Monetary Policy, Inflation, and Recovery in the Aftermath of COVID-19

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Outline

- The global setting in an unsettling environment: From disease to war
  - An uneven recovery
  - The return of global inflation
- The risks of tighter and more volatile global financial conditions--with a focus on emerging markets and developing countries (EMDEs)
  - Initial conditions of this tightening cycle
  - Capital flows and risk aversion
  - High and rising public and private debt
- A challenging time for central banks
  - Inflation stabilization/recovery tradeoffs and the exit from negative real interest rates
  - Pressures on central banks and domestic banks from rising domestic debt *(sovereign-banks doom loop)*
  - "Hidden" nonperforming loans and financial fragility
- Concluding thoughts

Rebound or Recovery?
Real per capita GDP: 1980-2021, 194 countries

Rebound or recovery from the COVID-19 shock?

	Advanced economies		Middle-income		Low-income	
	Number of countries	Share in percent	Number of countries	Share in percent	Number of countries	Share in percent
2021 ≥ 2019	15	40.5	36	27.5	6	23.1
2021 < 2019	22	59.5	95	72.5	20	76.9
Total	37	100	131	100	26	100

but for many countries the income slowdown preceded COVID-19...

	Advanced economies		Middle-income		Low-income	
2021 = peak	13	35.1	27	20.6	3	11.5
2021 < peak	24	64.9	104	79.4	23	88.5
Total	37	100	131	100	26	100

Sources: IMF, World Economic Outlook and author's calculations.

The COVID-19 crisis is markedly regressive

The return of inflation is global
(or nearly so, as Asia has been more immune thus far)

Share of Advanced Economies (AE) and Emerging Markets and Developing Countries (EMDE) with Inflation > 5%
2010:1-2022:1

EMDEs

AEs
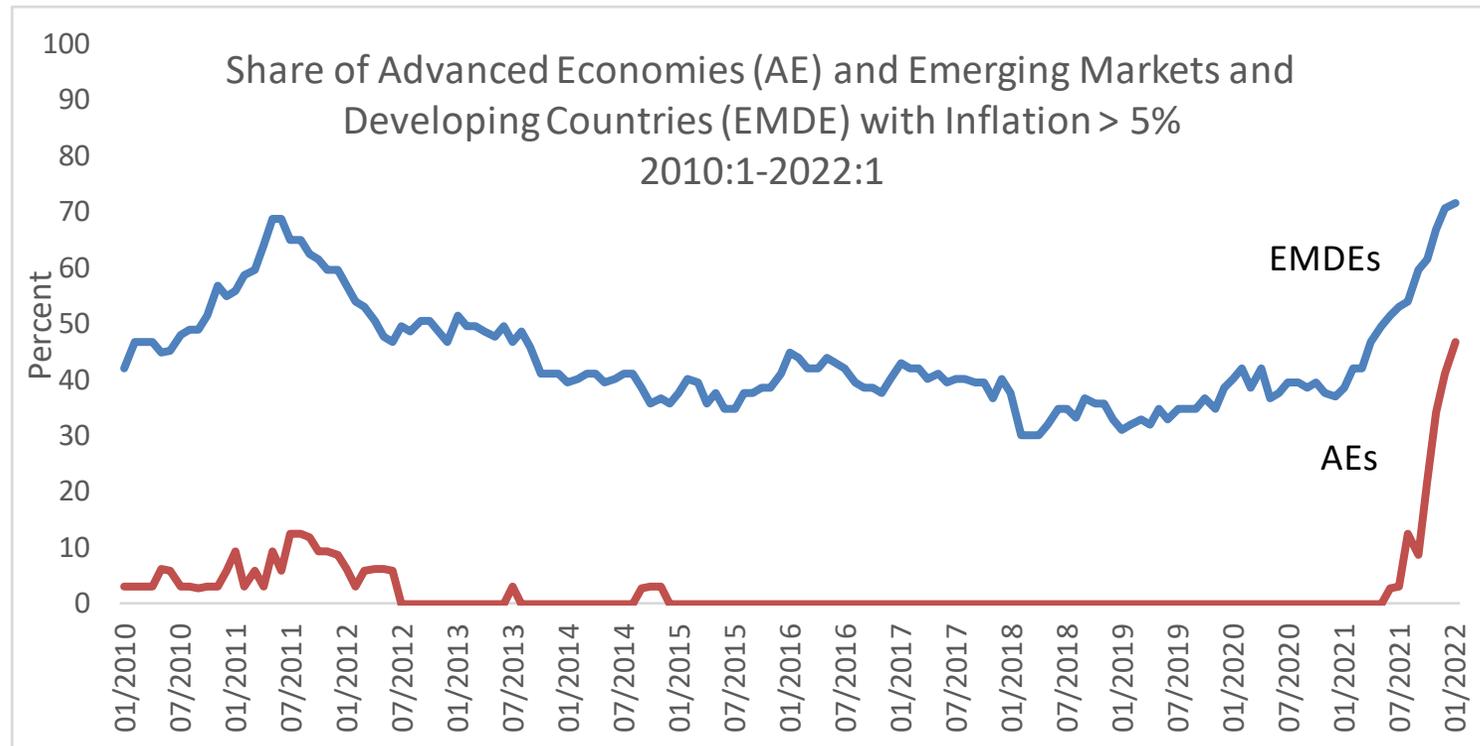
Note: The sample consists of 34 advanced economies and 109 emerging markets and developing countries.

Sources: Graf von Luckner and Reinhart (2022), International Financial Statistics, IMF, and Trading Economics.

Spotlight on food price inflation

Food price inflation. Food accounts for a much larger share of the household consumption basket in EMDEs. As such, lower income countries (and lower income households) are hit particularly hard. **Food inflation is a particularly regressive tax both across countries (below) and within countries. Inflation, in general, is a regressive tax which is levied without legislation or votes.**

Number and share of countries with 12-month food price increase > 5% sometime during 2021-early 2022 **(this is pre-Russia/Ukraine war)**

Country group	Total number	Number > 5%	Share >5% (percent)
Advanced	34	9	26.5
EMDEs	109	86	78.9

Source: World Bank, 2022, author's calculations.

The largest share of countries are in Quadrant I-- stagflation risk
(shown **in yellow**)

Quadrant I:
Higher (or high) inflation; lower incomes than prior peak
Stagflation risks
Quadrant II:
Higher (or high) inflation; incomes at peak in 2021
Overheating risks
Quadrant III:
Lower inflation;
Income at peak in 2021
"Low" risk bucket
Quadrant IV:
Lower inflation; lower incomes than prior peak
Recession/
depression risks

Russia was in Quadrant II (October WEO) before the war; it is safe to assume it is now squarely in Quadrant I.
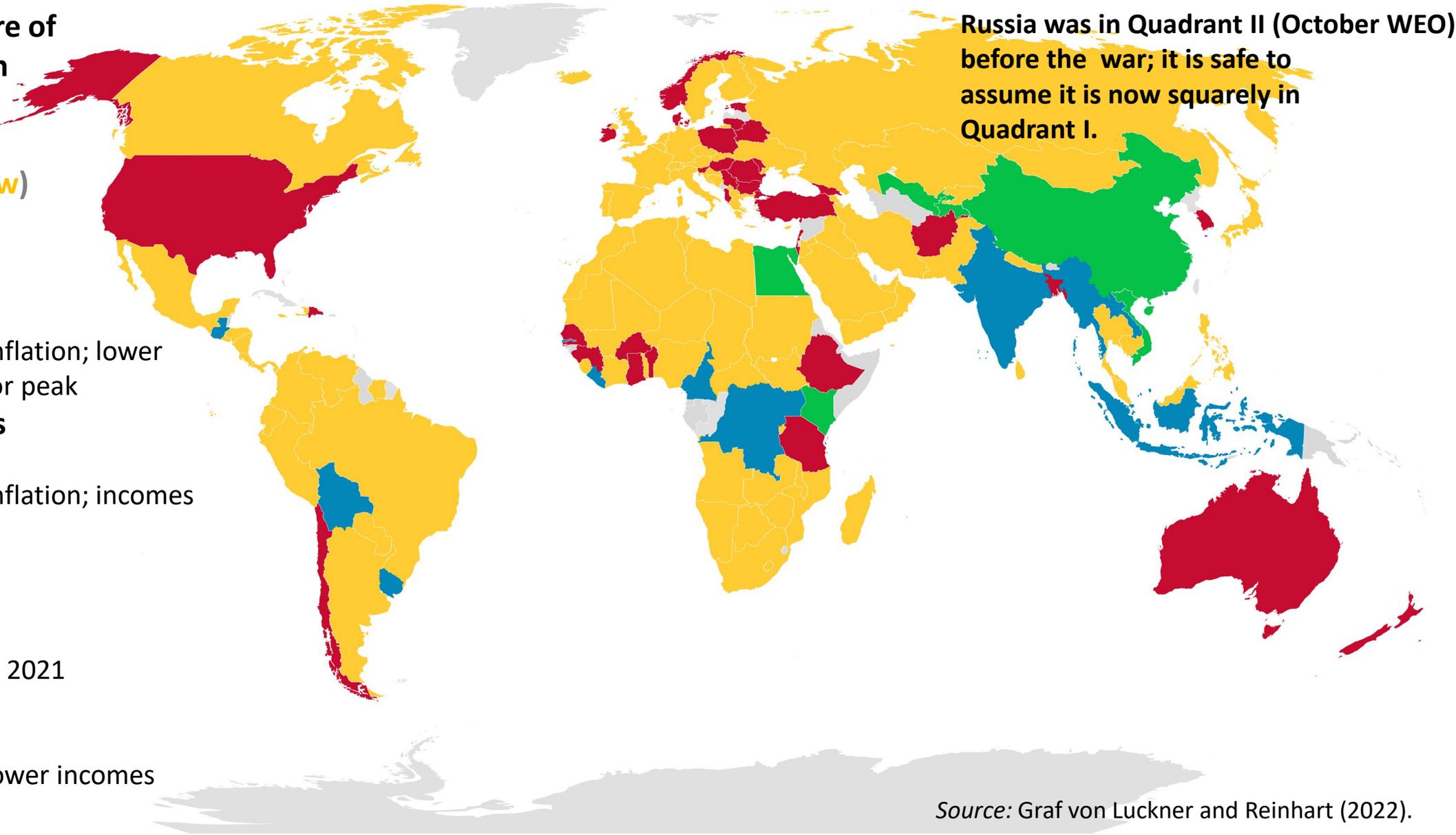
Source: Graf von Luckner and Reinhart (2022).

■ Quadrant 1: HL ■ Quadrant 2: HH ■ Quadrant 3: LH ■ Quadrant 4: LL ■

Implications of tighter and more volatile global financial conditions—Fed tightening and other factors (with a focus EMDEs)

- Economic slowdown, recession risks, as in past tightening cycles.

- Equity markets in the US have lofty valuations.

- China was an engine of growth for the global economy following the Global Financial Crisis and the **largest** (by far) official lender to EMDEs (including Russia post-2014). They now have their own financial/balance sheet fragilities to cope with. Their overseas lending has stalled.

- A more timely and robust policy response from the major central banks is not good news for EMDEs in the short run.
  - Most of these countries will see their debt servicing costs rise
  - For the already vulnerable (especially low-income countries), it may increase the odds of a debt crisis.

- Contagion risks may also increase in EMDEs, as in the 1990s (the last major episode involved the Russian default of 1998 and LTCM).

Salient features of monetary since the Global Financial Crisis (GFC) of 2008-2009

- The two instruments of monetary policy (the central bank balance sheet and the policy interest rate) have followed a **two-step ratchet** since the GFC (Reinhart, 2022)**.**

- Under the umbrella of Quantitative Easing (QE), massive (a record, by peacetime standards during the GFC) purchases of government debt (or government-guaranteed) by the Fed and other advanced economy central banks. In the older literature, this is known as **monetization**. (see next figure)

- Central Bank balance sheets, began to shrink back to their pre-GFC levels. Then COVID-19 erupted, and central bank purchases of government debt skyrocketed from their already large base to levels only seen during major wars.

- Policy interest rates, nominal and real, ratcheted to new lows in two steps.

The two-step ratchet and the expanding role of central banks in advanced economies, 2000-2020

Central bank holdings of government debt as a % of outstanding debt stock
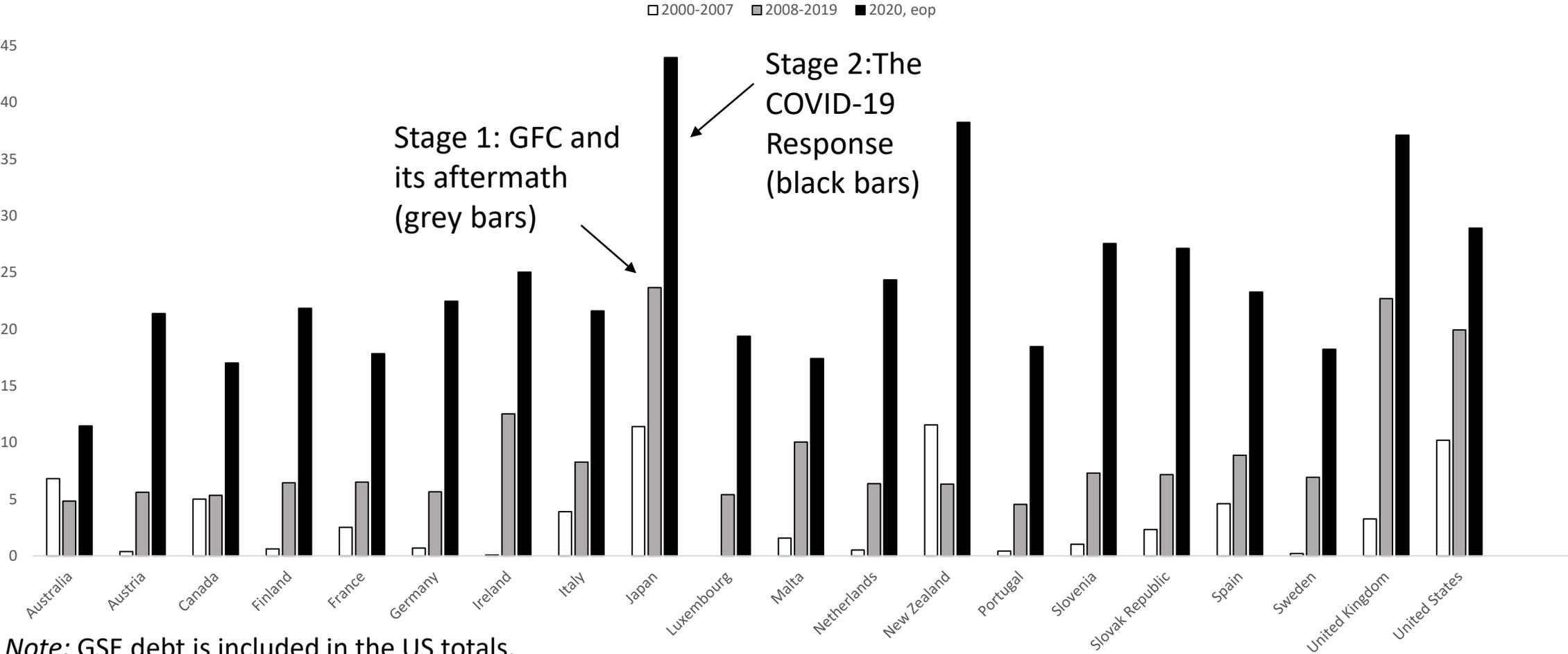
Note: GSE debt is included in the US totals.

Sources: Arslanalp and Tsuda (2014a), Board of Governors of the Federal Reserve, and Reinhart (2022).

Salient features of monetary since the Global Financial Crisis (GFC) of 2008-2009

- Another prevalent feature during 2008-2021 is sustained negative short-term real interest rates (nominal interest rate minus inflation) in the United States and other advanced economies. In much of Europe and Japan, nominal interest rates have also been negative during this period.

- In effect, 2008-2021 is the longest spell of negative real interest rates in a global financial center since the start of our data in 1790 (see next table).
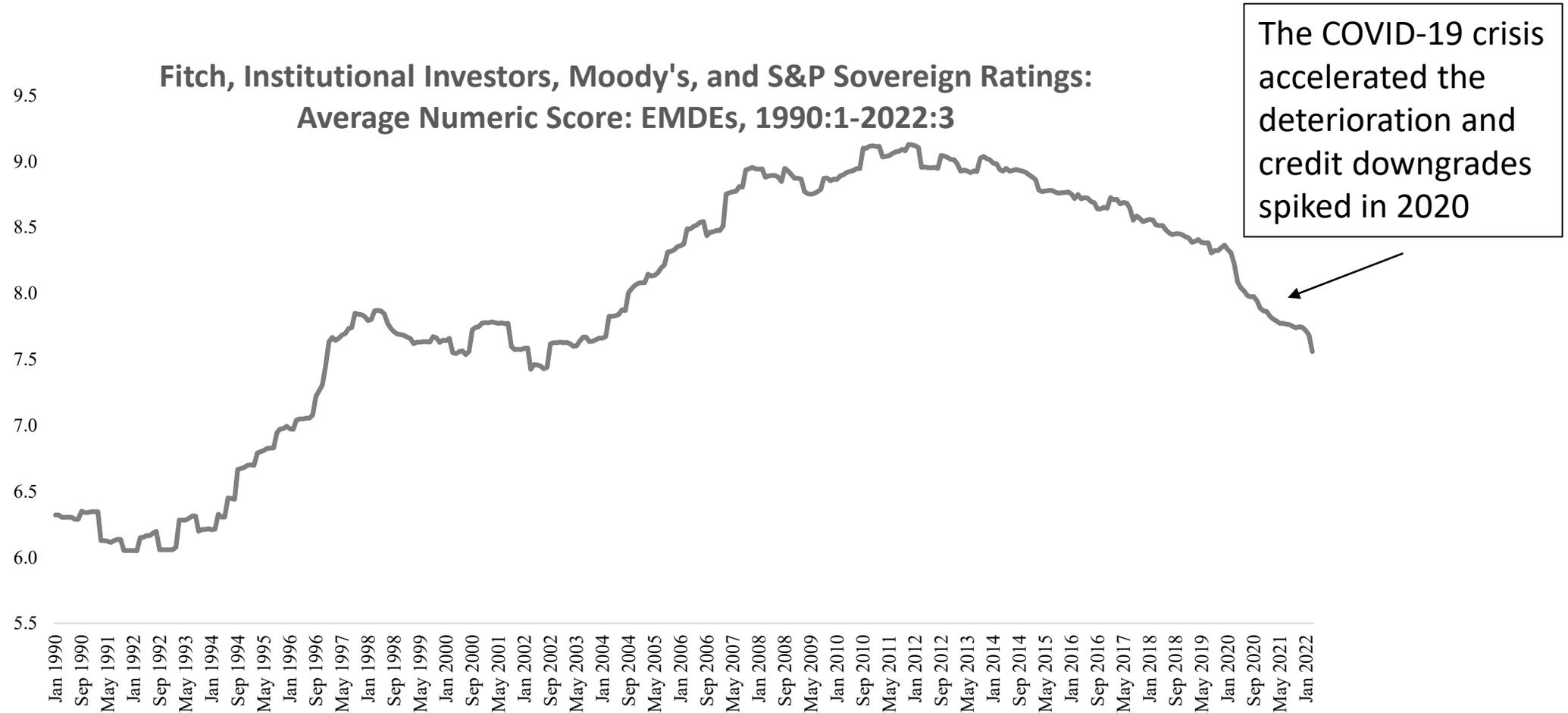
Historical negative short-term real interest rate spells in global financial centers: UK, 1870-1918 and US, 1919-2021
(Real ex-post rates are at historical lows on a sustained basis)

Negative real rate spell	Average annual US inflation	Major shocks
1916-1920	14.7	WWI
1941-1948	7.1	WWII
1974-1980	9.3	OPEC oil shock
2008-2021	1.9	GFC and COVID-19

Sources: Bank of England, Board of Governors of the Federal Reserve, FRED, and Nickols, Reinhart, Reinhart, and Trebesch (2016 and 2022).
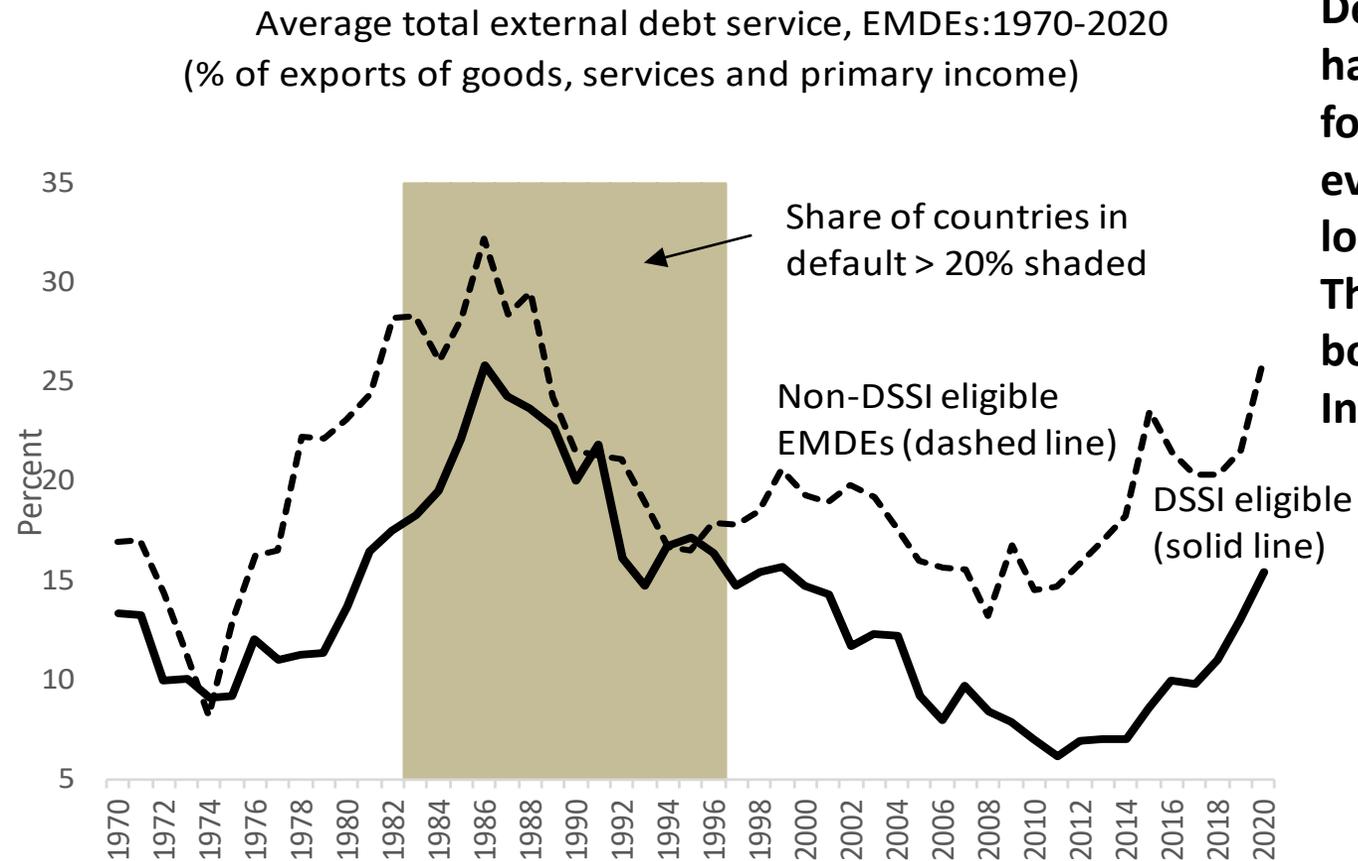
Exit from the previous negative interest rate spell called for a draconian policy from the Federal Reserve.
What will this exit look like?

While global financial conditions have remained favorable for EMDEs, the crash in commodity prices and slowdown in China since 2015 took a toll on EMDE's capital flows and domestic "pull" factors, as captured in sovereign credit ratings.

Fitch, Institutional Investors, Moody's, and S&P Sovereign Ratings:
Average Numeric Score: EMDEs, 1990:1-2022:3

The COVID-19 crisis accelerated the deterioration and credit downgrades spiked in 2020

Sources: Fitch, Institutional Investors, Moody's, Standard and Poor's, and Nickols, Reinhart, Reinhart, and Trebesch (2022).

Average total external debt service, EMDEs:1970-2020
(% of exports of goods, services and primary income)

Average total external debt service, EMDEs:1970-2020
(% of exports of goods, services and primary income)

Share of countries in
default > 20% shaded

Non-DSSI eligible
EMDEs (dashed line)

DSSI eligible
(solid line)

Percent

Debt servicing burdens have been rising markedly for about a decade now—even with exceptionally low global interest rates. This trend is evident in both low- and middle-Income countries.
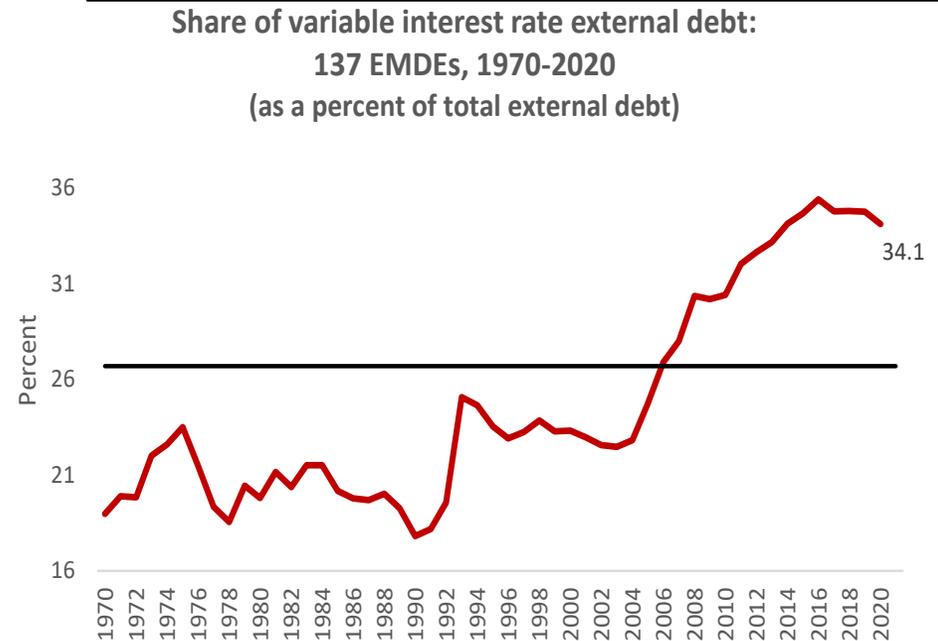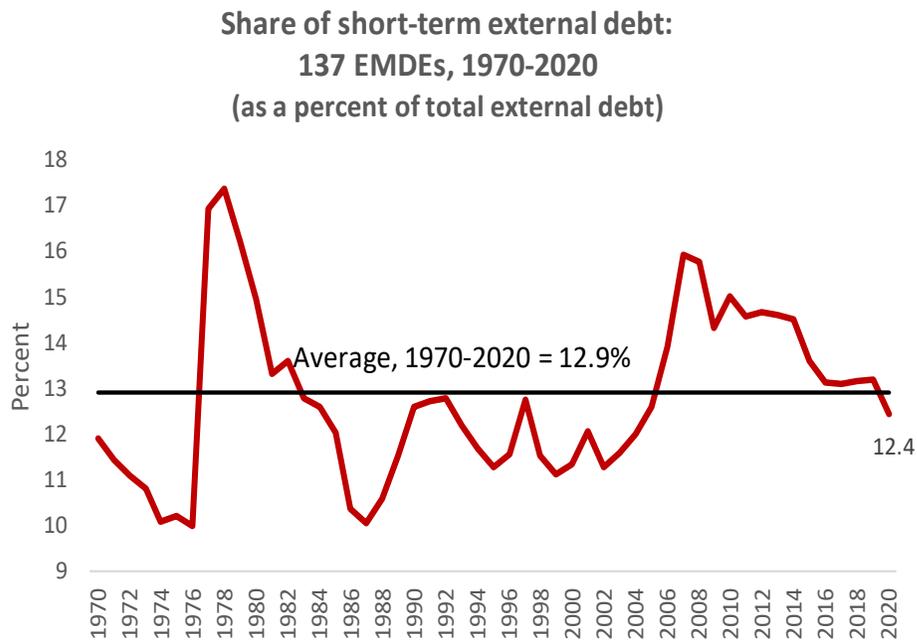
Sources: International Debt Statistics, World Bank and Farah, Graf Von Luckner, and Reinhart (2022).
Notes: Default shares based on all countries (193 as of 2020).
Debt servicing is an average for 123 EMDEs.

Reinhart

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Features of external debt affect how quickly interest rate shocks are transmitted: Average maturity, share of short-term debt, and share of variable interest rate debt

The good news: Maturities are long and share of short-term debt is below the historical average.

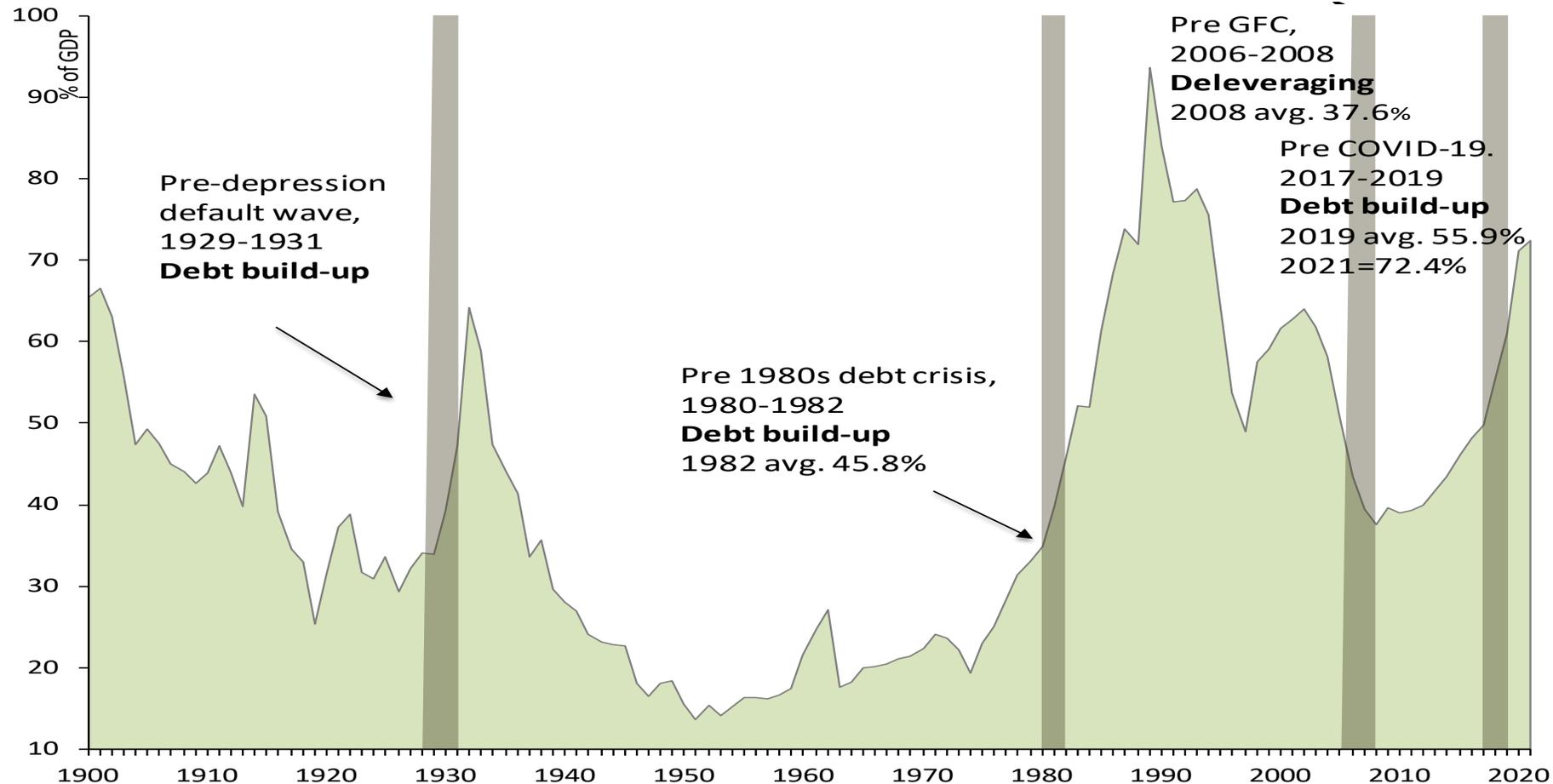The not-so-good-news: The share of variable rate debt is close to all time peak—implying a faster passthrough.

Share of short-term external debt:
137 EMDEs, 1970-2020
(as a percent of total external debt)

Average, 1970-2020 = 12.9%

12.4

Source: International Debt Statistics, The World Bank and author's calculations.

Share of variable interest rate external debt:
137 EMDEs, 1970-2020
(as a percent of total external debt)

34.1

Rising public (domestic and external) debt levels:
While EMDE debt levels are well below AEs, many of these countries are *Debt Intolerant* and have encountered debt crises at lower levels than those in prevailing in 2021.
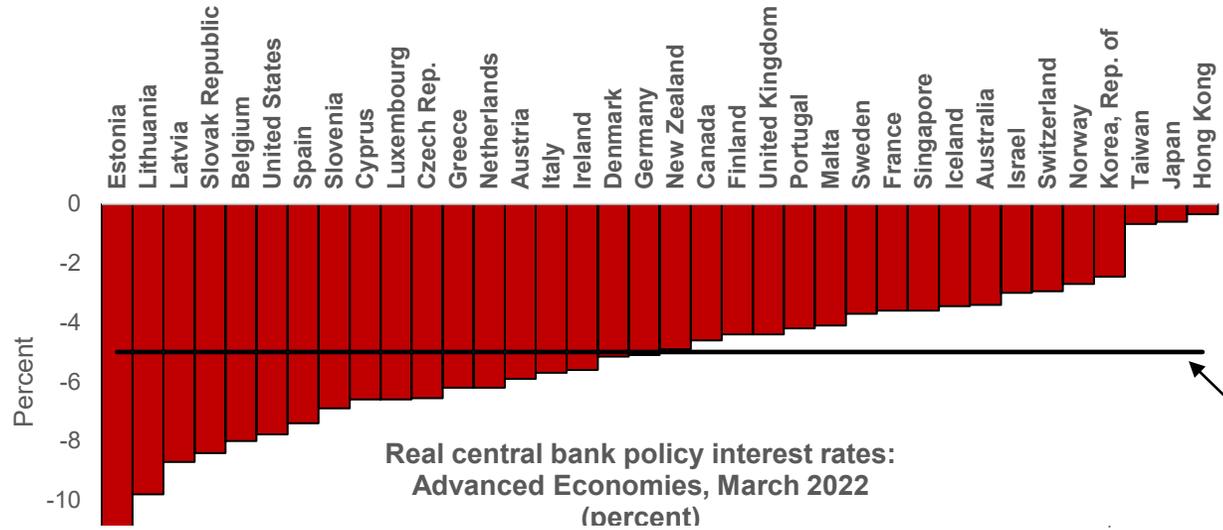### Unweighted average, 46 EMDEs 1900-2021

Pre-depression
default wave,
1929-1931
Debt build-up

Pre 1980s debt crisis,
1980-1982
Debt build-up
1982 avg. 45.8%

Pre GFC,
2006-2008
Deleveraging
2008 avg. 37.6%

Pre COVID-19.
2017-2019
Debt build-up
2019 avg. 55.9%
2021=72.4%

Sources: IMF, *World Economic Outlook* and Reinhart and Rogoff (2009, 2011) and sources cited therein.
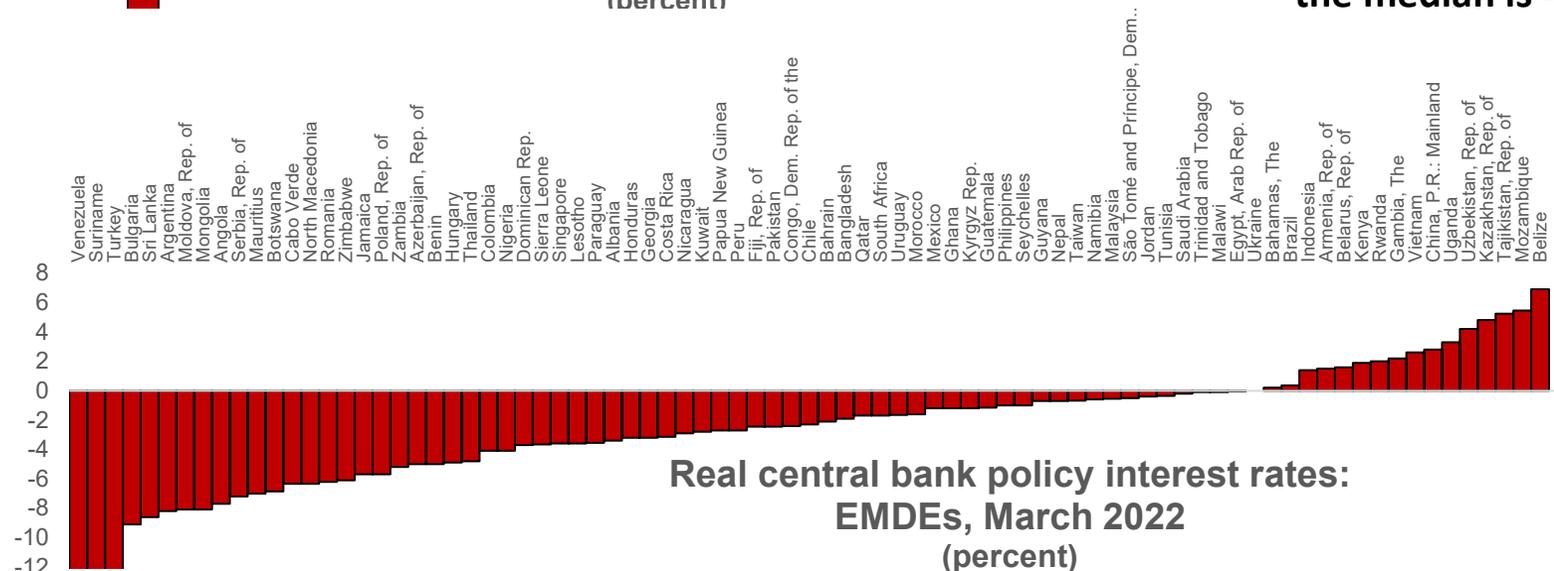
Real ex-post (inflation-adjusted) central bank policy interest rates are in exceptionally negative territory across the world

Higher rates tackle inflation, attract capital inflows/ curb outflows, and limit currency depreciation (the last two are less pressing issues in most AEs.)

Higher rates may also delay recovery (feed a credit crunch), increase domestic debt servicing costs, and add to financial fragility.

Median real rate for AE central banks is -5% and ALL AEs are in negative territory; about 80% of EMDEs have negative real rates—the median is -2.3%

Real central bank policy interest rates: Advanced Economies, March 2022 (percent)

Real central bank policy interest rates: EMDEs, March 2022 (percent)

Reinhart

Closer to home: Real interest rates are well below what they were during the period of "price stability" in key EMDEs. The appropriate speed and magnitude of the policy adjustment is uncertain—the direction is not (r* models are not an especially helpful guide at the moment)

Country	Real central bank policy rates average			12-month inflation (percent)			Exchange rate change 2019:12-2022:2 (percent)
	2005-2019	2022:3	Difference	2019:12	2022:2	Difference	
Brazil	5.09	1.35	-3.74	4.30	10.40	6.10	28.00
Chile	0.58	-2.30	-2.88	3.00	7.80	4.80	7.30
Colombia	1.29	-4.10	-5.39	3.80	8.10	4.30	18.60
Indonesia	1.58	1.40	-0.18	2.70	2.10	-0.60	3.40
Mexico	1.76	-1.50	-3.26	2.80	7.20	4.40	8.70
Peru	0.91	-2.20	-3.11	1.90	6.20	4.30	14.70
Philippines	0.81	-1.00	-1.81	2.90	3.00	0.10	1.10
South Africa	1.30	-1.70	-3.00	4.40	5.70	1.30	9.60
Thailand	0.32	-4.80	-5.12	1.10	5.30	4.20	8.30
US	-0.60	-7.53	-6.93	2.30	7.90	5.60	0.00

Sources: Central Bank Rates, www.cbrates.com, central banks (various), International Financial Statistics, IMF, Trading Economics, Graf von Luckner and Reinhart (2022).

One of the challenges posed by rising domestic public debt is that governments may pressure the central banks to purchase the debt, especially if external financing is difficult or not feasible. Historically, EMDEs, where central banks held higher levels of government debt, also tended to have higher inflation rates. It remains to be seen whether it will be different in AEs.

Central bank holdings of government debt as a % of outstanding debt stock

□ 2000-2019   ■ 2020, eop

Average annual inflation for this group over 2000-2020 Is 10.2%
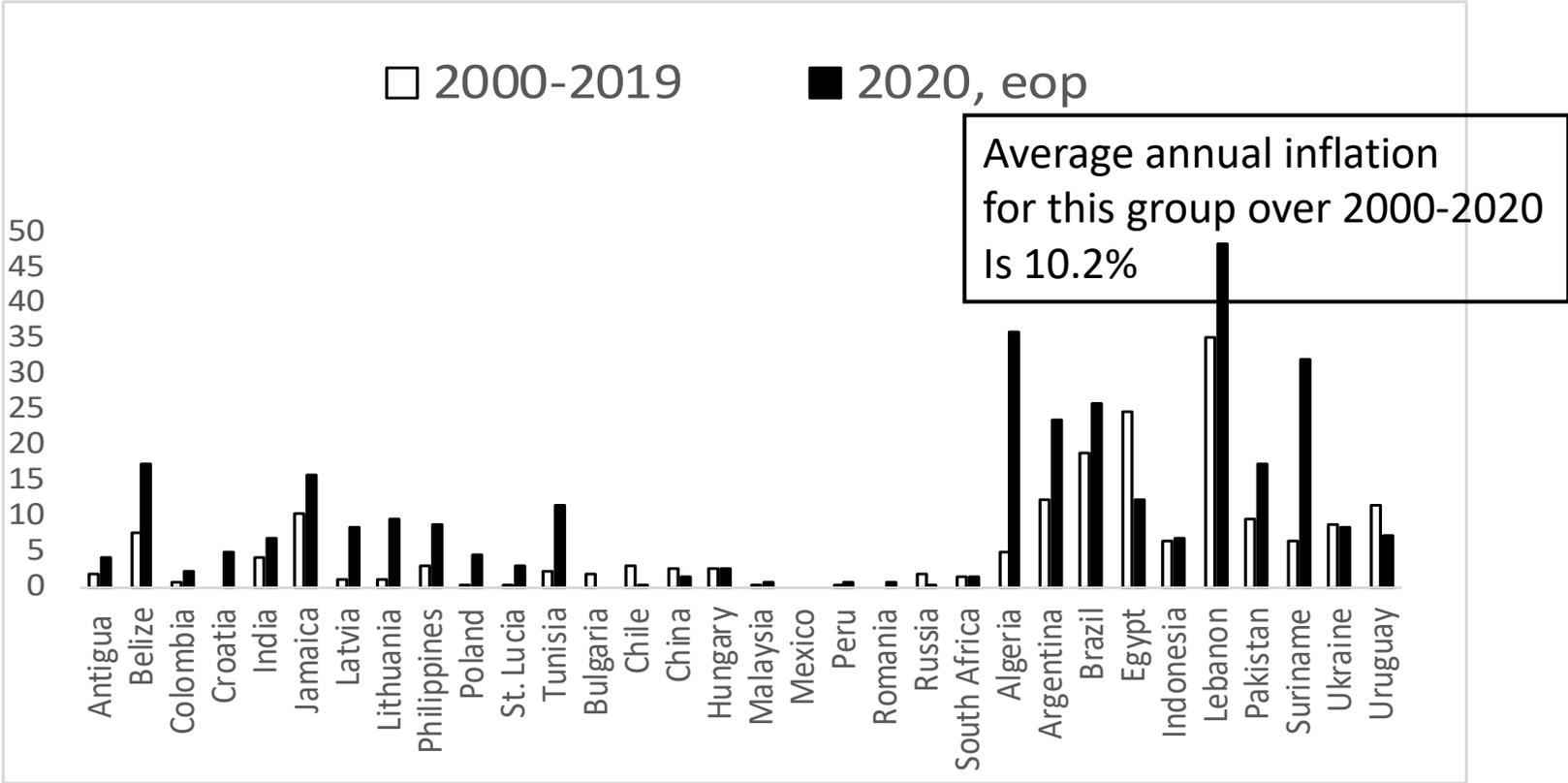
Sources: Arslanalp and Tsuda (2014) and Reinhart (2022).

Are reported non-performing loan (NPL) data misleading? COVID-19 Business Pulse Survey Dashboard conveys a very different picture. Forbearance policies in reporting NPLs are among the reasons for a potential *Hidden NPL* problem (WDR, 2022)

The 20 countries with the largest gaps:
Share of establishments in arrears or expect to fall in arrears in the next 6 months (Pulse Survey)
minus share of non-performing loans
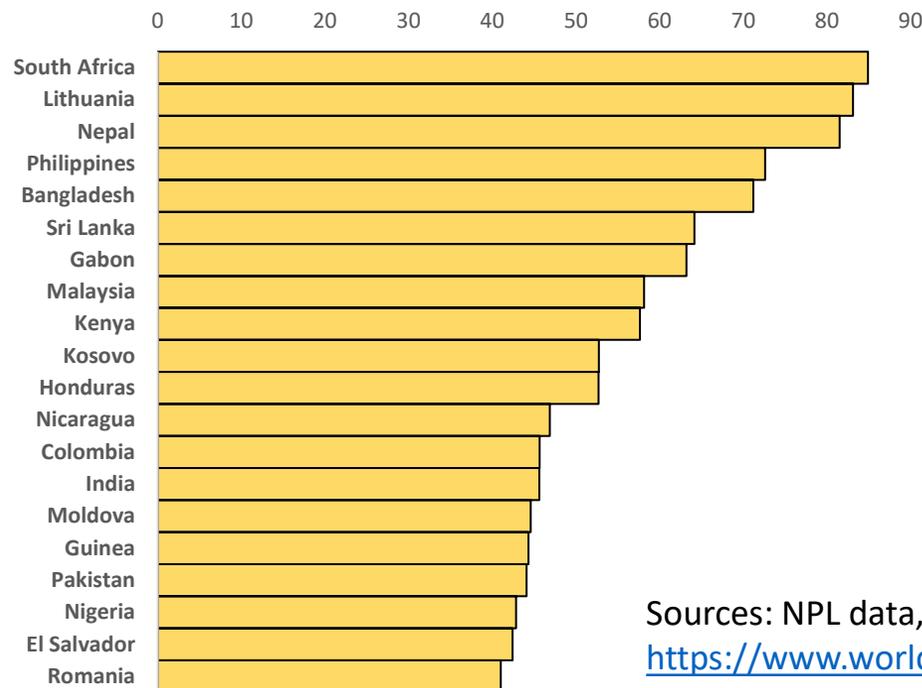
Cross-country data on business failures in a sample of emerging and advanced economies that adopted credit forbearance policies for banks (or small businesses and corporates) presents a similar discrepancy.
NPL rates remained essentially flat between 2019 and 2020, while failure rates, as calculated by a global payment provider, more than doubled.

Sources: NPL data, International Monetary Fund; Arrears data, World Bank Business Pulse Survey
https://www.worldbank.org/en/data/interactive/2021/01/19/covid-19-business-pulse-survey-dashboard. *Notes:* The survey covers 50 countries.

Final thoughts

To state that this is challenging time for central banks is an understatement. This may be the first real test of inflation targeting frameworks. There is no one size fits all playbook, but a lesson that emerged from the 1970s was that monetary policy is ill-equipped to offset the negative economic impacts of supply shocks (which, at present, are NOT in short supply).

Central bank credibility is difficult to achieve but may be more easily lost. With inflation expectations in EMDEs less anchored than in AEs and more attune currency movements, the passthrough from exchange rates to prices is usually faster and higher—especially in countries with a history of high inflation.

The exit from negative real interest rates is poised to be difficult for countries that have not recovered (politically difficult also). But in the meantime, the resurgence of inflation (in its most regressive form, as food and fuel have had a relative price increase as well) is reinforcing inequality both within (and across) countries.

Rising inflation is already impacting fiscal policy (subsidies and price controls), and in some instances, trade policy (food export restrictions). Credit rating agencies have taken note.

Final thoughts concluded

In the context of their financial stability mandate, this is a moment for central banks to work closely with banking/financial sector supervision for the reasons discussed.

It is also a time for risk-averse debt management (for the treasury and central bank) with emphasis on reducing roll-over risks in a period of rising global and domestic uncertainty.

Finally, the impetus to tackle inflation may not come from US monetary policy. While a modest tightening (by historical standards) is poised to unfold in 2022, at least in the US, it is unlikely that it will be sufficient to roll back inflation. As Reinhart and Rogoff (2013) highlight, much of the inflation persistence of the 1970s owed to the Federal Reserve's tendency to do too little too late until Paul Volcker's arrival.

Delays in stabilizing inflation in the US during the 1970s ended up requiring draconian measures that ushered in one of the deepest postwar recessions in the US and the developing country debt crisis of the 1980s.