

# Challenges faced by central banks in normalising their policy: The international dimension

**Carmen M. Reinhart**

*Harvard University*

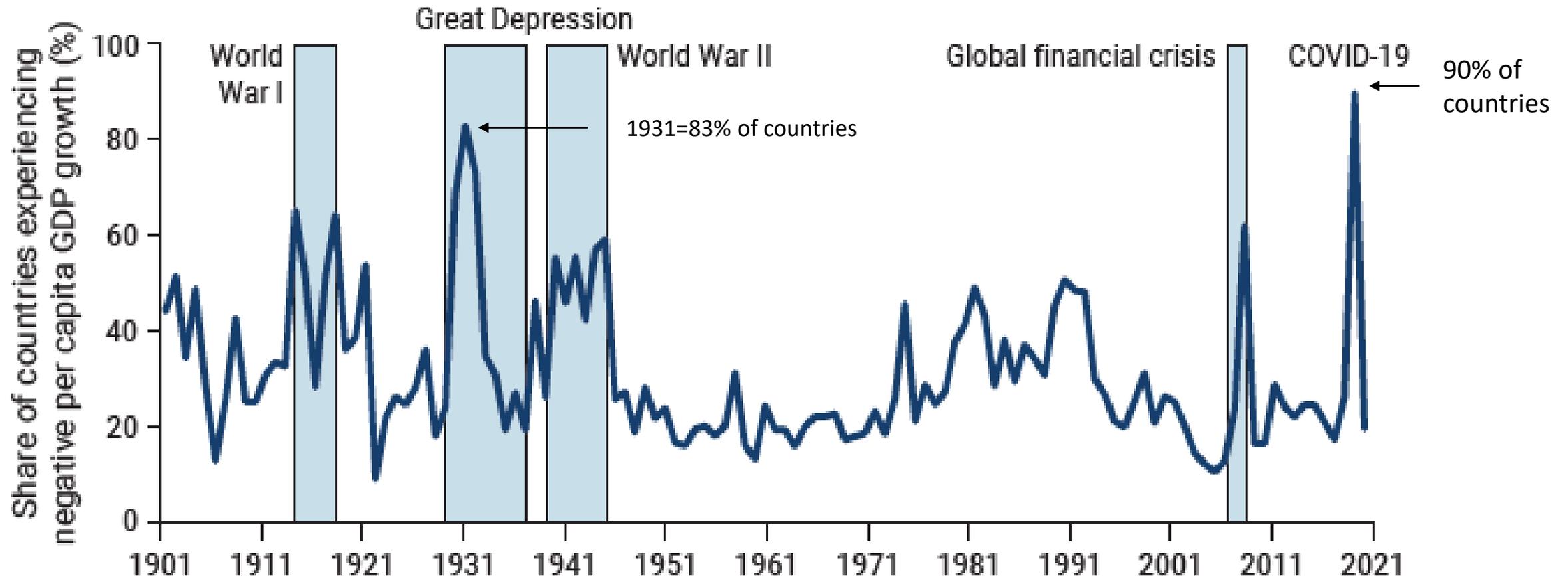
**ECB Conference on Monetary Policy: bridging science and practice**

**October 11, 2022**

# Outline

- The unsettling global setting: An uneven recovery
- The return of global inflation
- Advanced economy (AE) public debt: Some observations
- Central bank policies in AEs before and after the COVID-19 pandemic and challenges ahead for central banks
- Implications for the global economy of tighter monetary policy--with a focus on emerging markets and developing countries (EMDEs)
- Concluding thoughts on risks ahead

# The COVID-19 shock: Share of countries with annual declines in real per capita GDP, 1901-2021



Source: Holston and Reinhart (2022) and sources cited therein.

Notes: The number of countries ranges from 34 in 1901 to 192 in 2020; *World Economic Outlook*, October 2021 estimates for 2021.

# A very uneven recovery between advanced economies (AEs) and emerging markets and developing countries (EMDEs)

## Per capita GDP, peak versus 2021: 1980-2021, 194 countries

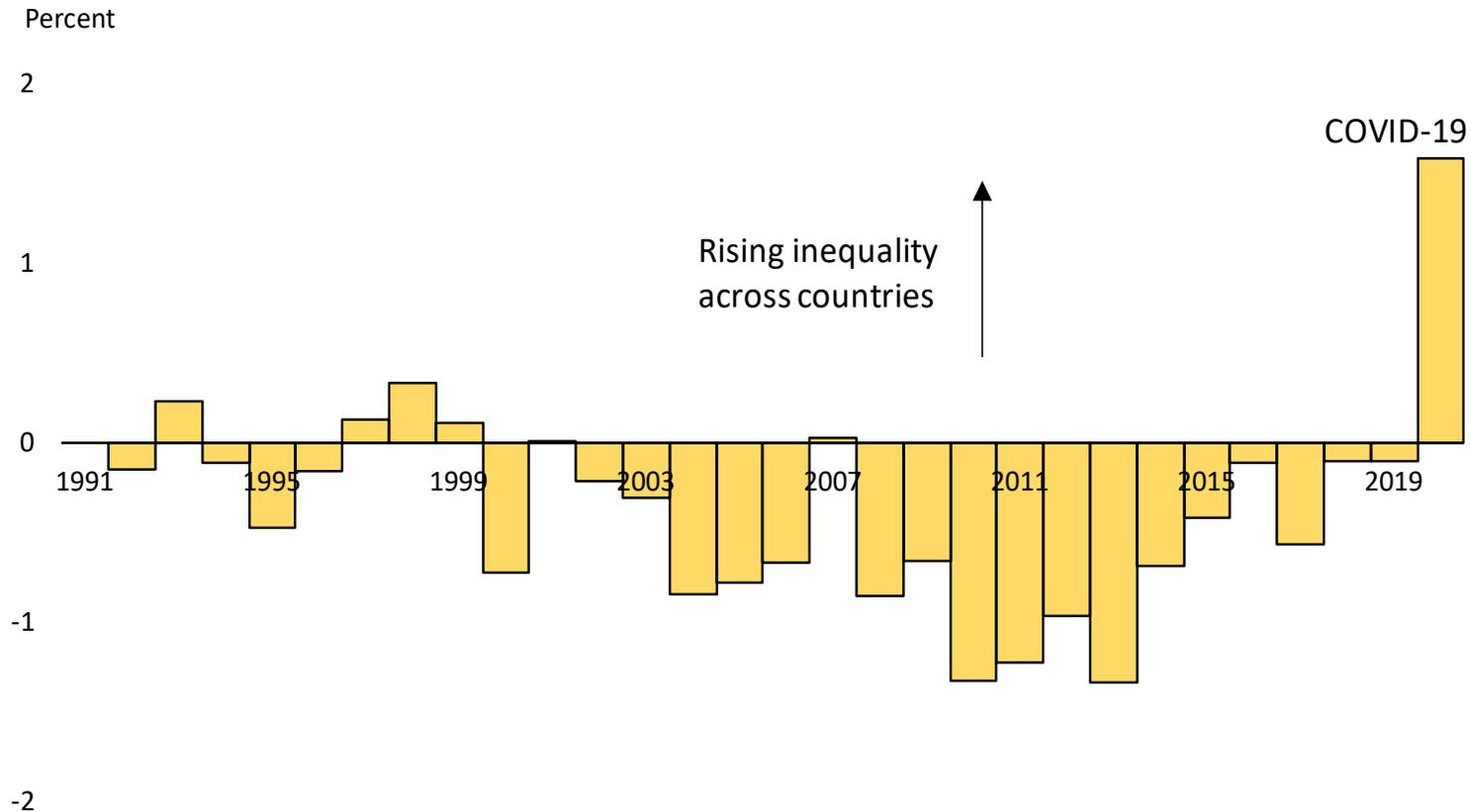
	Advanced economies		Middle-income		Low-income	
	Number of countries	Share in percent	Number of countries	Share in percent	Number of countries	Share in percent
2021 = peak	14	36.8	35	26.7	3	19.2
2021 < peak	24	63.2	96	73.3	23	80.8
Total	38	100	131	100	26	100

Put differently, between **70 and 80 percent** of EMDEs were below their **prior** per capita income levels in **2021** let alone the levels that would have prevailed had output followed its pre-crisis trend.

*Sources:* World Economic Outlook, IMF and Holston, and Reinhart (2022).

# Global Gini, 1991-2020: Measuring income inequality across countries (annual percent change)

As measured by the Global Gini index, Cross-country income inequality declined during 2000-2015. **Progress began to stall over 2016-2019 and reversed acutely during COVID-19.**

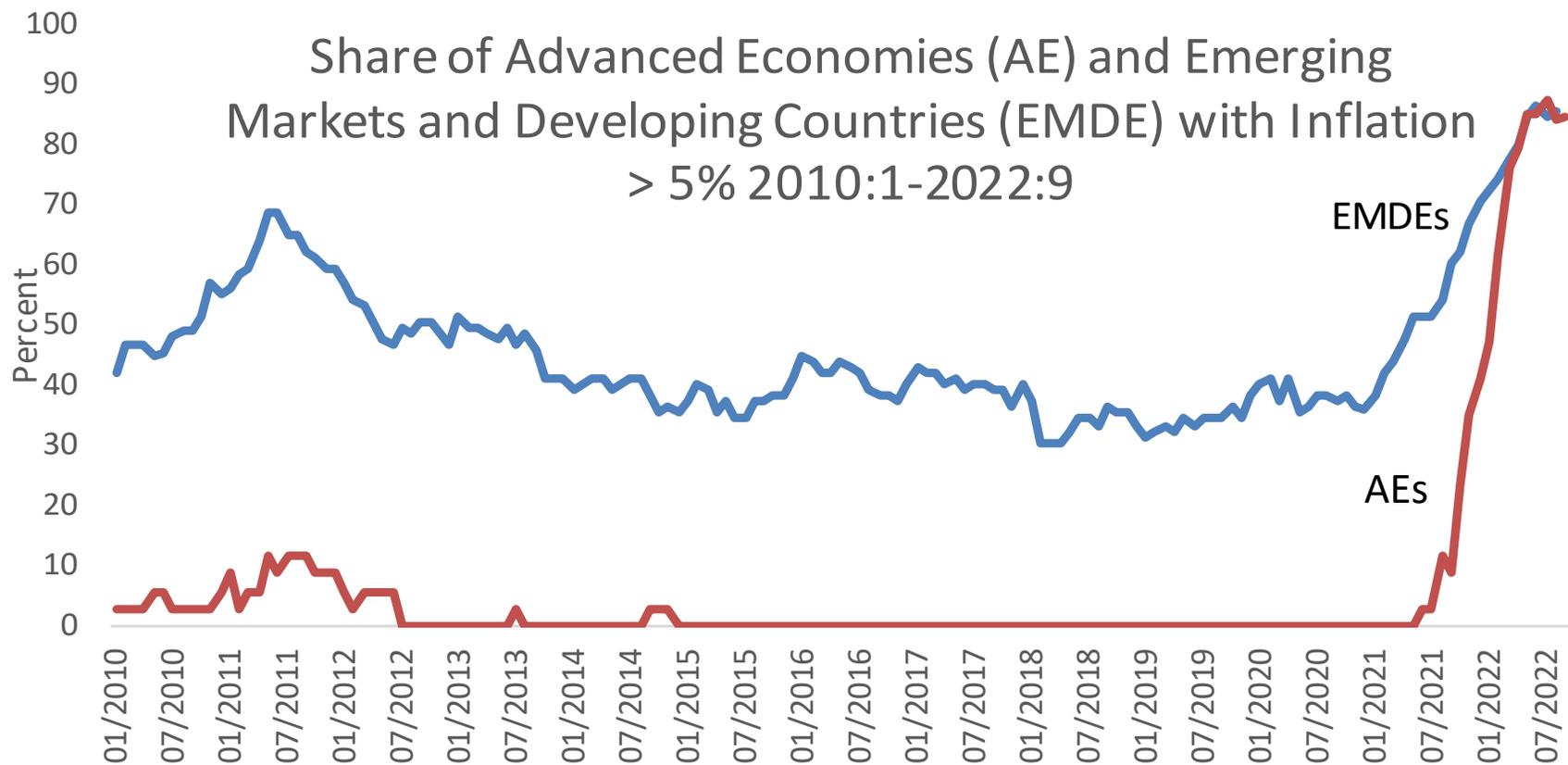


Sources: Olaberria and Reinhart (2022) based on Mahler, Yonzan and Lakner (2022).

Note: Global distributions in Poverty and Inequality Platforms for the historical series and simulations by Mahler, Yonzan and Lakner (2022).

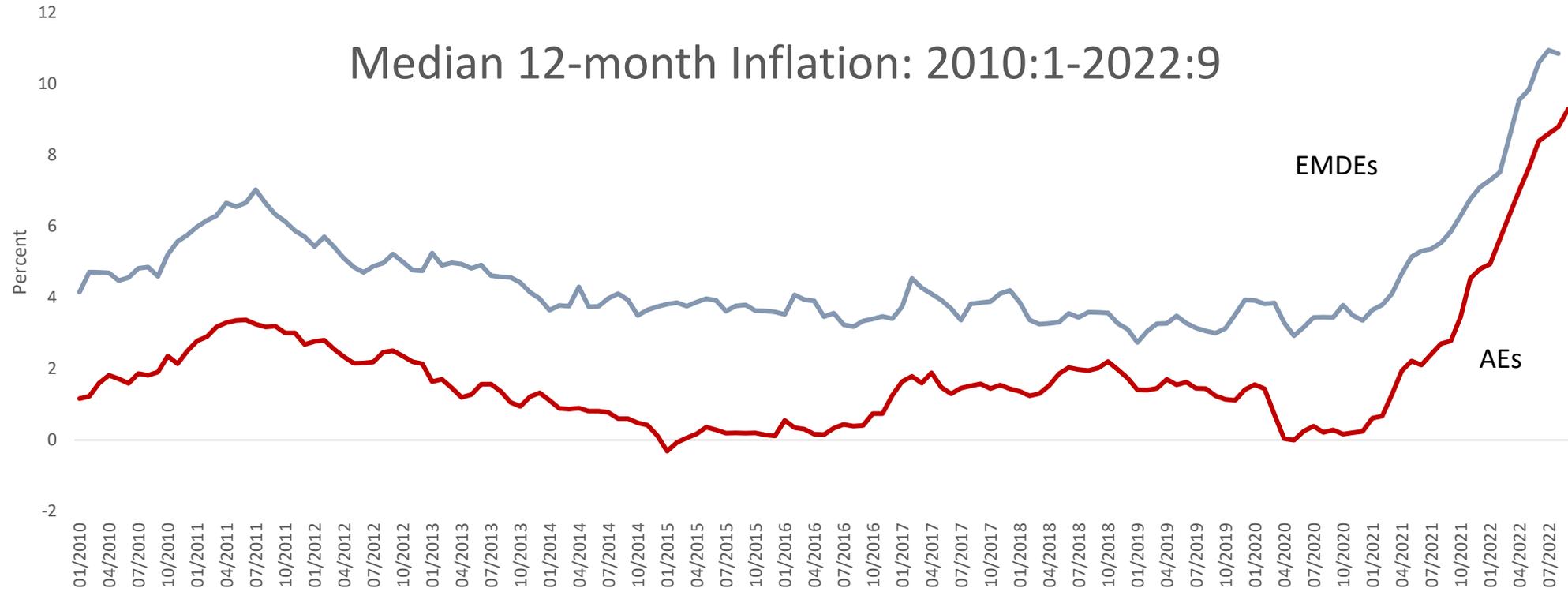
# The return of inflation is global

(or nearly so, as Asia has been more immune thus far)



Sources: Graf von Luckner and Reinhart (2022), International Monetary Fund, Trading Economics.

The last time median inflation in AEs was 9.3 percent was December 1982...

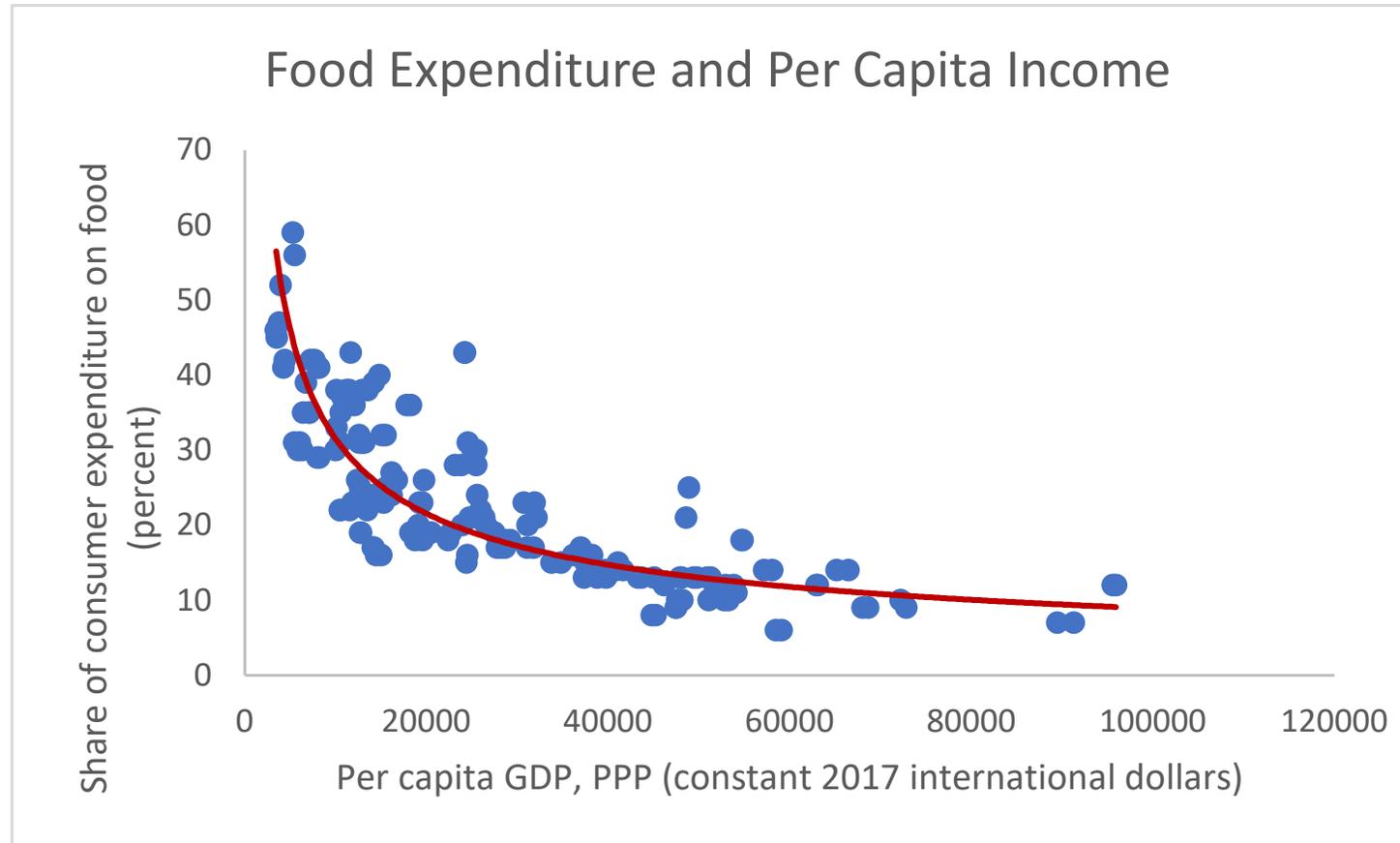


Sources: Graf von Luckner and Reinhart (2022), International Monetary Fund, Trading Economics

# Drivers of the inflation surge

- **Overheated economies** following record fiscal and monetary stimulus during the COVID-19 crisis (this is more an **AE** story).
- **Global supply chains** have been and continue to be severely impacted, and transport costs have skyrocketed since the outbreak of the pandemic. Unlike the supply shock of the 1970s, which was easy to pin on oil, the COVID-19 supply shocks are diverse and opaque and their potential persistence remains uncertain (global-AEs and EMDEs factor).
- **Commodity prices** have risen as global demand increased from 2020 levels, with **oil** prices up about 120 percent between December 2020 and March 2022.
- **Currency depreciation** in EMDEs, as foreign capital inflows retrench and sovereign credit ratings are downgraded, have contributed to inflation of imported goods. With inflation expectations less anchored than in AEs, the passthrough from exchange rates to prices is usually faster and higher and especially for commodities denominated in dollars.

**Spotlight on 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.



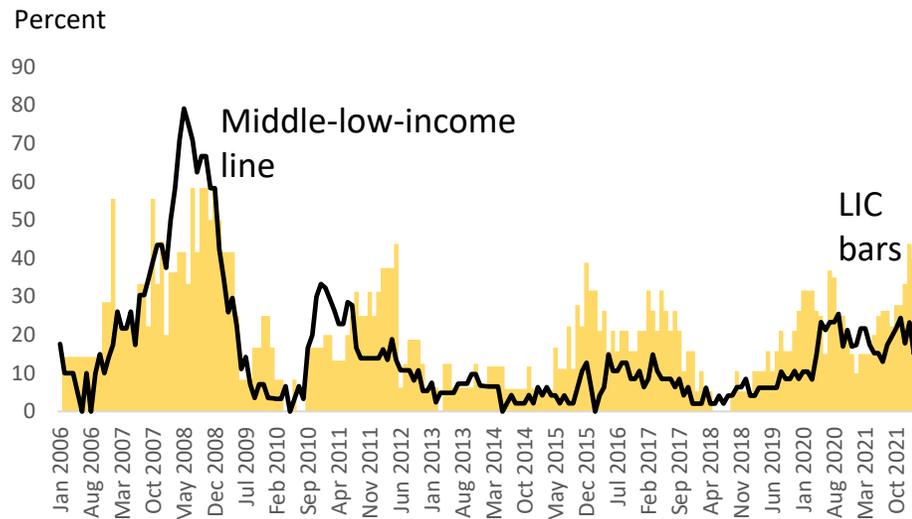
**Food inflation is a very regressive tax both across countries and within countries. Inflation is a regressive tax which is levied without legislation or votes.**

*Sources:* USDA and World Bank.

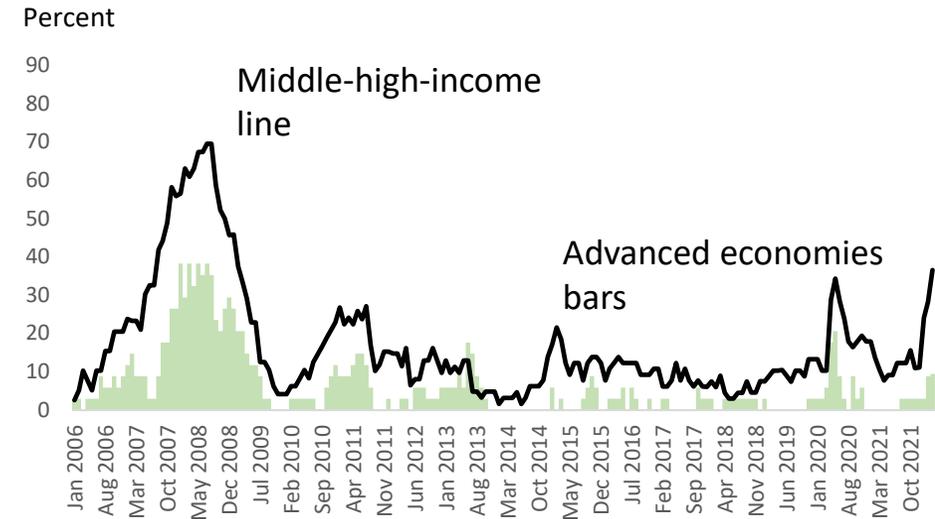
*Notes:* Based on 2017 data for 168 countries.

# Share of countries in each income group with year-over-year real (CPI food/CPI) food price increases greater than 4 percent: 2006:1-2022:3

Low and middle-low-income countries



Middle-high-income and advanced economies



Sources: International Monetary Fund, Trading Economics, and Graf Von Luckner, Holston, and Reinhart (2022).

Notes: During the global food crisis of 2008, the median real food price increase was 4.06%.

# Recovery and inflation pairings and risk varieties: “peak GDP” to 2021 compared

		Real per capita GDP	
		2021 < prior peak	2021 ≥ prior peak
<b>12-month inflation rate</b>	March 2022 > end-2019 or inflation ≥ 10%	<b>Quadrant I:</b> Higher (or high) inflation; lower incomes Stagflation risks	<b>Quadrant II:</b> Higher (or high) inflation; higher incomes Overheating risks
	March 2022 ≤ end-2019	<b>Quadrant IV:</b> Lower inflation; lower incomes Recession/ depression risks	<b>Quadrant III:</b> Lower inflation; higher incomes “Low” risk bucket

Source: Graf von Luckner and Reinhart (2022).

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

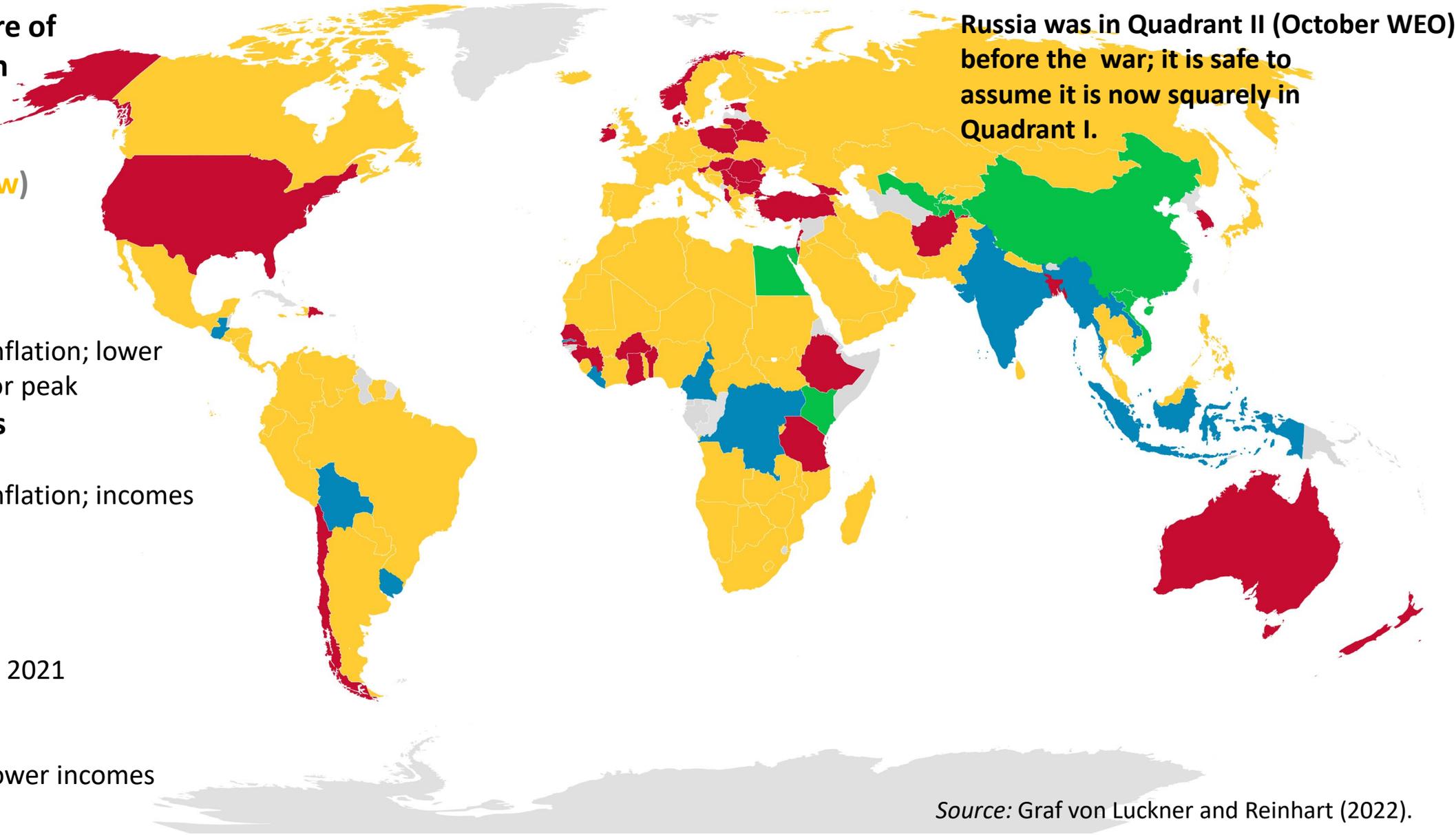
**Stagflation risks**

**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.

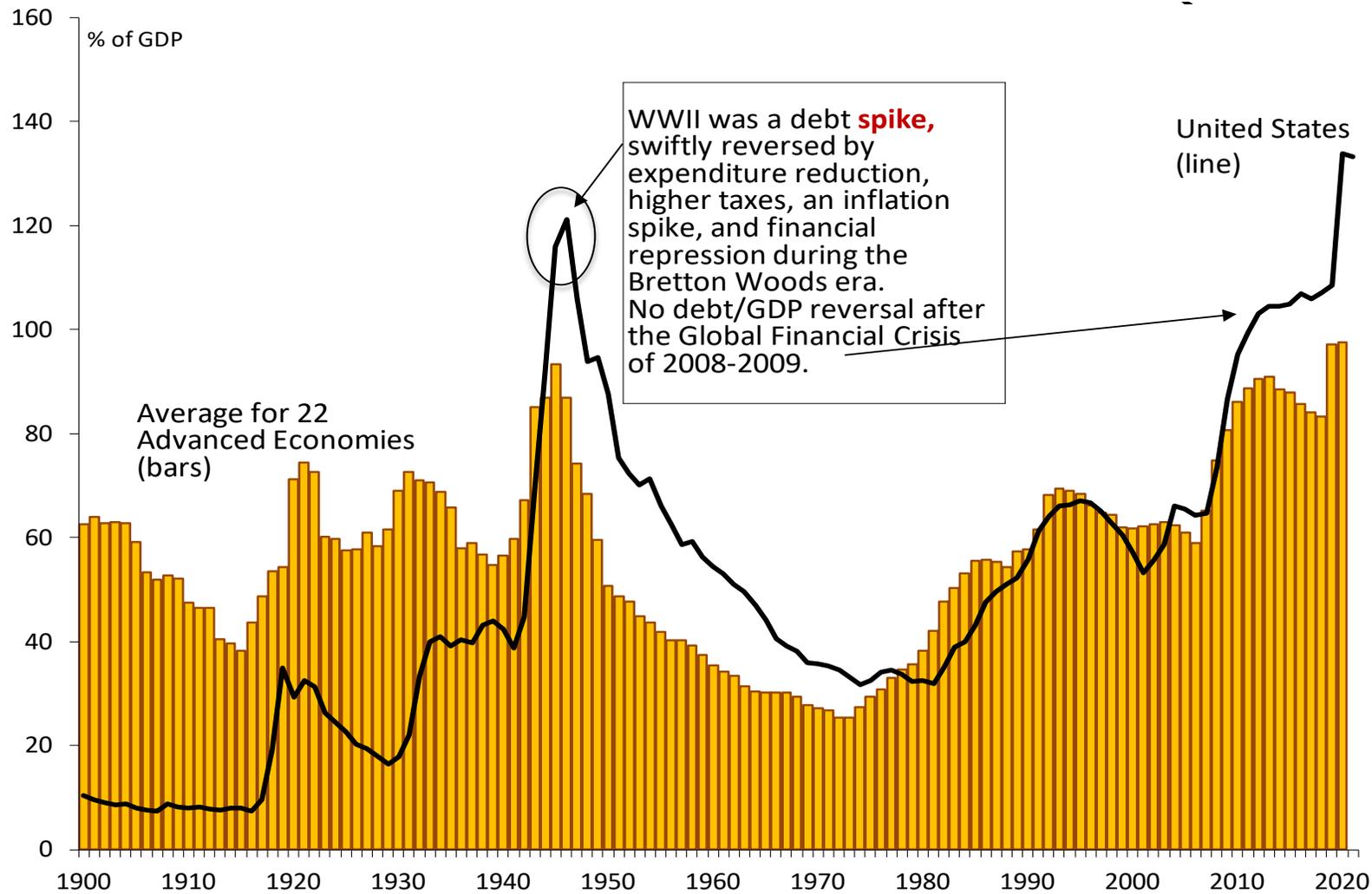


Source: Graf von Luckner and Reinhart (2022).

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

# Public debt as a % of GDP: Advanced Economies, 1900-2021

Debt spikes, debt reversals and debt plateaus

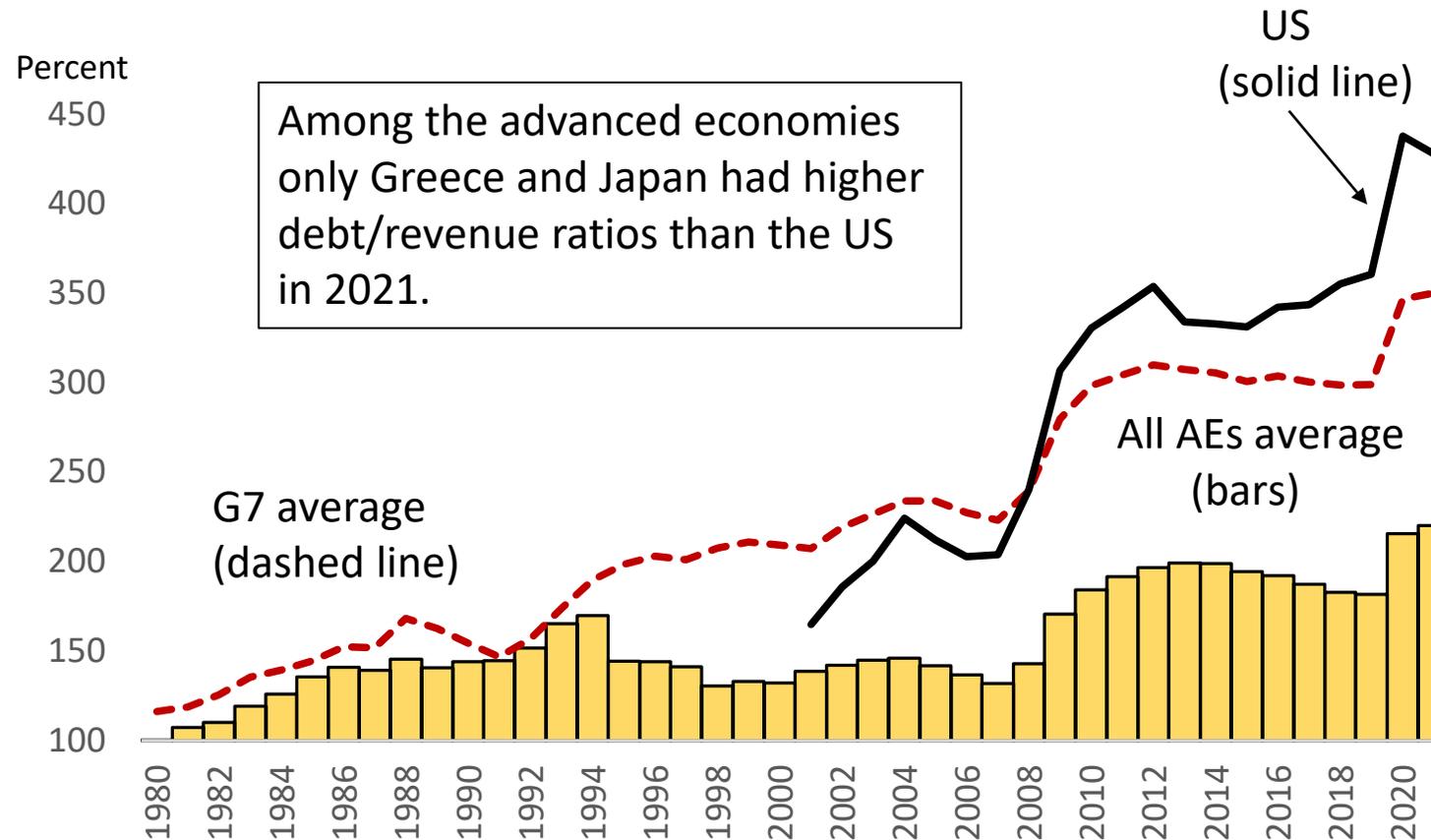


Sources: IMF, *World Economic Outlook* and Reinhart and Rogoff (2009, 2011) and sources cited therein.

Reinhart

# General government debt/revenue: Advanced economies, 1980-2021 (33 countries)

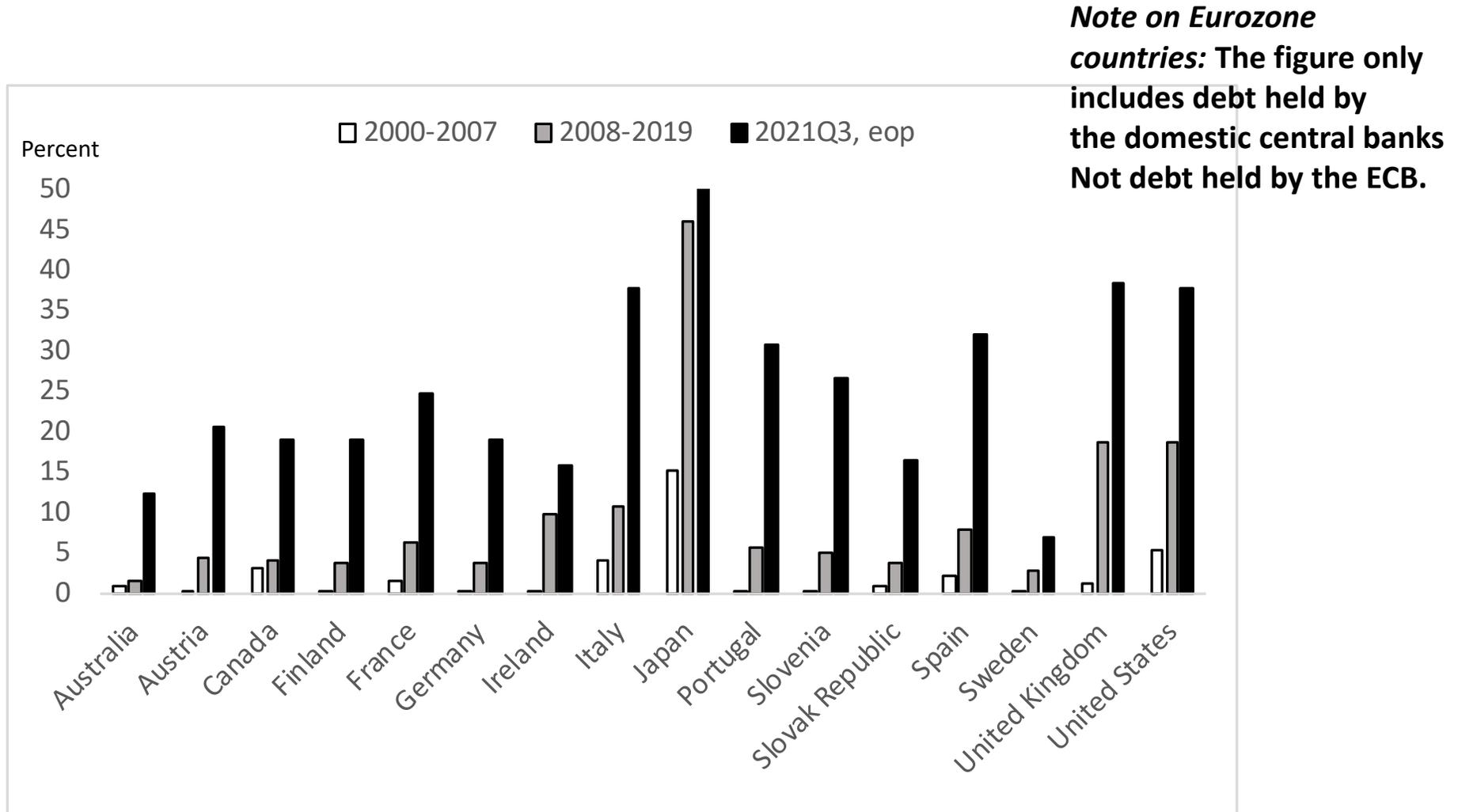
*Given the downward rigidities of government spending in the US, it is difficult to envision scenarios that do not involve higher taxes, including the inflation tax.*



# 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 (see next 2 figures and Reinhart, 2022).
- **GFC:** Under the umbrella of Quantitative Easing (QE), massive (a record, by peacetime standards) purchases of government debt (or government-guaranteed) by the Fed and other advanced economy central banks. **Post-GFC:** Central Bank balance sheets shrank modestly but remained far larger than their pre-GFC levels.
- **COVID-19:** Central bank purchases of government debt skyrocketed from their already large base to levels only seen during major wars.
- 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.
- Policy interest rates, nominal and real, ratcheted to new lows also in **two steps**.
- 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 figure and table that follows next 2 figures).

# Central bank holdings of government debt as a % of GDP and the **GFC-COVID-19 two-step upward ratchet effect**.

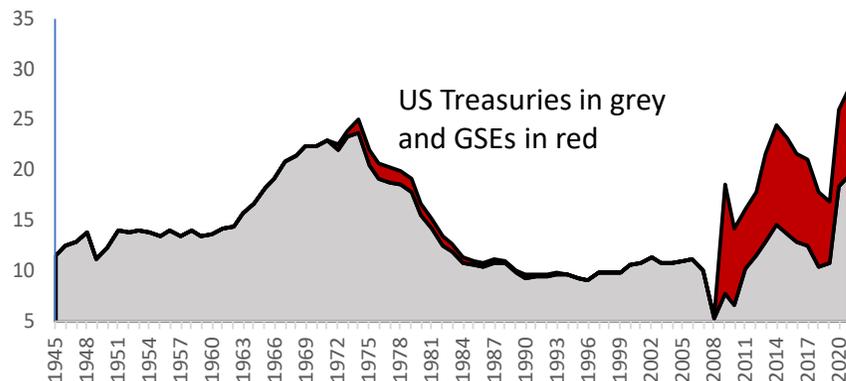


*Note:* GSE debt is included in the US totals.

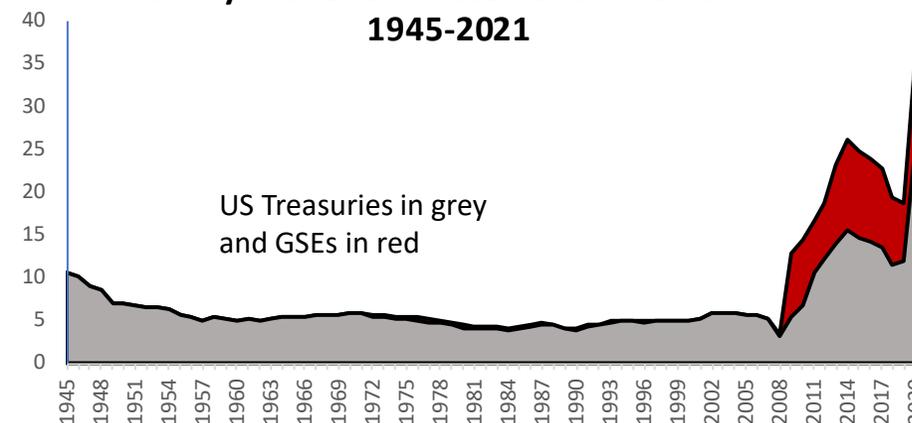
*Sources:* Arslanalp and Tsuda ( 2014), Board of Governors of the Federal Reserve, and Reinhart (2022).

While the list of explanations for the exceptionally low/negative real interest rates that have prevailed for more than a decade is long and varied, an obvious explanation (not mutually exclusive from the other factors stressed) is that advanced economy central banks have gone to great lengths to keep them there remains underappreciated. A benign inflation outcome facilitated sustained monetary accommodation and deficit financing.

**US Marketable Treasury Securities and GSEs held by the Federal Reserve as a % of outstanding: 1945-2021**



**US Marketable Treasury Securities and GSEs held by the Federal Reserve as a % of GDP: 1945-2021**

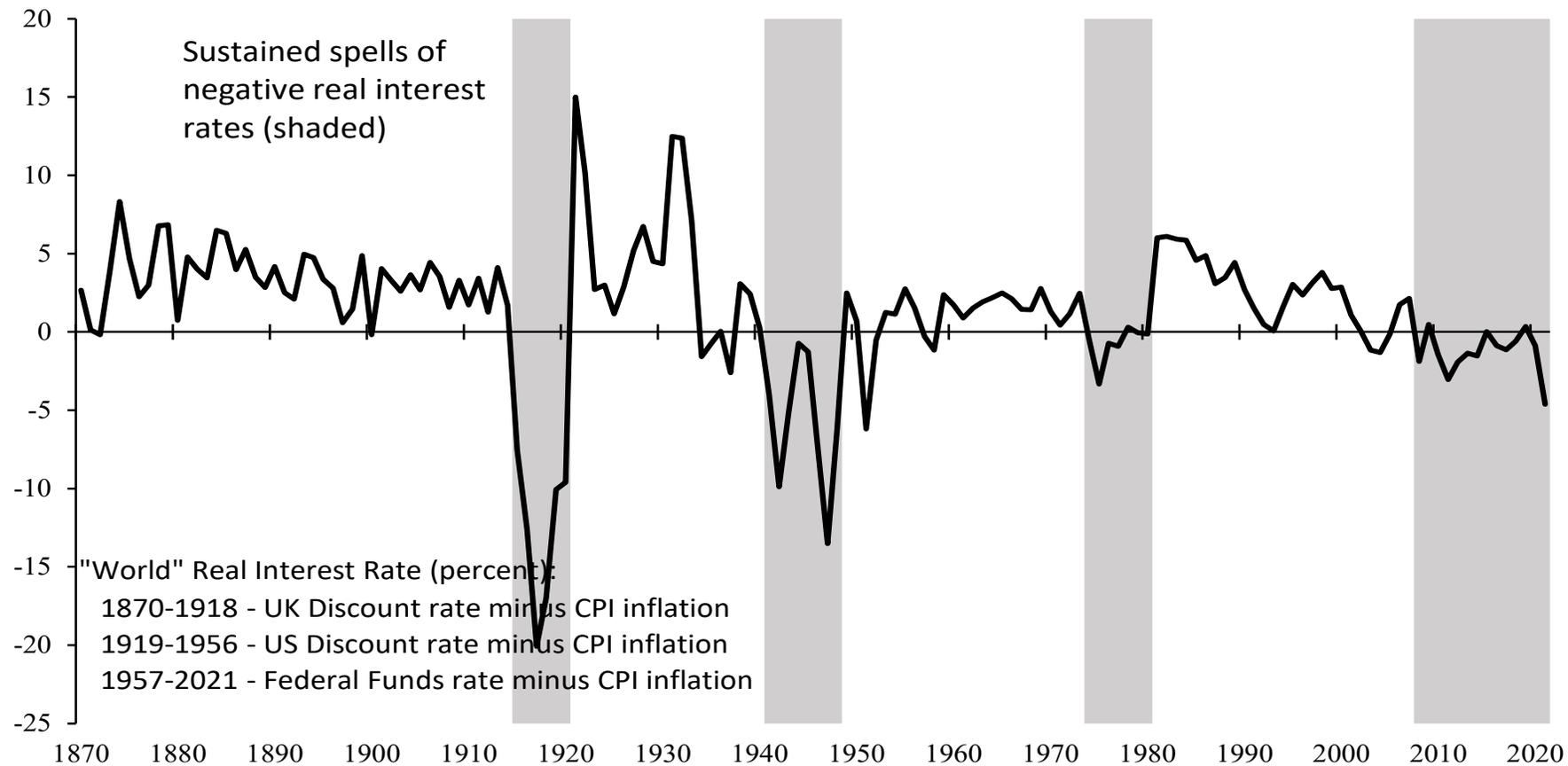


*Note:* GSE debt is included in the US totals.

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

# Short-term real interest rate in global financial centers: 1870-2021

*Real interest rates have been persistently negative since the Global Financial Crisis—the longest spell in history*



Sources: Bank of England, Board of Governors of the Federal Reserve, FRED, and Reinhart, Reinhart, and Trebesch (2016 and 2022)

Reinhart

# Historical negative short-term real interest rate spells in global financial centers: UK, 1870-1918 and US, 1919-2021

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	GFD and COVID-19

Sources: Bank of England, Board of Governors of the Federal Reserve, FRED, and 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?**

## Some of the consequences of protracted negative (or very low) real interest rates:

- encourages over-borrowing by both the government and private sector.
- fuels risk taking in the search for yield.
- while (other things equal) negative/low rates improves the government's balance sheet, it may create or aggravate existing off-balance sheet losses. Pension fund solvency (including those of local governments) benefit from high rates of return.
- are not a substitute for fiscal discipline or reforms if these are needed. In effect, it may facilitate delay.
- For very high debt cases (Italy and Greece), low/negative rates are not a substitute for debt restructuring, which can (at least in principle) deliver faster and larger debt reduction.

# The exit from sustained negative real interest rates is complicated if central bank independence eroded--not necessarily *de jure*, but very possibly *de facto*. ***The Debt Loop***

If a protracted period of low (negative) interest rates encourages risk taking and leverage (public and private), do **financial stability/balance sheet concerns** tilt policy toward continued accommodation?

If a protracted period of low (negative) interest rates fuels **asset price bubbles**, do fears of a market crash tilt policy toward continued accommodation?

At high levels of government debt, are CBs under greater **political pressure** to maintain an accommodative stance, as was the case during the aftermath of WWII, (see next figure)?

If there are concerns about potential **sovereign insolvencies** (an issue for the ECB) do such concerns tilt the bias of toward accommodation?

Does not some combination of the above introduce (reinforce) an asymmetry between easing and tightening? (Extending the ***Debt Loop***.)

**During the past 15 years or so, it has been easier for the major central banks to ease than to exit. It took some years of sustained high inflation last episode in the 1970s.**

# What **short-term risks** does Fed (and other major central banks) tightening pose for the global economy?

*With an emphasis on EMDEs—the Russia-Ukraine war may pose more immediate risks*

- Economic slowdown, recession risks, as in past tightening cycles.
- Equity markets have lofty valuations.
- China was an engine of growth for the global economy following the Global Financial Crisis—they have their own financial fragilities to cope with.
- 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 (next figure) and
  - for the already vulnerable (especially low-income countries), it may increase the odds of a debt crisis.
- It will probably also add to global poverty, which increased for the first time in 2020 since 1998. (see table following the next two figures).

# General government debt-to-revenue ratio: EMDEs, 1990-2021

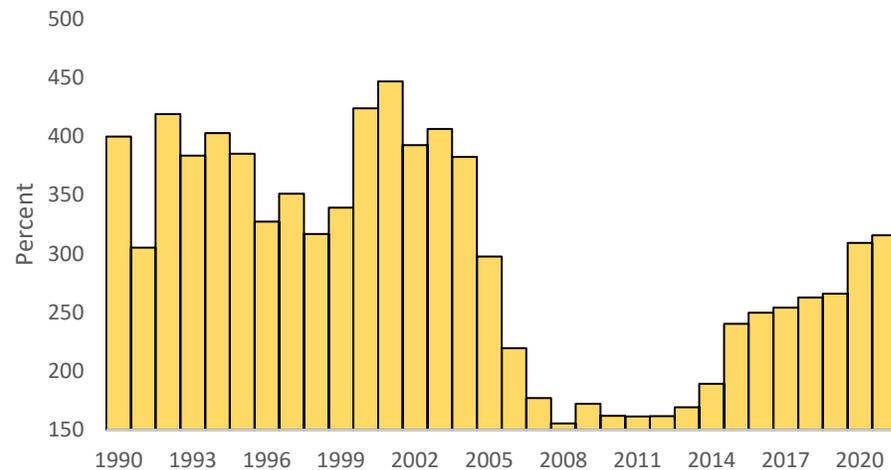
(in percent, **note the significant difference in scales**)

## Levels of public indebtedness follow a U-shaped pattern

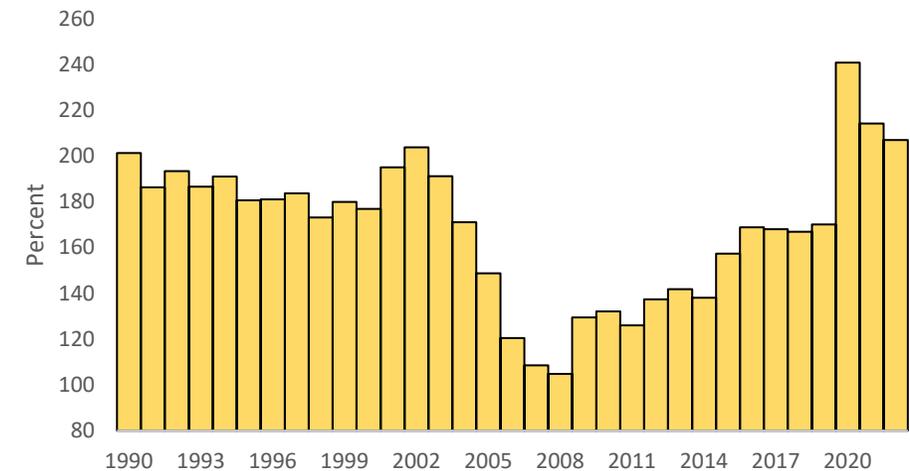
For the low- and many middle-low-income countries, the **HIPC initiative** delivered debt reduction in the 2000s. The commodity price crash of 2015 and ensuing lower growth, along with the surge in borrowing from China, led to **sharp increases in debt even prior to the COVID-19 debt surge**.

For the middle-upper and high-income EMDEs, the debt build-up began during the GFC, accelerated with the decline in commodity prices, and escalated further during the pandemic. **As a group, fiscal stimulus played a much greater role in EMDEs than in LICs, where fiscal support was minimal.**

80 low- and middle-low- income countries

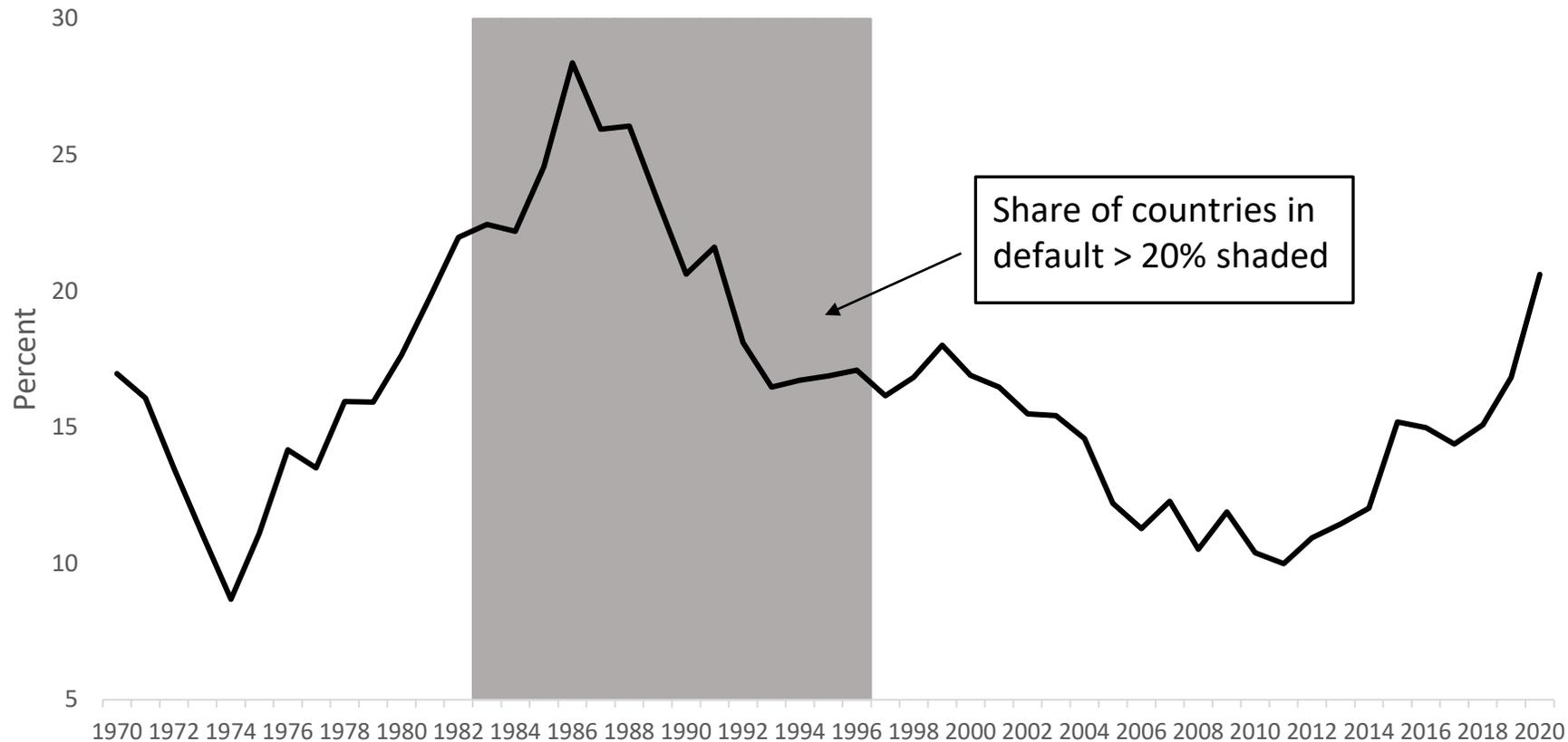


75 middle-upper and high-income EMDEs



Source: Olaberria and Reinhart (2022), *IMF World Economic Outlook*, April 2022, IMF-WB, *Low-income Debt Sustainability Analysis (DSAs)* documents.

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



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.

Among the 73 low-income countries that were eligible for the Debt Service Suspension Initiative (DSSI) during the pandemic almost 60% are either in *debt distress* or at *high risk of debt distress*.

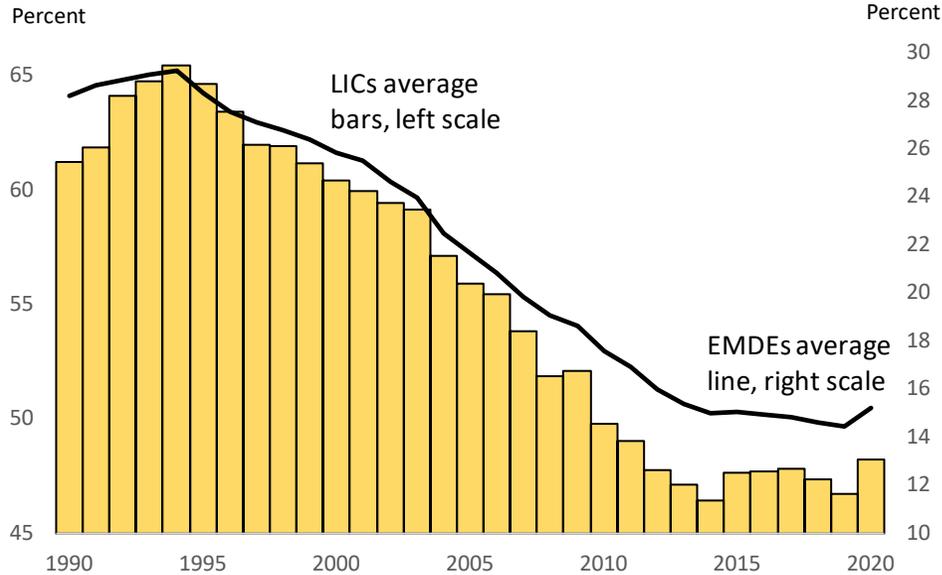
Sources: *International Debt Statistics* and Farah, Graf Von Luckner, and Reinhart (2022).

Notes: Default shares based on all sovereigns (193).

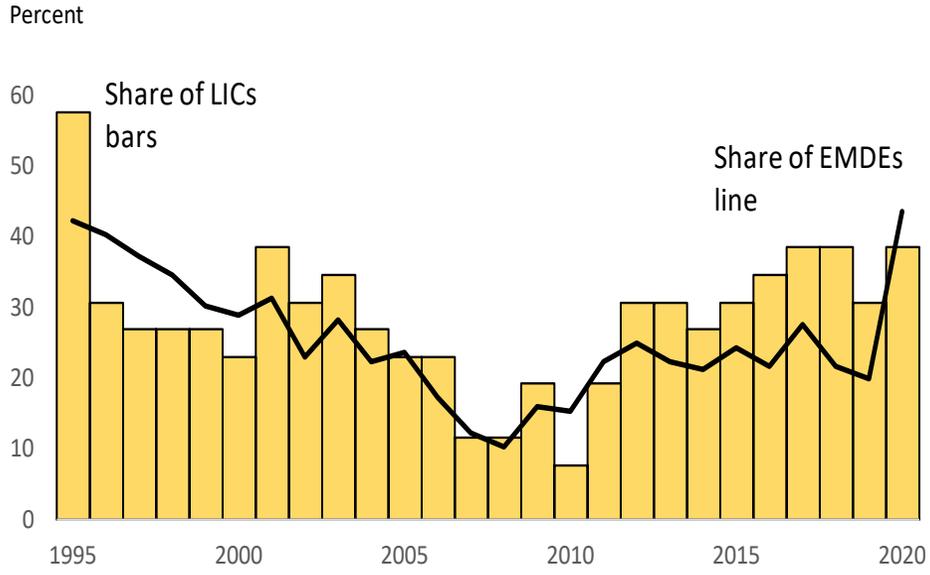
Debt servicing is an average for 123 EMDEs.

# Global progress in poverty reduction had stalled before the pandemic and has now reversed

Extreme poverty rate: LICs and EMDEs 1990-2020



Share of LICs and EMDEs with an increase in the poverty rate relative to the average of the previous 5 years



Source: Olaberria and Reinhart (2022) based on Mahler, Yonzan and Lakner (2022) and The World Bank, *Poverty and Shared Prosperity, 2020*.  
 Note: The number of LICs and EMDEs (LICs included) is 26 and 156, respectively. Extreme poverty through 2020 is based on the \$1.90 a day global poverty line.

# Final thoughts

- The **exit** from the pandemic-induced fiscal, monetary, and financial (forbearance policies) stimulus/support is fraught with a host of heightened risks. The **delay** of policy adjustment is also fraught with significant risks—among these higher persistent inflation. To state that this is challenging time for governments and central banks is an understatement.
- 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 tackling 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.
- Delays will stretch out *The Debt Loop*.
- In the meantime, the resurgence of inflation is reinforcing inequality both within and across countries.