Debt Challenges Ahead

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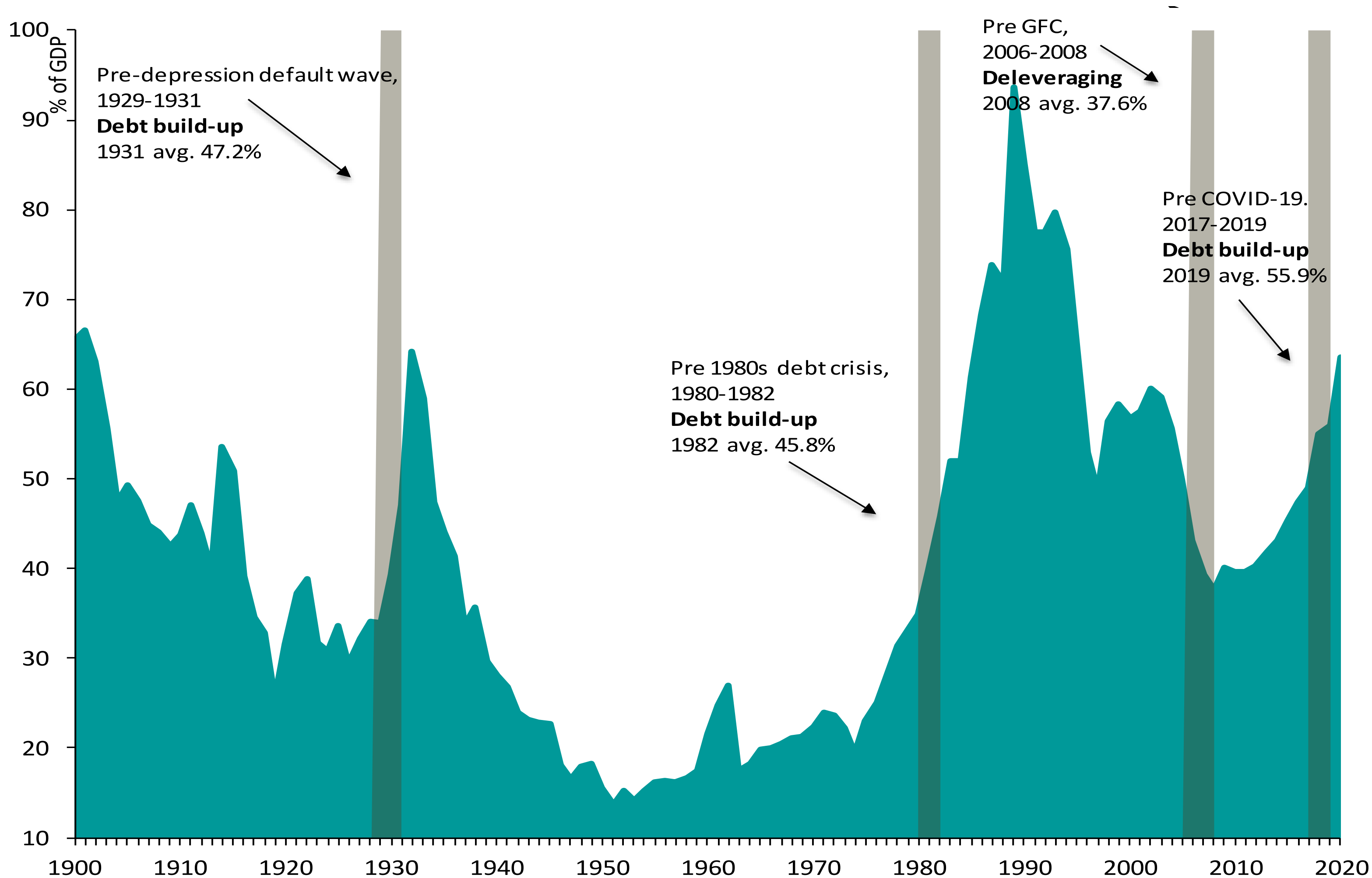
Roadmap

- Pre-pandemic vulnerabilities and recent developments
- Hidden debts: What to expect in a crisis
- Debt build-ups and debt management during the crisis
- Temporary debt payment suspension and other options
- Dealing with debt overhangs and debt restructuring
- Final thoughts on the coming banking crises

Pre-pandemic vulnerabilities in historical context and recent developments

public debt
external debt at the time of default
the VIX (risk aversion)
capital flows to EMs
credit rating downgrades
cost of financing, yield ratios

Public debt and major crises: 45 emerging and developing countries, 1900-2020



Note: WEO 2020 estimates at this stage are likely to underestimate the debt spike this year. Sources: Reinhart and Rogoff (2009) and sources cited therein, World Economic Outlook (2020).

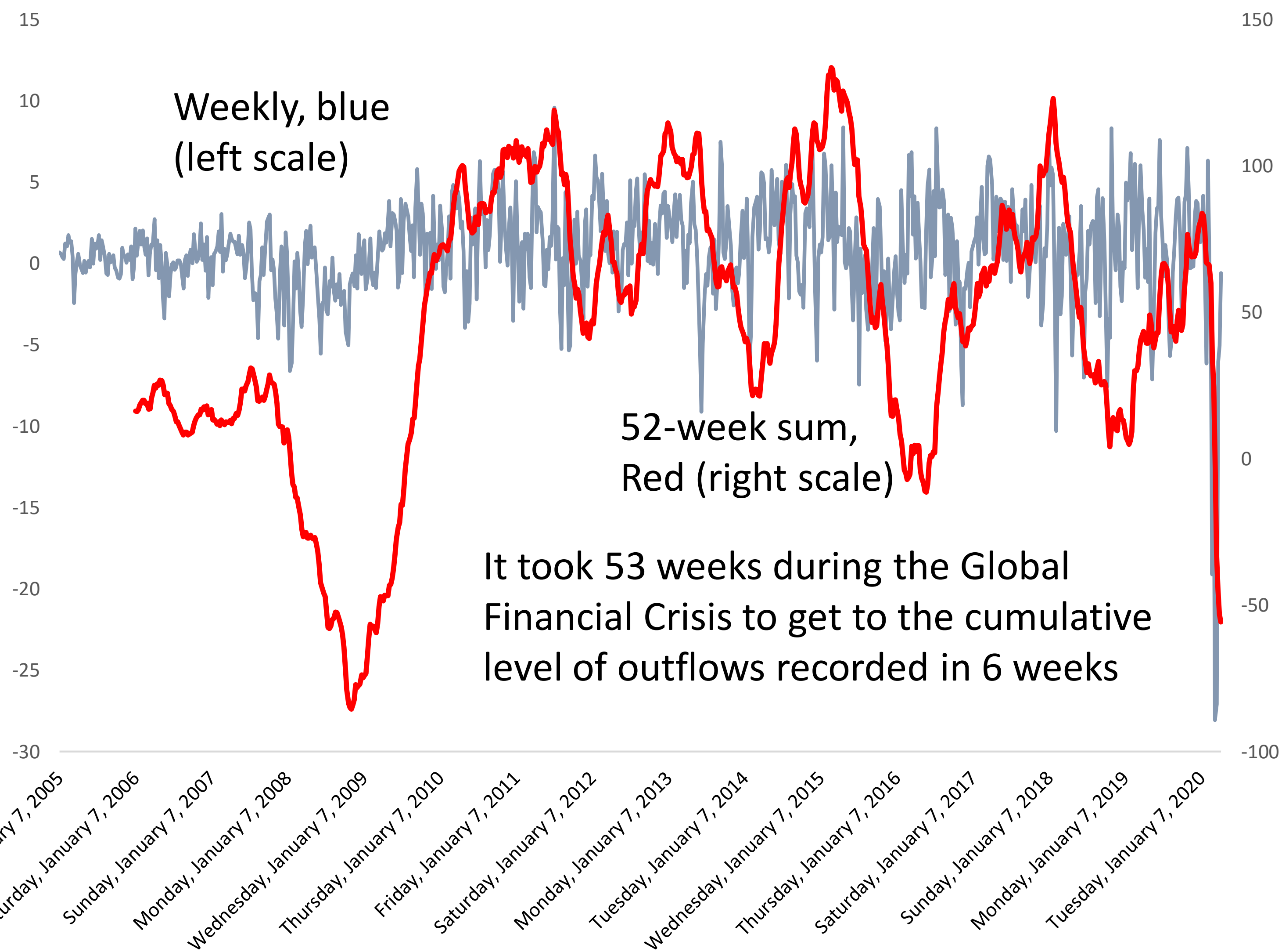
Defaults and restructurings at low levels of external debt by advanced economy standards are commonplace in EMs

Frequency distribution of external debt ratios in middle-income countries at the time of default 1970-2001 (Reinhart, Rogoff, and Savastano, 2003)

This fact holds when updated to include episodes with recent

External debt-to-GNP range in first year of default or restructuring	*Percent of total defaults or restructurings*
Below 40 percent	13
41 to 60 percent	40
61 to 80 percent	13
81 to 100 percent	20
Above 100 percent	13

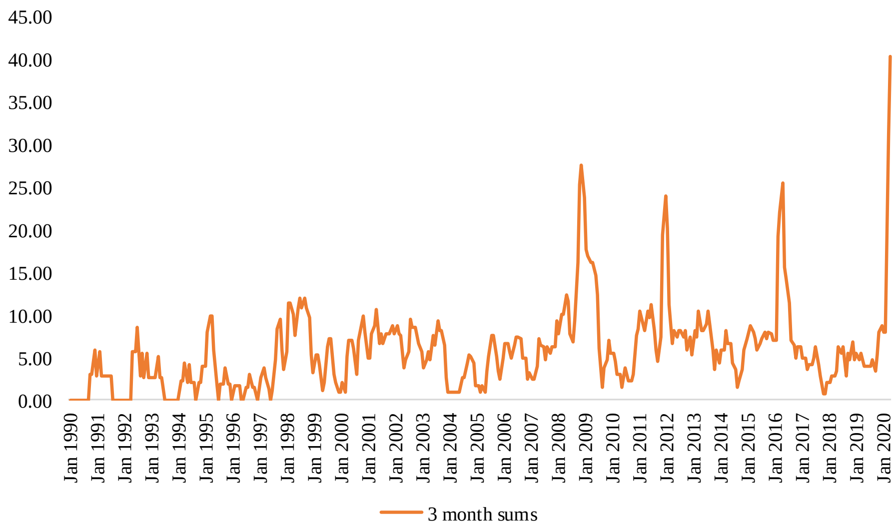
Weekly Net Non-Resident Purchases of EM Stocks and Bonds
($ billion) (Excludes Turkey and Mexico)



Source: IIF (2020)

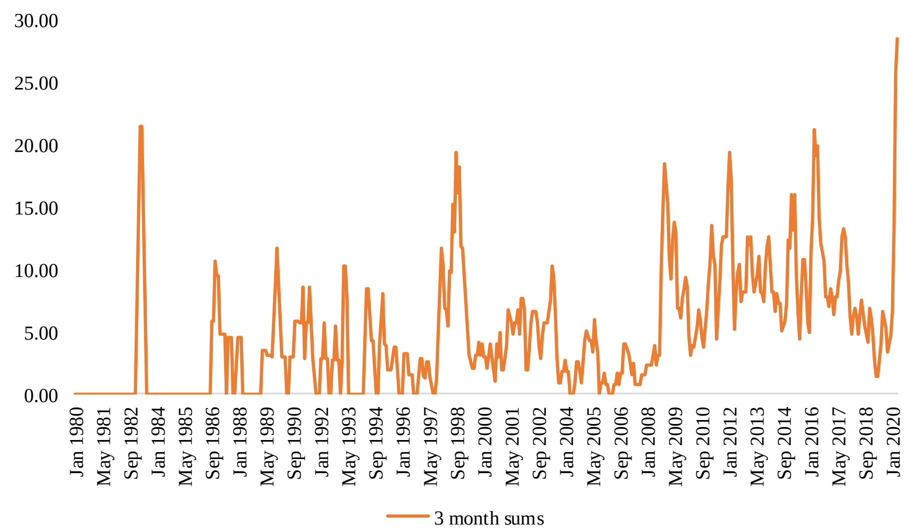
Historically capital flows to developing counties have been negatively correlated with the global share (incidence) of countries in default (Reinhart, Reinhart and Trebesch, 2020).

The surging odds of defaults evident in credit rating changes certainly map onto the sudden stop in capital flows to EMs



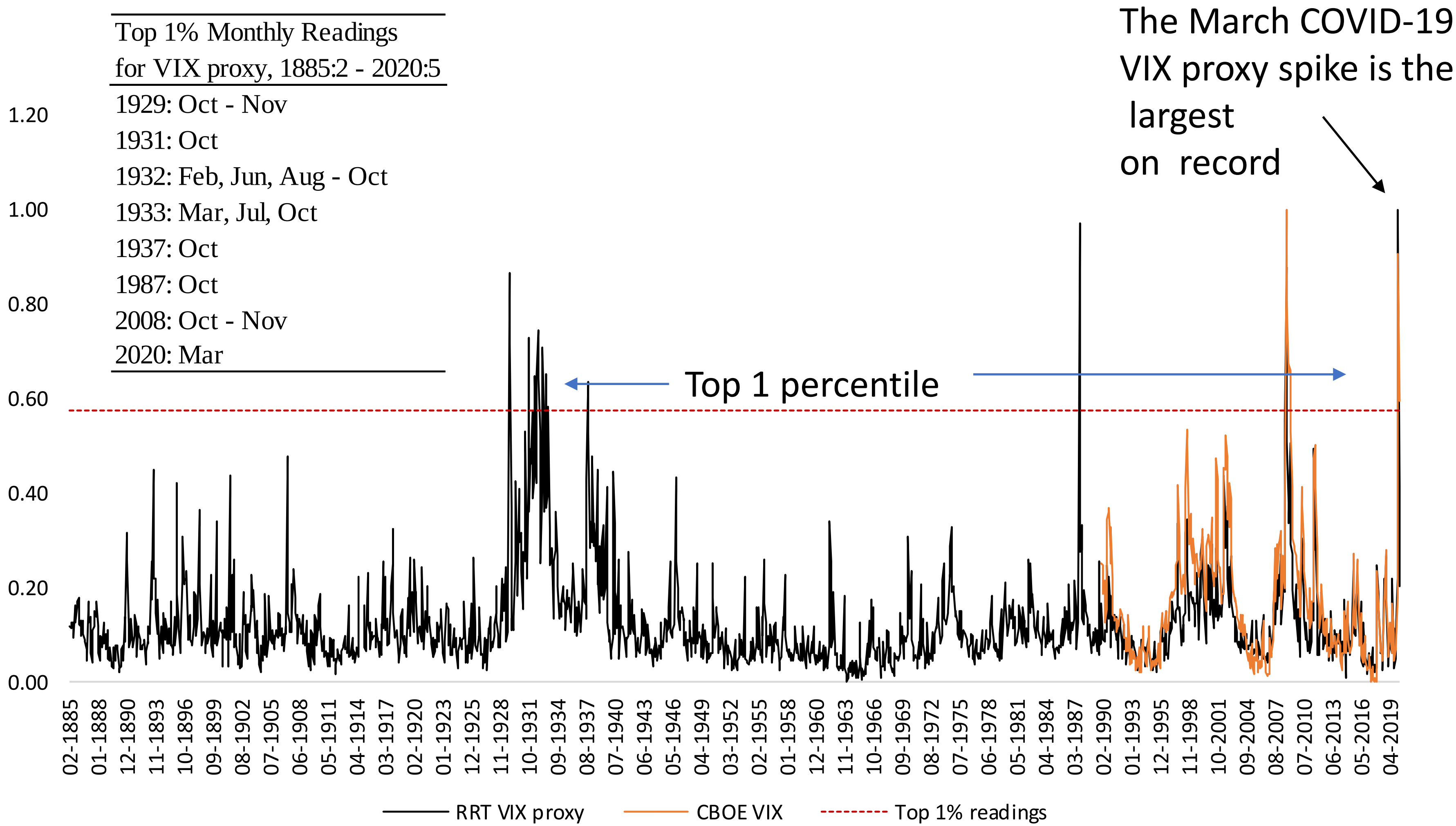
Share of downward revised sovereign outlooks by major rating agencies, 3-month sums 1990:1-2020:5

Number of downgraded sovereigns, 3-month sums 1980:1-2020:5



Sources: Fitch, Moody’s, Standard & Poors, and Trading Economics.

Risk aversion is also a key factor in the sudden stop in capital flows
Volatility and Risk Aversion CBOE VIX and VIX proxy:1885:2-2020:5

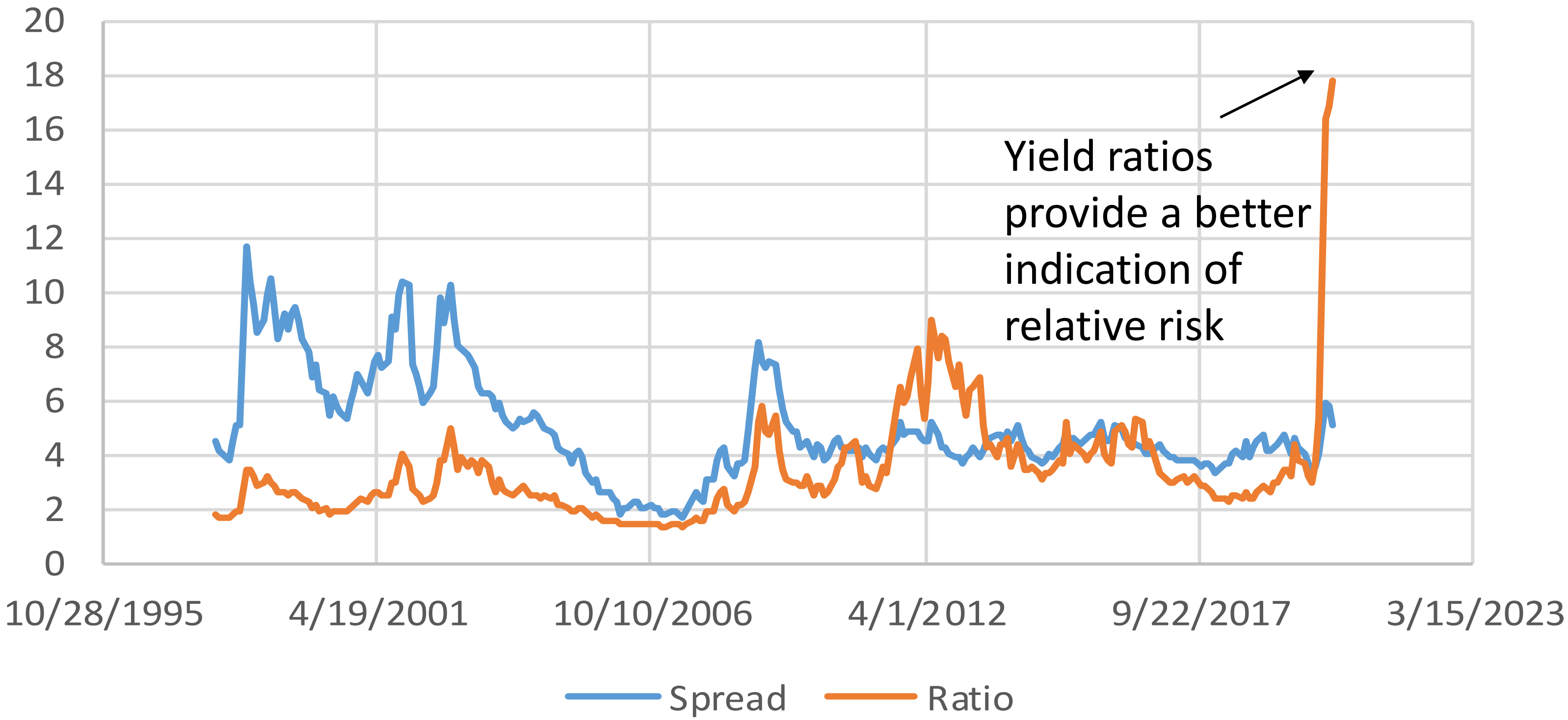


Sources: Reinhart, Reinhart, and Trebesch (2020) based on Schwert (1990), Thomson Reuters EIKON (2019), FRED.

Note: Correlation of CBOE VIX and RRT VIX proxy, 1990-2020 is 0.89. VIX proxies for UK and US were also constructed at an annual frequency for the full 1815-2018 sample.

For comparisons over time (1995-2020) of yields of developing country debt to the US risk-free rate when there is a trend in interest rates, spreads are deceptive… This highlights how comparatively costly it is for developing countries to raise new funds or roll over existing debts.

JPM EMBI+ yield relative to the five-year Treasury yield
percentage points and ratio



Source: Bloomberg, May 31, 2020.

Hidden debts: What to expect

definition of the official sector
mismeasurement
arrears
contingent liabilities
central bank reserves: gross versus net

Hidden debts are unpleasant surprises that when revealed have often undermined the credibility of existing safety nets and set in motion runs

Central bank debt: To this day, even when the numbers are published, these are not included as part of *general government debt* (ie, Argentina's short-term Lebacs). In the event of Euro-area exits, Target2 balances (currently running at around 20-40% of GDP for Greece, Italy, Portugal and Spain) are *external* central bank debt. *Unseen:* In June 1997, the Thai finance minister 'discovered' that the Bank of Thailand had already spent US$ 28 billion out of US$ 30 billion of its international reserves in the course of forward market interventions to defend the baht.

Nonsecuritized, floating debt (arrears): Unpaid bills to suppliers and, in more desperate cases (Russia 1998) unpaid pensions and wages to public sector employees. PEMEX is a more recent example of unpaid wage bills.

Misreporting and other off-balance sheet: Greece-Goldman Sachs debt swaps: Greek dollar and yen-denominated debt was swapped at historical euro exchange rates to cosmetically reduce the overall level of debt.

External debts to China are, at best, partially incorporated in the government accounts of many low and middle-low income developing countries (Horn, Reinhart, and Trebesch, 2019).

Offshore derivative operations of banks: These can leverage banks' holdings of government debt (a significant hidden debt problem during the Mexican banking/peso crisis of 1994-1995). With Mexican bonds (Tesobonos) as collateral, Mexican banks took on short-term dollar debt, that was for the most part unhedged. As the value of the collateral sank, margin calls increased along with rollover risk.

Implicit guarantees and moral hazard:

Puerto Rico (PR) began issuing "Appropriation bonds" in 2000 indirectly through *government-owned entities* and made repayment contingent upon the Legislature's appropriating funds for this purpose. These bonds were not counted as debt under the debt limit. Yet PR appropriation debt was, for practical purposes, guaranteed by the government and charged to its taxpayers.

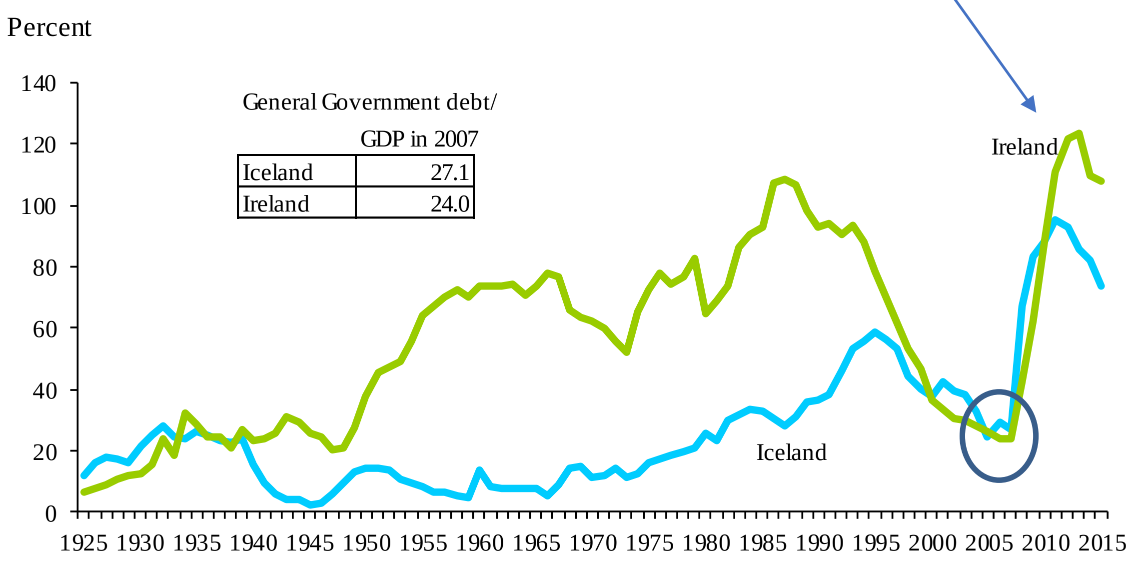
Private sector debt Especially external debt of banks (Diaz Alejandro, 1985) can overwhelm an otherwise healthy fiscal situation (Chile 1981, Iceland, Ireland, Spain, 2007-2008); corporate debt (Korea and Indonesia, 1997).

The extent of the contingent liability problem for corporate debt may itself be underestimated. Coppola, Maggiore, Neiman, and Schreger (2020) highlight the role of corporate debt issued in tax havens not reported in country's official debt statistics.

The (very) old problem of contingent liabilities; public debt was low, but the private sector was highly indebted (domestic and external)

Source: Reinhart (2015)

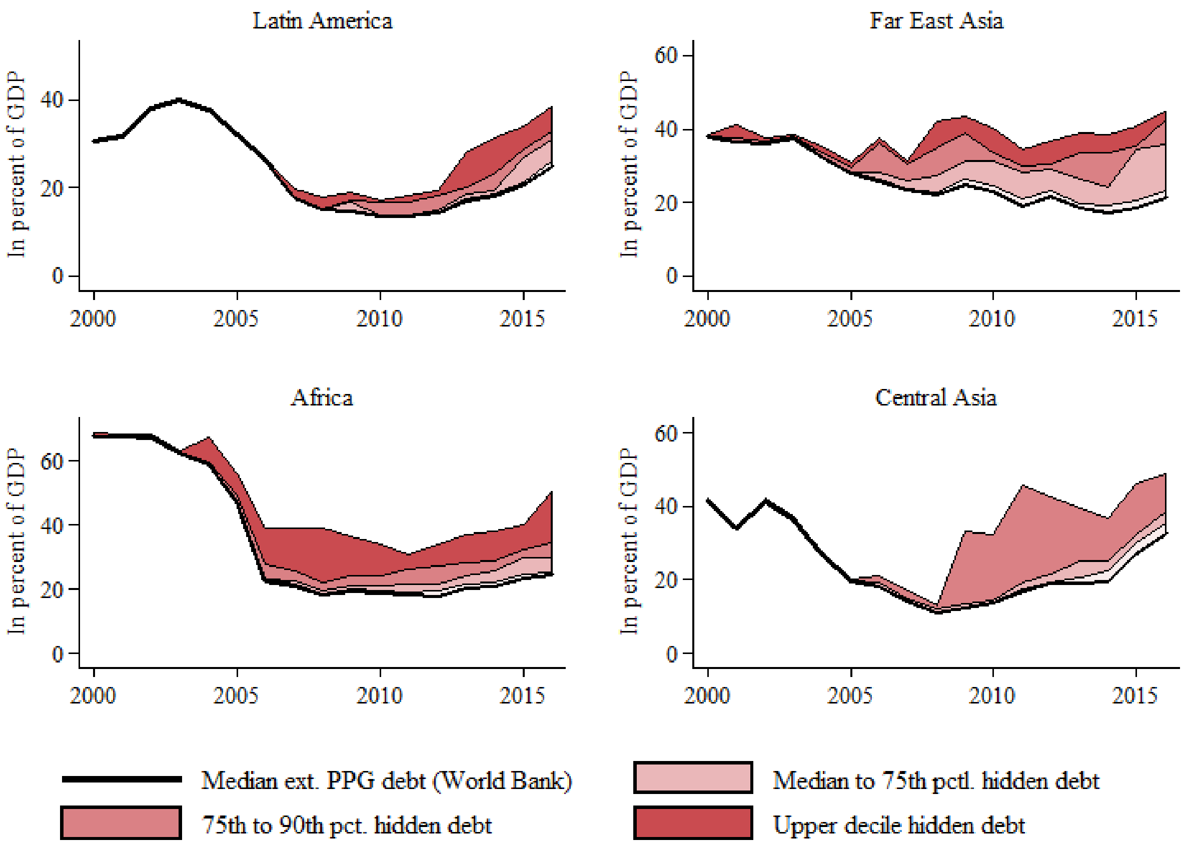
The debt surges reflect the effects of deep recessions (revenue collapse and higher spending) and the bail-out of the financial sector



External debt and estimates of "hidden debts" to China

Horn, Reinhart, and Trebesch (2019, and forthcoming)

Note the scales



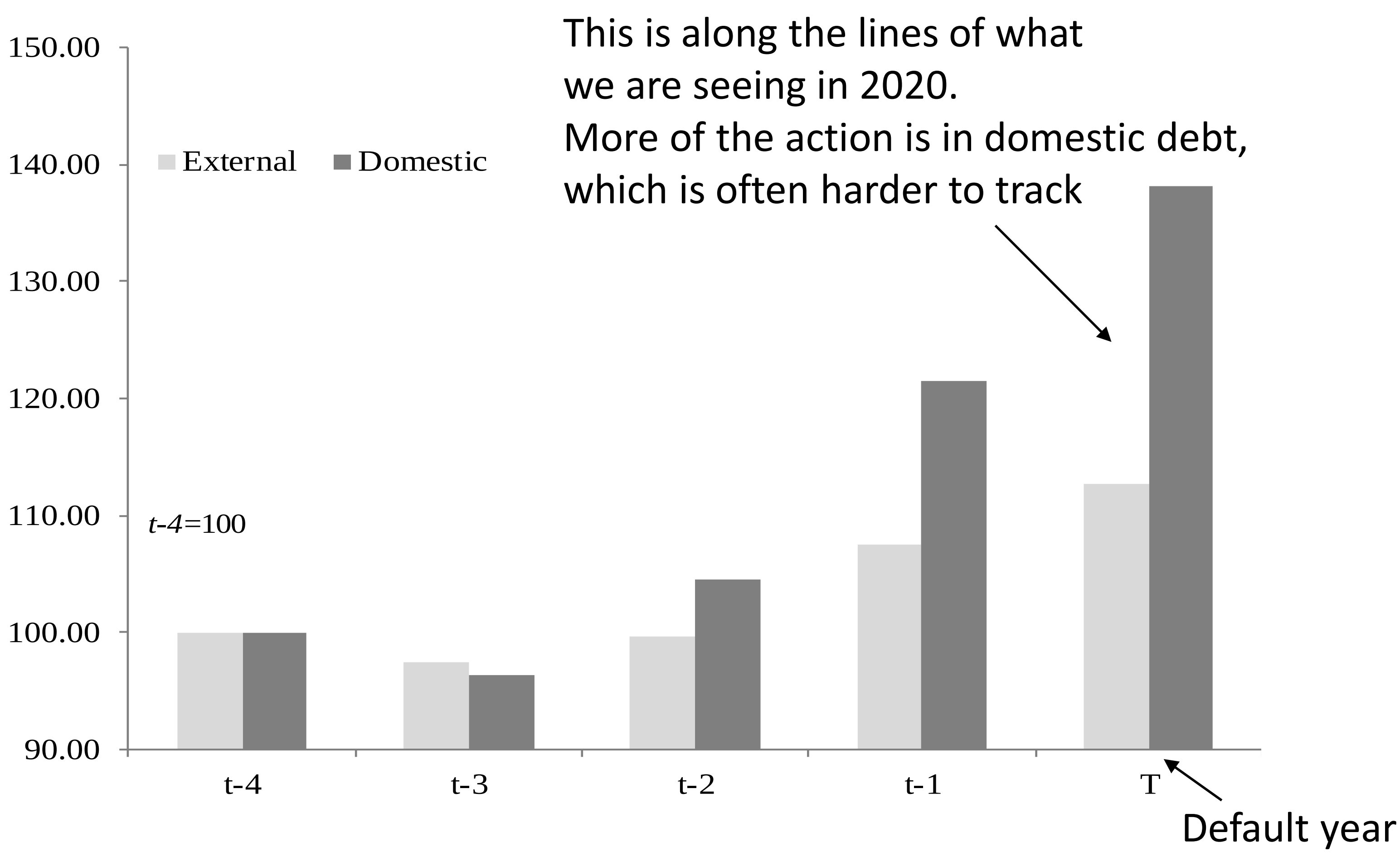
Debt buildups and debt management during crises

Build-up in domestic and external debt as the crisis nears

Debt management issues:

- **the bias to short maturities and roll-over risk**
- **co-ordination with the central bank (big buyer of debt)**
- **currency of denomination**
- **the private sector composition**

The run-up in domestic and external debt on the eve of external default: Eighty-nine episodes, 1827-2003 Source: Reinhart and Rogoff (2009)



Is there a problem with this strategy? The need for central bank and treasury co-ordination on debt management

Central Bank Chief Roberto Campos Neto has said that his preferred version of QE would flatten the yield curve without expanding the monetary base or the bank's balance sheet, by buying long-dated bonds while selling short-dated debt - akin to the Fed's "Operation Twist" in 2011.
https://www.reuters.com/article/us-brazil-economy-qe-analysis/brazil-set-to-start-qe-cautiously-but-may-need-to-bring-out-bazooka-idUSKBN2221G1

Source: Reuters, April 20, 2020

Financial fragility and short-term debt surges on the eve of crises

Among the manifestations of fragility is the change in the maturity composition of the debt. Short-term debts escalate on the eve of banking crises; the ratio of short-term to total debt about doubles from 12 to 24 percent. A similar pattern emerges in the run-up to sovereign defaults. `

Whether the rise in short-term debt reflects growing perceived risk and reluctance by lenders to extend longer term debt, (Broner, Lorenzoni, and Schmukler, 2013 present evidence of the sharp steepening of the yield curve prior to EM crises), or the hope of borrowers that better times and borrowing terms are around the corner (thus underestimating roll-over risks), a higher short-term debt ratio exposes a country to greater risk of a self-fulfilling panics.

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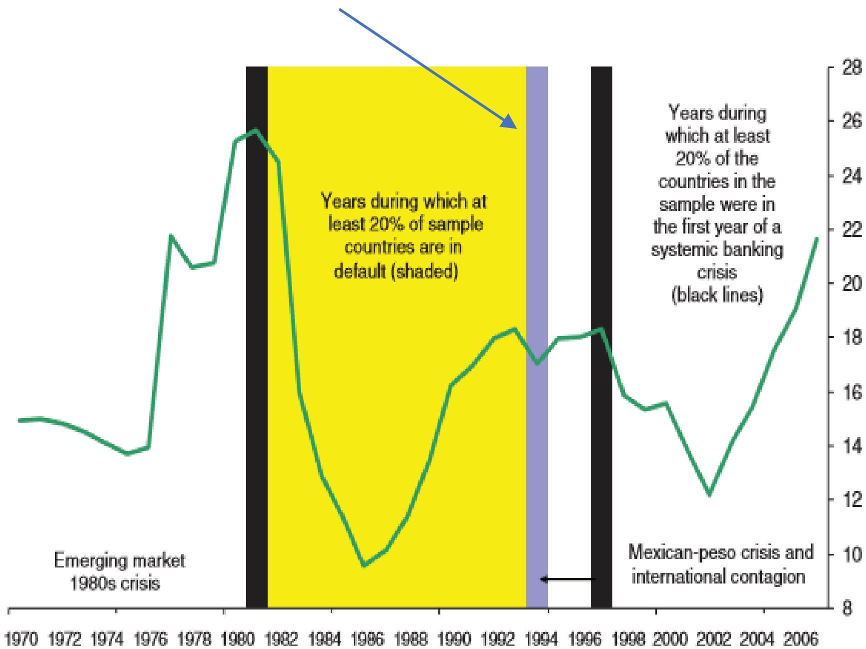
Share of Short-term Gross External Debt (Public plus Private): Emerging Markets, 1970–2009 (in percent)



Banking crises (black bars)

Source: Reinhart and Rogoff (2011).

Temporary debt payment suspension and other options

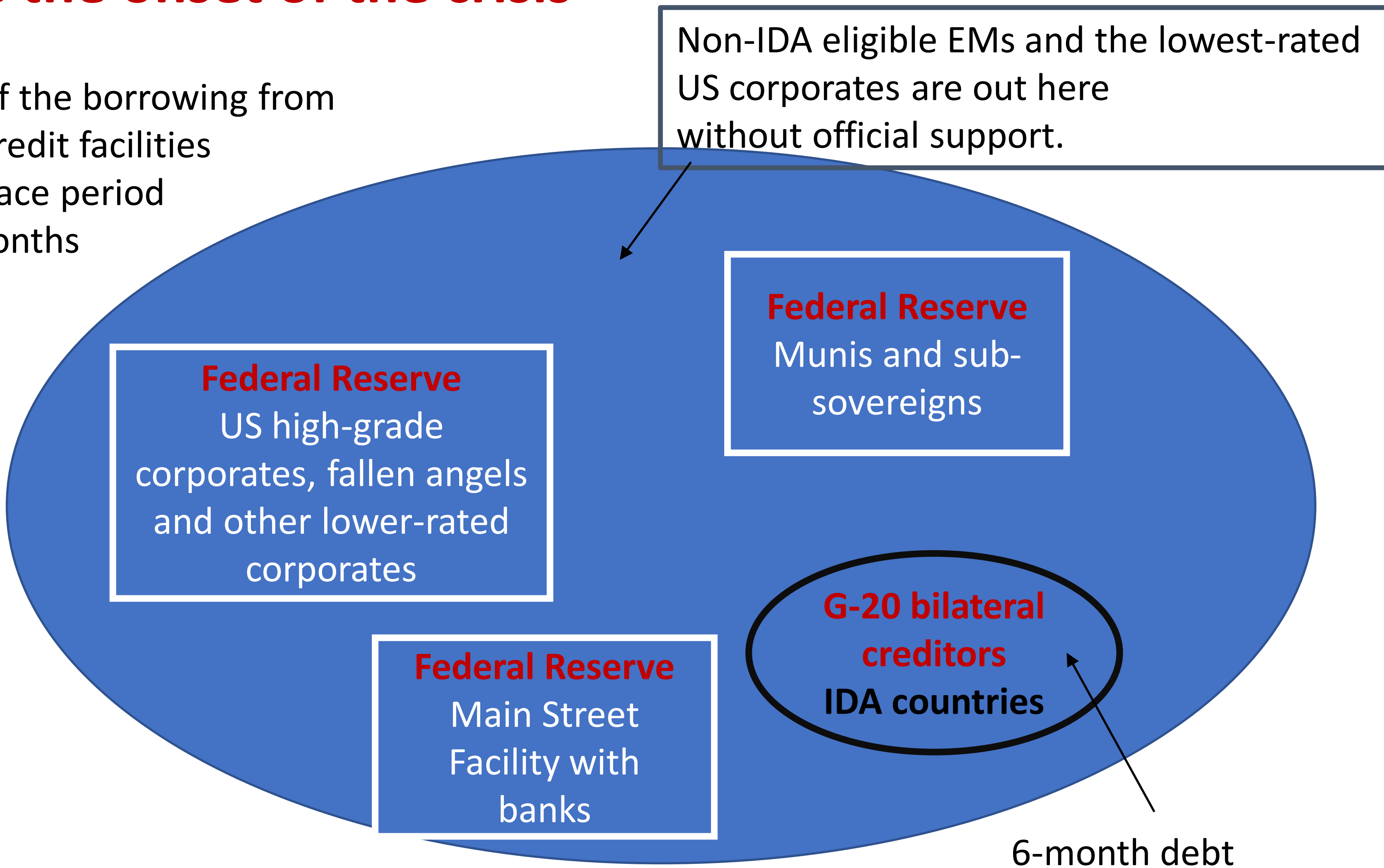
The debtors

The creditors: Where we are

Relative merits of standstills

EMs and frontier economies are in the high-yield universe. Significant segments of that market have official support since the onset of the crisis

Some of the borrowing from Fed's credit facilities offer grace period of 6 months



6-month debt payment moratorium

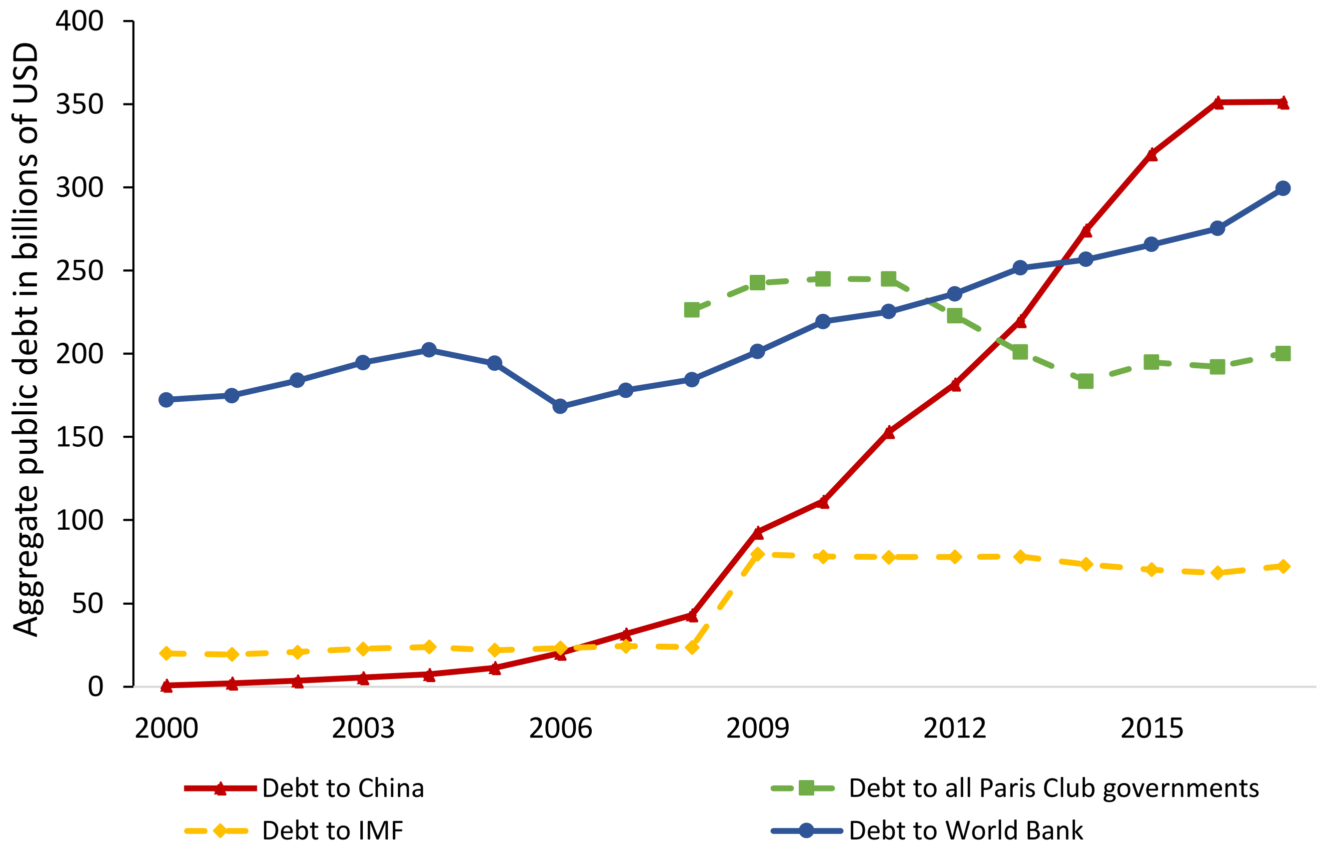
The debtors:

- Current G-20 initiative is limited to IDA countries and participation is on a voluntary basis.
- Take-up by IDA countries has been surprisingly low. Fear of credit rating downgrades has been cited as a reason.
- Fear of greater scrutiny of public accounts that the G-20 initiative includes may be another unspoken reason (remember our hidden debt discussion)
- List of developing nations affected by COVID-19 is much, much longer than the 76 IDA countries
- Within that longer list, several small, tourism-based economies with no capital market access do not qualify for IDA
- Increased risk aversion on the part of investors and credit rating downgrades (as discussed earlier) make borrowing much costlier for emerging markets at a time when financing needs have increased markedly
- Distance to default is shrinking rapidly for many economies.

The creditors: where we are

- Among official bilateral creditors, there is the uncertainty of whether and how China (very important, see chart), Saudi Arabia, and other creditors outside the Paris Club will implement the G-20 standstill. Recently, there are some encouraging signs from the Chinese government on that score.
- Among some of the IFIs (WB included), there is the concern that participation on a standstill would lead to a weakening of the Preferred Creditor Treatment (PCT) possibly jeopardizing the triple A rating of these institutions, which would raise the cost of funding and therefore lending.
- Backpaddling (see Bolton, et. al, 2020): As to the private sector, historically voluntary participation is complicated and often drawn out (more on this later) and more likely to be done on a country-by-country basis.
- A more general approach (see the Bolton Committee) invokes a doctrine of customary international law known as the "state of necessity." The doctrine itself is straightforward -- if a country must breach its international commitments in order to deal with an existential threat (war is the usual culprit), its obligations will be deemed suspended. Commentators argue about whether necessity applies to a state's contractual commitments to private parties or only to its treaty obligations.

China is the most important official creditor of developing and emerging countries: It's participation in any debt relief initiative is key.



Source: Horn, Reinhart, and Trebesch (2020).

On debt service standstills

- Standstills are **NOT a substitute for debt restructuring** if debt sustainability is in question. More of this to follow.
- No historical antecedent to compare to. The 1931 Hoover Moratorium, which lasted 1 year applied only to official WWI debts. The amounts owed were substantial (see Reinhart and Trebesch. 2016) but only applied to about 15 countries.
- Debt servicing burdens are high in many developing and emerging markets (for IDA about 12% of revenues in 2019 and rapidly climbing).
- It limits the immediate debt build-up associated with coping with the pandemic. Many countries were already facing debt problems.
- Can free up resources quickly in an emergency.
- Can provide time to develop a more sustainable debt strategy—if debt restructuring is necessary
- Raises concerns about stigma and credit ratings (even for countries that do not choose not to participate)
- At the moment, it does not help countries which relied on multilaterals and private creditors (even among the IDA countries)
- As noted, it does not help countries that do not meet IDA low-income criteria and this is a GLOBAL crisis.

Other options to provide debt relief (support) beyond new rapid and highly concessional lending by IFIs (these are not mutually exclusive)

- Should multilaterals participate in the standstill? As noted, there is the concern that participation on a standstill would lead to a weakening of the PCT possibly jeopardizing the triple A rating of IFIs, which would raise the cost of funding and therefore lending. But failure to do so raises credibility issues with private creditors and some governments the "Do as I say but not as I do" problem.
- An IFI facility to buy sovereign external debt (modeled after what major central banks have done). Reduces some the recent distortions in the high-yield market, would reduce odds of fire sales, and provide a more stable creditor base (can reduce rollover risks). Problem is scale, as IFIs are capital-constrained.
- Should IFIs lobby to have the major central banks buy their debts (they are buying far riskier assets already)? This would provide support for fund-raising at a critical time.
- Credit rating agencies are notoriously procyclical; IFIs were designed to be countercyclical (relative to private lending). Should credit rating agencies exert such influence over these institutions?

Undoing debt overhangs with a focus on debt restructuring

Menu of options

What to expect from debt restructuring

- **Magnitude of haircuts**
- **Length of default spells and number of negotiations**
- **Magnitude of debt relief (and type)**
- **Re-access to external capital and aftermath**

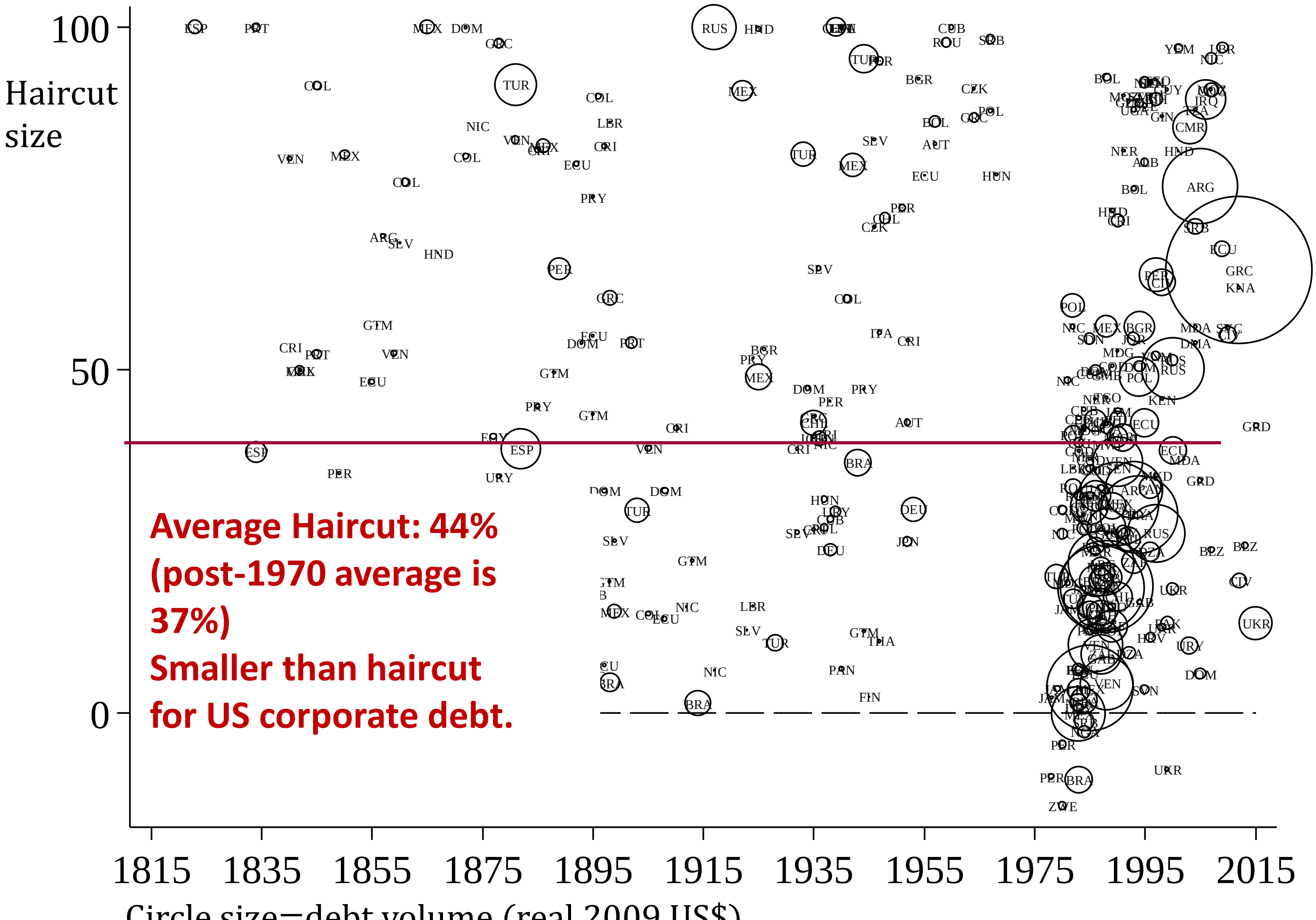
Undoing debt overhangs: Menu of options

- Debt/GDP ratios have been reduced by:
  - (i) economic growth;
  - (ii) fiscal adjustment/austerity;
  - (iii) explicit default or restructuring;
  - (iv) a sudden surprise burst in inflation; and
  - (v) a steady dosage of financial repression that is accompanied by an equally steady dosage of inflation.
  - (*Options (iv) and (v) are only viable for domestic-currency debts*).

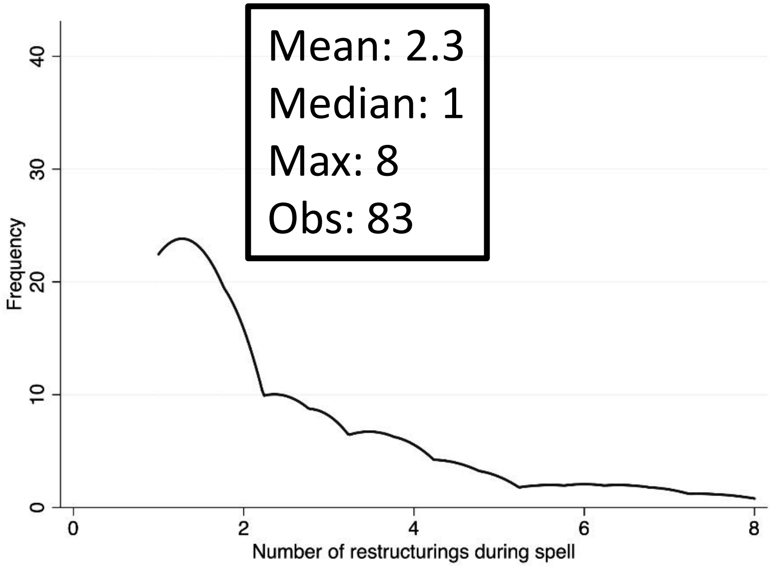
This is what I am going to focus on

200 years of haircuts: 1815-2016

Meyer, Reinhart, and Trebesch (2019)



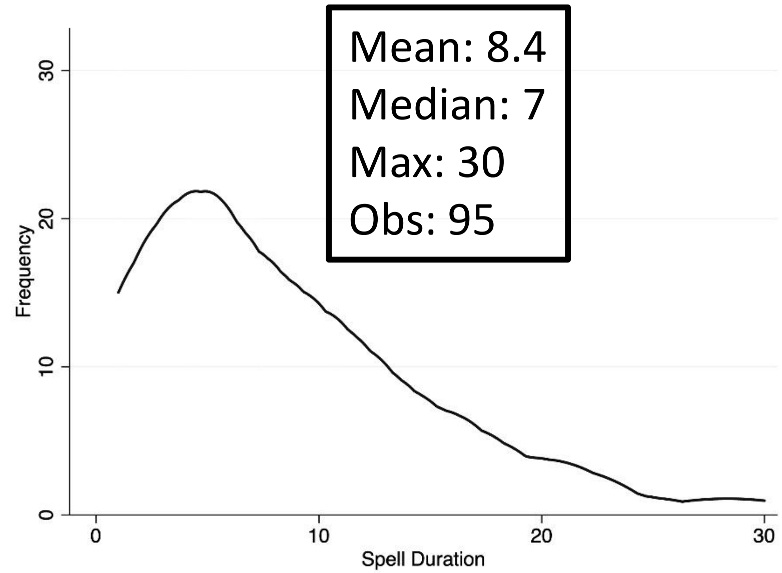
The first restructuring is often not enough to restore debt sustainability (≈ 70% require more than 2 restructurings)



Source: Clemens, Mayer, Reinhart, and Trebesch (forthcoming, 2020)

Debt restructurings with private creditors can drag on. For about 2/3rds of cases it takes over 4 years.

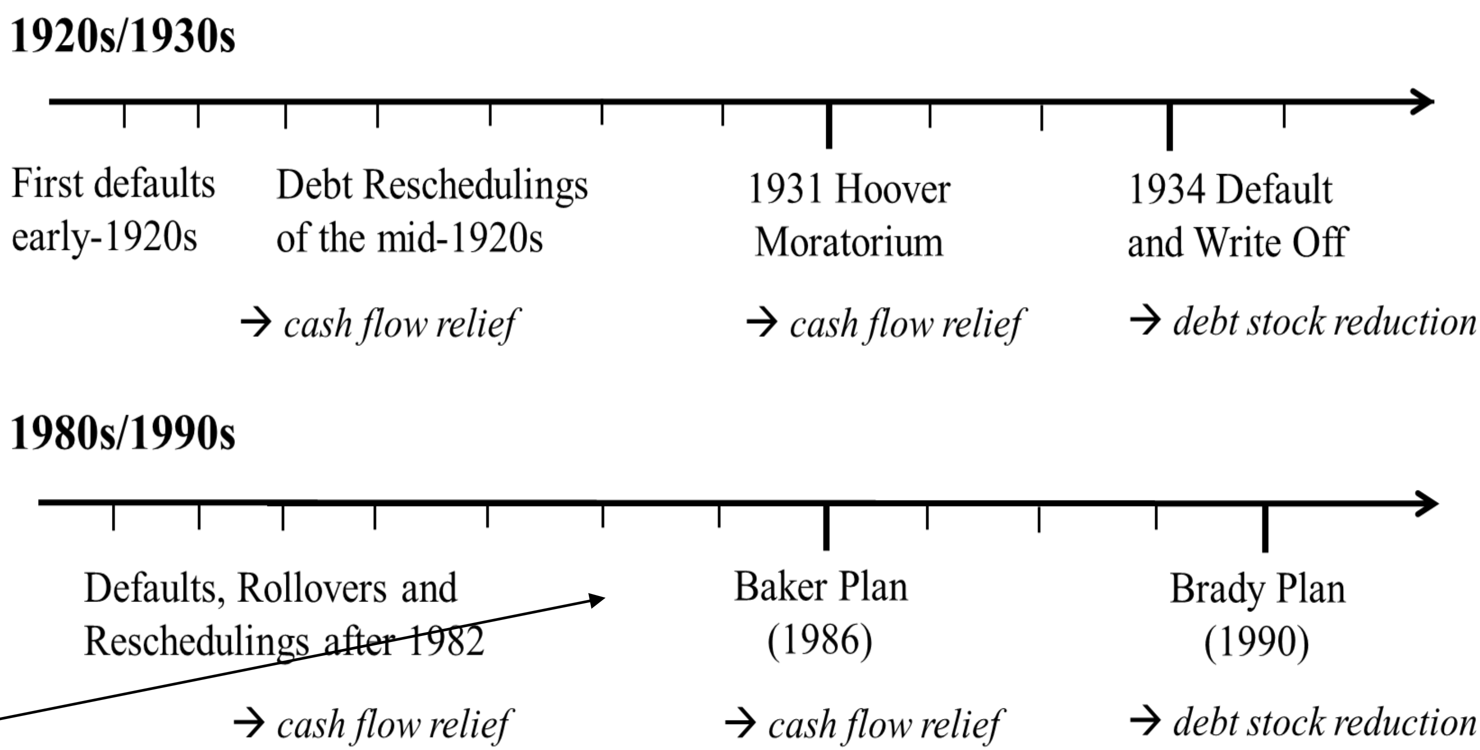
In years



Note: Cote D'Ivoire holds the post-WWII record (1983-2012)

Stylized crisis timeline of the 1920s/1930s and 1980s/1990s

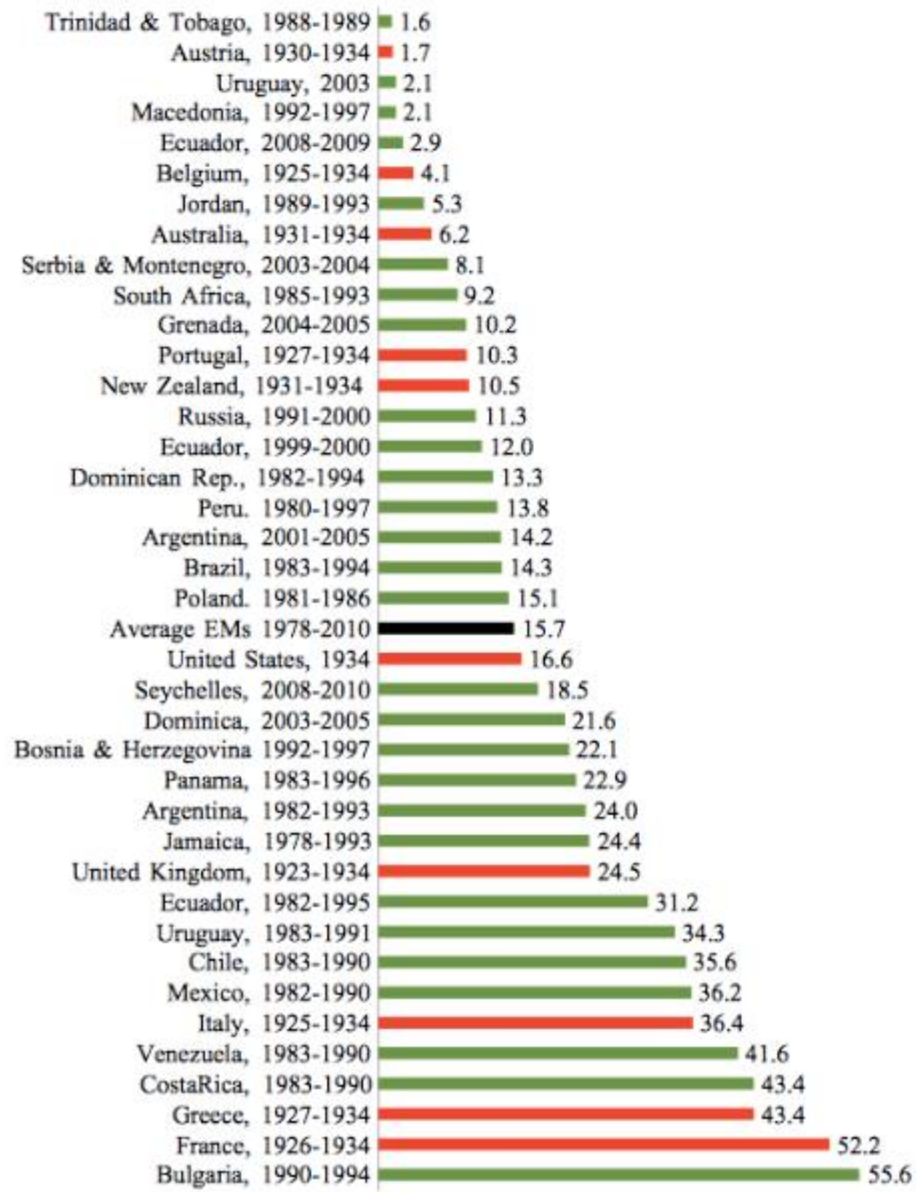
Source: Reinhart and Trebesch (2014)



Multiple restructurings were commonplace (Brazil had 6 in the 1980s and Poland 8)

Default, restructuring, and debt relief: World War I debt to the US and the UK, 1934, emerging markets, 1978-2010 (debt relief as a percent of GDP)

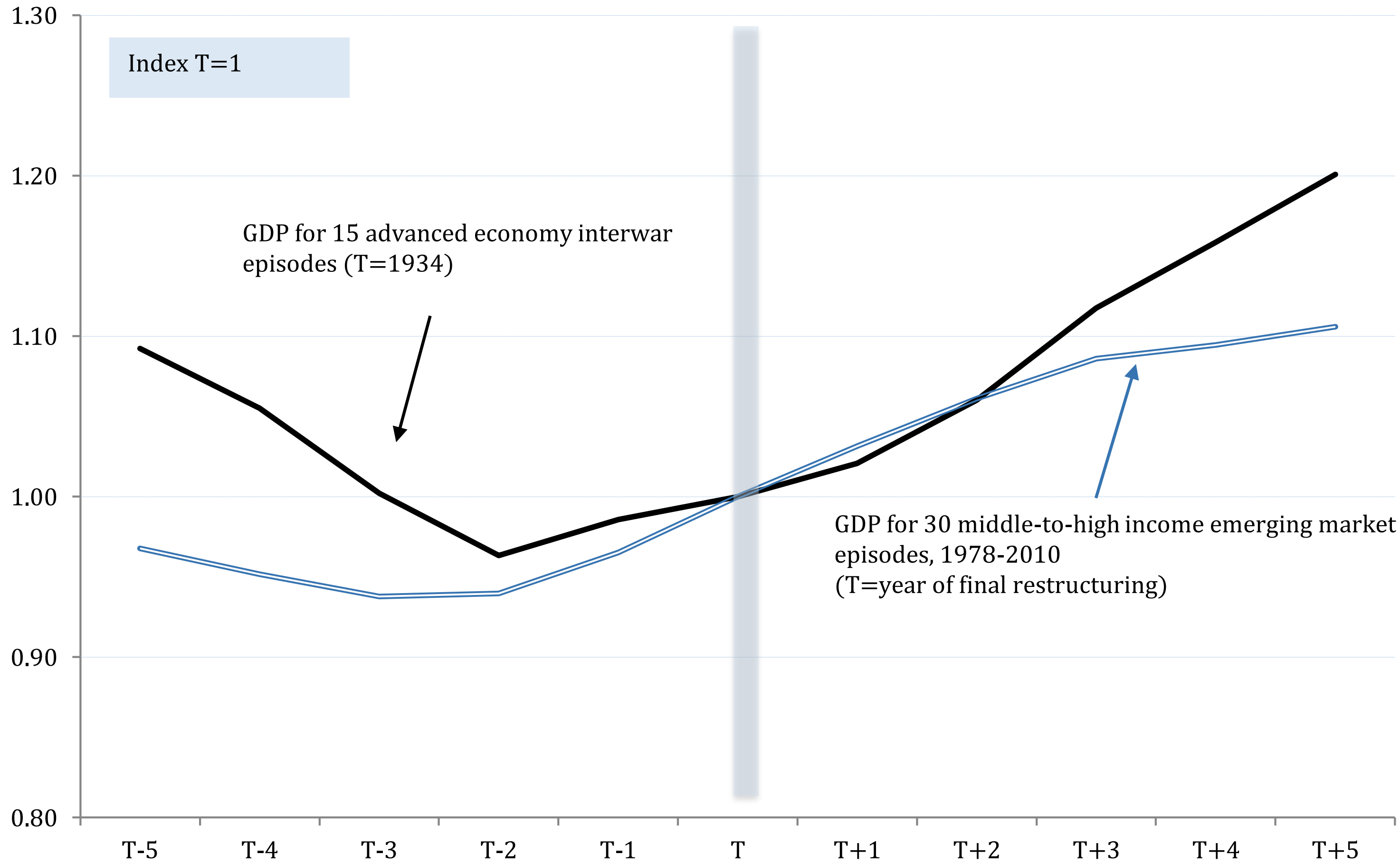
Sources: Reinhart and Trebesch (2014 and 2016)



Real per capita GDP around debt relief events (exit from default) in middle income emerging markets (1978-2013) and advanced economies (1934)

10-year window around debt relief event, level of real per capita GDP at T=1

Sources: Reinhart and Trebesch (2014 and 2016)



A note on banking crises—which are proliferating at the moment

Apart from dealing with sovereign debt challenges—many countries will be facing systemic banking crises.

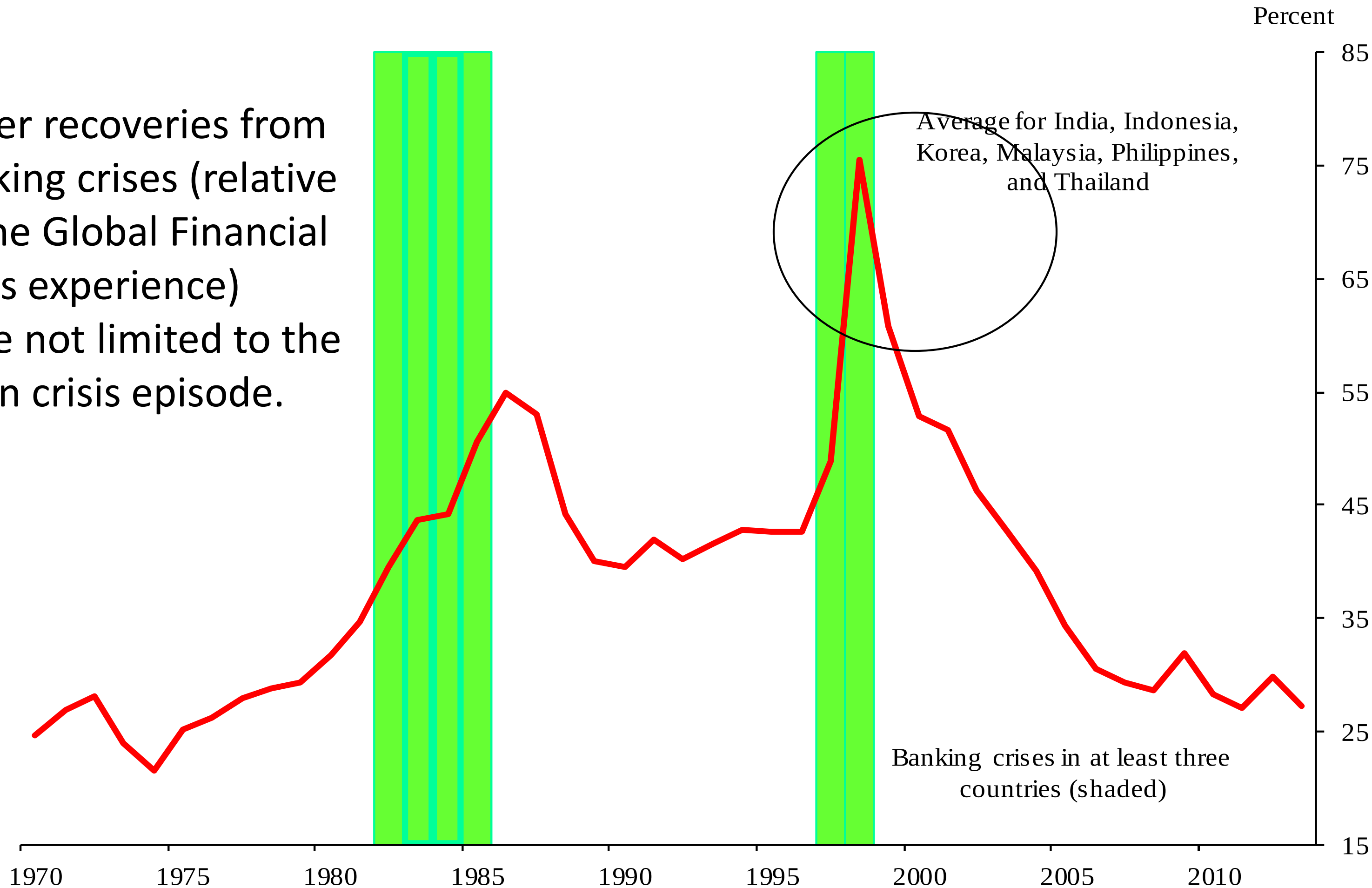
Banking crisis resolution is importantly about dealing with private debt.

If I am asked the question: What factors made the 2008-2009 crisis so protracted in Europe?

My response includes: That an often neglected but key deterrent to recovery was the lack of deleveraging and write-downs of nonperforming assets even as late as almost a decade later.

Rapid deleveraging and banking crisis resolution in the aftermath of the Asian Crisis: External public and private debt in 6 Asian economies, 1970-2013 (% of GDP)

Faster recoveries from banking crises (relative to the Global Financial Crisis experience) were not limited to the Asian crisis episode.



Source: Reinhart and Tashiro (2014)

Some related reflections on crisis resolution

(see also, How we handle bad debts will determine success of economic recovery, Reinhart (2020) https://www.hks.harvard.edu/faculty-research/policy-topics/development-economic-growth/dissecting-coronavirus-economic-impact)