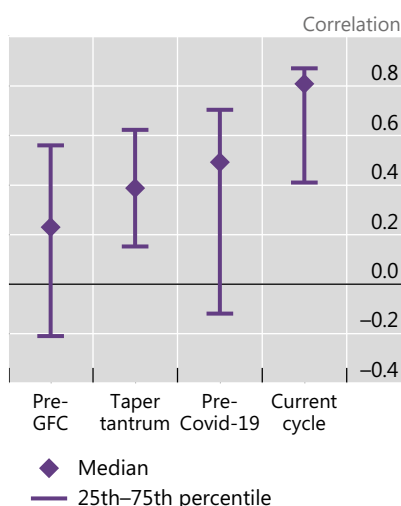
First, the commonality of the Covid-19 shock led to greater inflation synchronicity across AEs and EMEs (Graph 5.A). This spared EMEs from the need to steer policy in a different direction than AEs, easing the output-inflation trade-off. And, consistent with improved policy frameworks, many EMEs – notably those in Latin America – were willing and able to tighten monetary policy well ahead of the United States, pre-empting capital outflows and forestalling unwelcome exchange rate depreciation (Graph 5.B).

A second factor relates to AEs themselves. Financial conditions in core markets have not responded as abruptly or as strongly to the policy tightening (Graph 5.C). Orderly and somewhat subdued transmission of higher policy rates there, alongside the associated risk-on sentiment, have supported risky asset classes, including EME bonds and equities. Economic growth in AEs has remained quite resilient too.

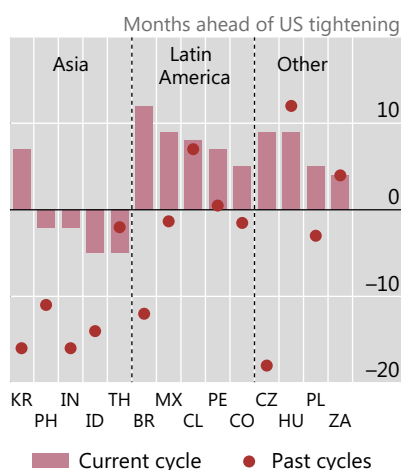
### Several specificities of the current tightening episode stand out

Graph 5

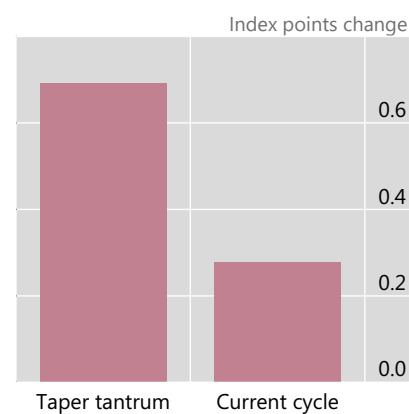
A. Synchronous inflation shocks ease policy trade-offs<sup>1</sup>



B. Many EMEs adjusted policy settings ahead of the United States<sup>2</sup>



C. Global financial conditions respond less to Fed tightening<sup>3</sup>



<sup>1</sup> Cross-country correlation of local year-on-year inflation with US inflation in a 60-month window. Data moments computed across 24 EMEs during each episode (Pre-GFC = Jul 2004–Aug 2007; Taper tantrum = May–Sep 2013; Pre-Covid-19 = Dec 2015–Jul 2019; Current cycle = Mar 2022–Mar 2024). <sup>2</sup> Leads and lags (in months) of local monetary policy tightening relative to that in the United States; positive numbers imply local tightening ahead of that in the United States. Simple averages across past cycles. Past cycles: Jun 1999, Jun 2004 and Dec 2015. <sup>3</sup> Changes in the Goldman Sachs financial conditions index in the period between first US rate hike and the first subsequent rate cut, scaled by the corresponding increase in the policy rate. Mar 2024 is treated as the end of the current cycle. “Taper tantrum” episode defined as May–Sep 2013, scaled by the Apr–Jun 2013 increase in the Wu-Xia Shadow Federal Funds Rate.

Sources: Bloomberg; LSEG Datastream; national data; BIS.

That said, it is worth noting that not every EME did equally well. The rather unusual simultaneous rise of the US dollar and commodity prices is an additional conjunctural factor that speaks to the cross-country differences.<sup>6</sup> Higher commodity prices boosted outcomes for commodity exporters while acting as a drag on commodity importers (see Hofmann et al (2023) for further discussion).<sup>7</sup>

<sup>6</sup> The resilience in EMEs stands out also considering that a 10% appreciation corresponds to a 200 basis point tightening in the policy rate in terms of estimated impact on output (Obstfeld and Zhou (2022)). Consistent with this, increases in US yields are more likely to be associated with adverse outcomes in EMEs when they coincide with dollar appreciation (Caballero and Upper (2023)).

<sup>7</sup> More generally, countries with more pronounced improvement in monetary policy frameworks and reduced levels of dollar-denominated debt proved less sensitive to tighter global financial conditions (Kalemli-Özcan and Ünsal (2024)).

## Risks ahead

Asynchronous policies, in response to differences in inflation and growth outlooks or fragmentation, could inject unwelcome dynamics that are hard to foresee with certainty.

Suppose inflation proves persistent and growth remains resilient but more so in AEs than in EMEs. High-for-longer interest rates in core AEs would then weigh on those EMEs where interest rates are comparatively lower for cyclical reasons. FX depreciation would raise inflation, and fiscal issues may come to the fore. Resilient global growth could mitigate the trade-offs: strong commodity prices could benefit commodity-exporting EMEs, or robust external demand could help those firmly integrated in global trade.

Alternatively, suppose inflation fades but growth weakens. This is reminiscent of the post-GFC/pre-Covid-19 period – a search for yield redux. Growth and interest rate differentials with AEs could imply that EMEs would face the opposite challenge of keeping capital inflows at bay and limiting FX appreciation.

A third possibility is persistent inflation with weak growth. This would be the most challenging for EMEs. It would induce higher interest rates globally without the offset from robust activity.

## References

Caballero, J, A Maurin, P Wooldridge and D Xia (2022): “The internationalisation of EME currency trading”, *BIS Quarterly Review*, December, pp 49–65.

Caballero, J and C Upper (2023): “What happens to EMEs when US yields go up?”, *BIS Working Papers*, no 1081, March.

Carstens, A and H S Shin (2019): “Emerging markets aren’t out of the woods yet”, *Foreign Affairs*, 15 March.

Dincer, N, B Eichengreen and P Geraats (2022): “Trends in monetary policy transparency: further updates”, *International Journal of Central Banking*, vol 18, no 1, pp 331–348.

Doornik, B, J Frost, R Guerra, A Tombini and C Upper (2024): “Towards liquid and resilient government debt markets in EMEs”, *BIS Quarterly Review*, March, pp 59–72.

Goel, T and K Tsatsaronis (2022): “Anchoring inflation expectations: has past progress paid off?”, *BIS Bulletin*, no 51, March.

Hardy, B and G von Peter (2023): “Global liquidity: a new phase?”, *BIS Quarterly Review*, December, pp 21–31.

Hofmann, B, D Igan and D Rees (2023): “The changing nexus between commodity prices and the dollar: causes and implications”, *BIS Bulletin*, no 74, April.

Hofmann, B, A Mehrotra and D Sandri (2022): “Global exchange rate adjustments: drivers, impacts and policy implications”, *BIS Bulletin*, no 62, November.

Ilzetzki, E, C Reinhart and K Rogoff (2019): “Exchange rate arrangements entering the twenty-first century: which anchor will hold?”, *Quarterly Journal of Economics*, vol 134, no 2, pp 599–646.

Jašová, M, R Moessner and E Takáts (2016): “Exchange rate pass-through: what has changed since the crisis?” *BIS Working Papers*, no 584, September.

Kalemli-Özcan, Ş and F D Ünsal (2024): “Global transmission of Fed hikes: the role of policy credibility and balance sheets”, *NBER Working Papers*, no 32329.

Laeven, L and F Valencia (2018): “Systemic banking crises revisited”, *IMF Working Papers*, no 2018/206.

Obstfeld, M and H Zhou (2022): “The global dollar cycle”, *Brookings Papers on Economic Activity*, Fall, pp 361–427.

Onen, M, H S Shin and G von Peter (2023): “Overcoming original sin: insights from a new dataset”, *BIS Working Papers*, no 1075, February.