

A Decade of Debt

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Outline: Variations on debt themes

Most advanced economies

Debt overhang, deleveraging, unemployment, double dips?

The European risks

From financial crash to debt crisis—more restructurings

Major emerging markets

The “capital inflow problem”

A global issue

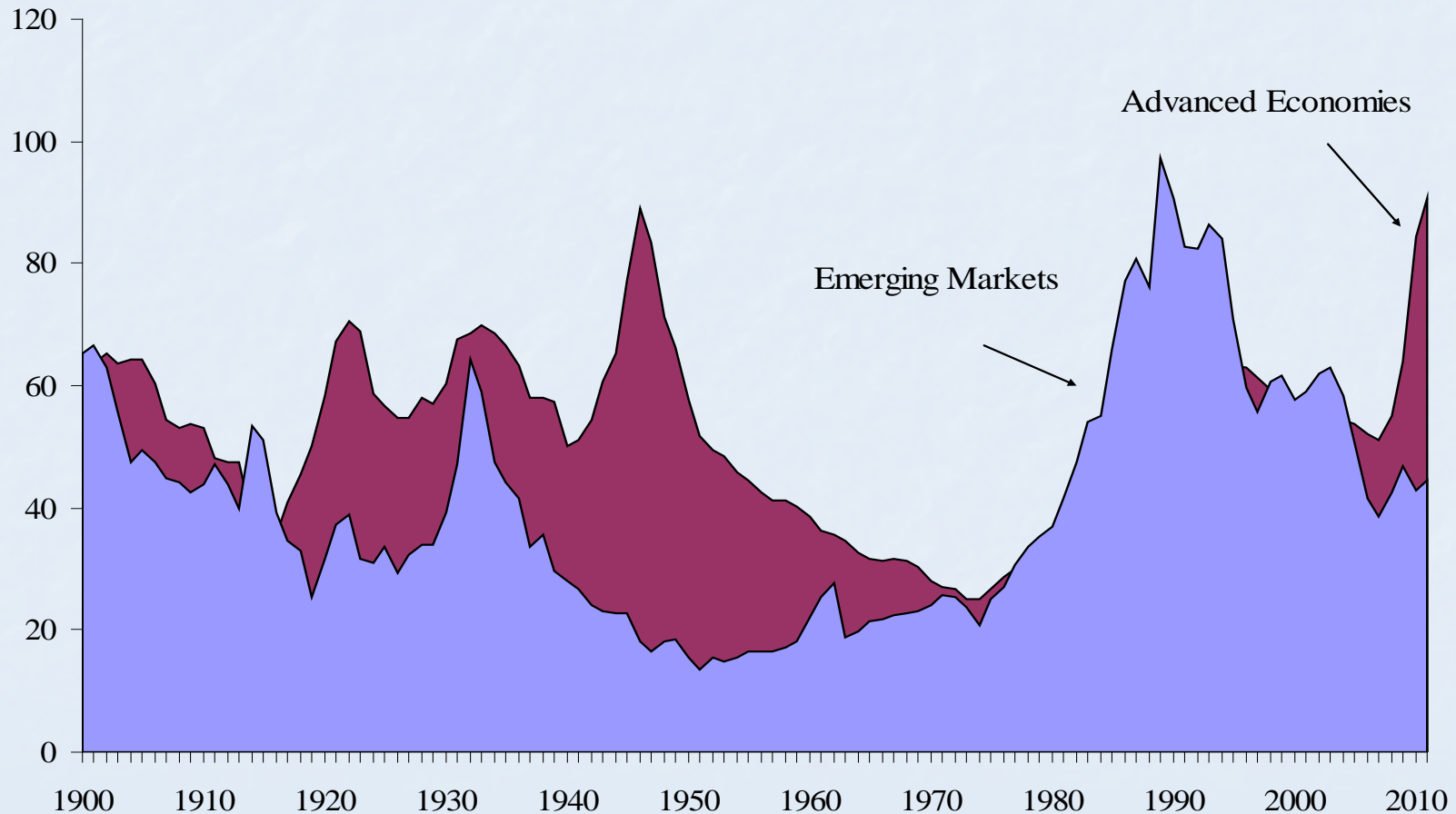
The return of financial repression?

**In the spirit of Jan Tinbergen,
this lecture connects at least
three of his recurring themes...**

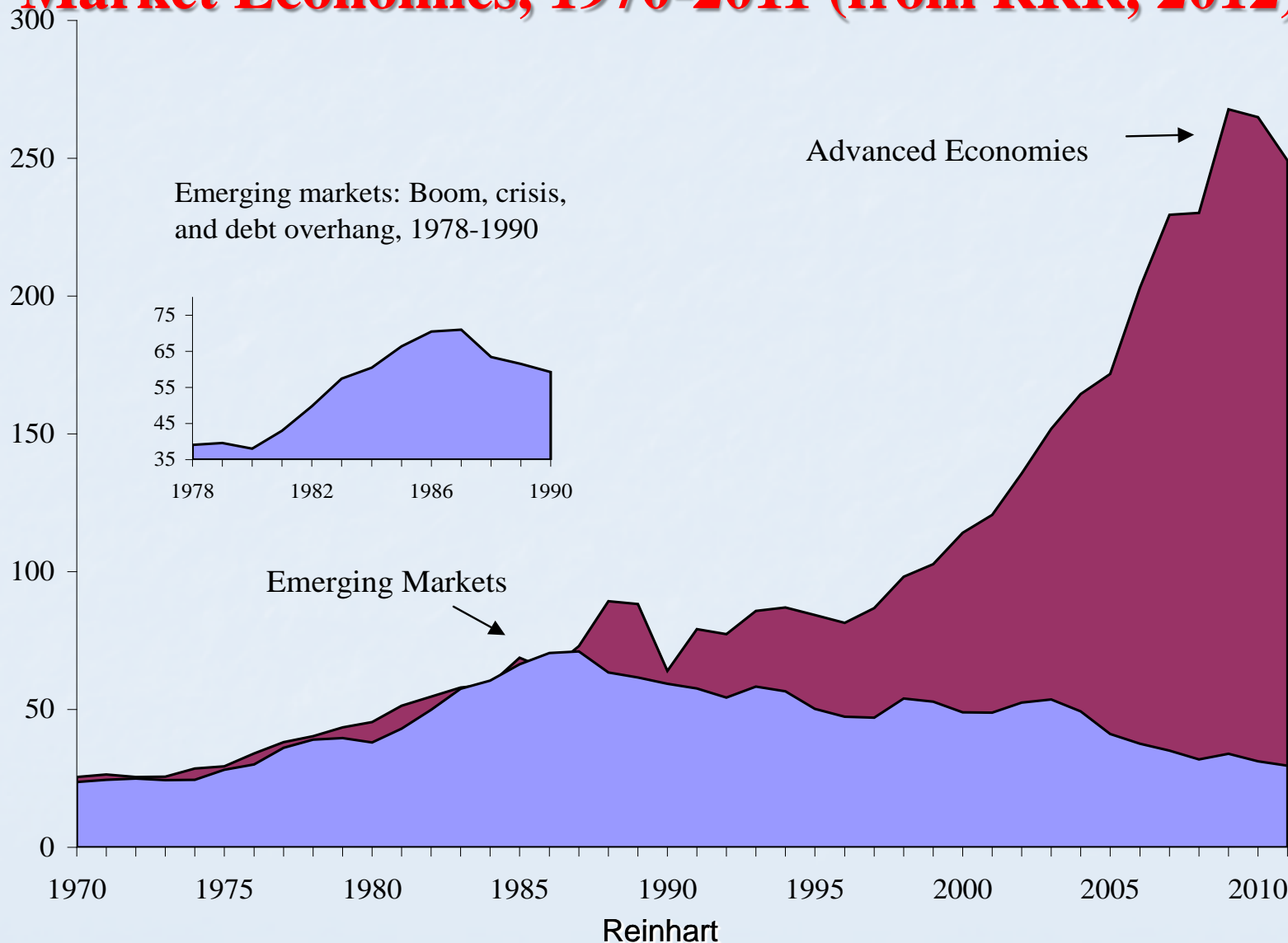
- **Business cycles (gone sour)**
- **A global—North-South scope**
- **Lessons from the Past...**

Advanced economies:
**Debt Overhang,
deleveraging,
unemployment, double dips?**

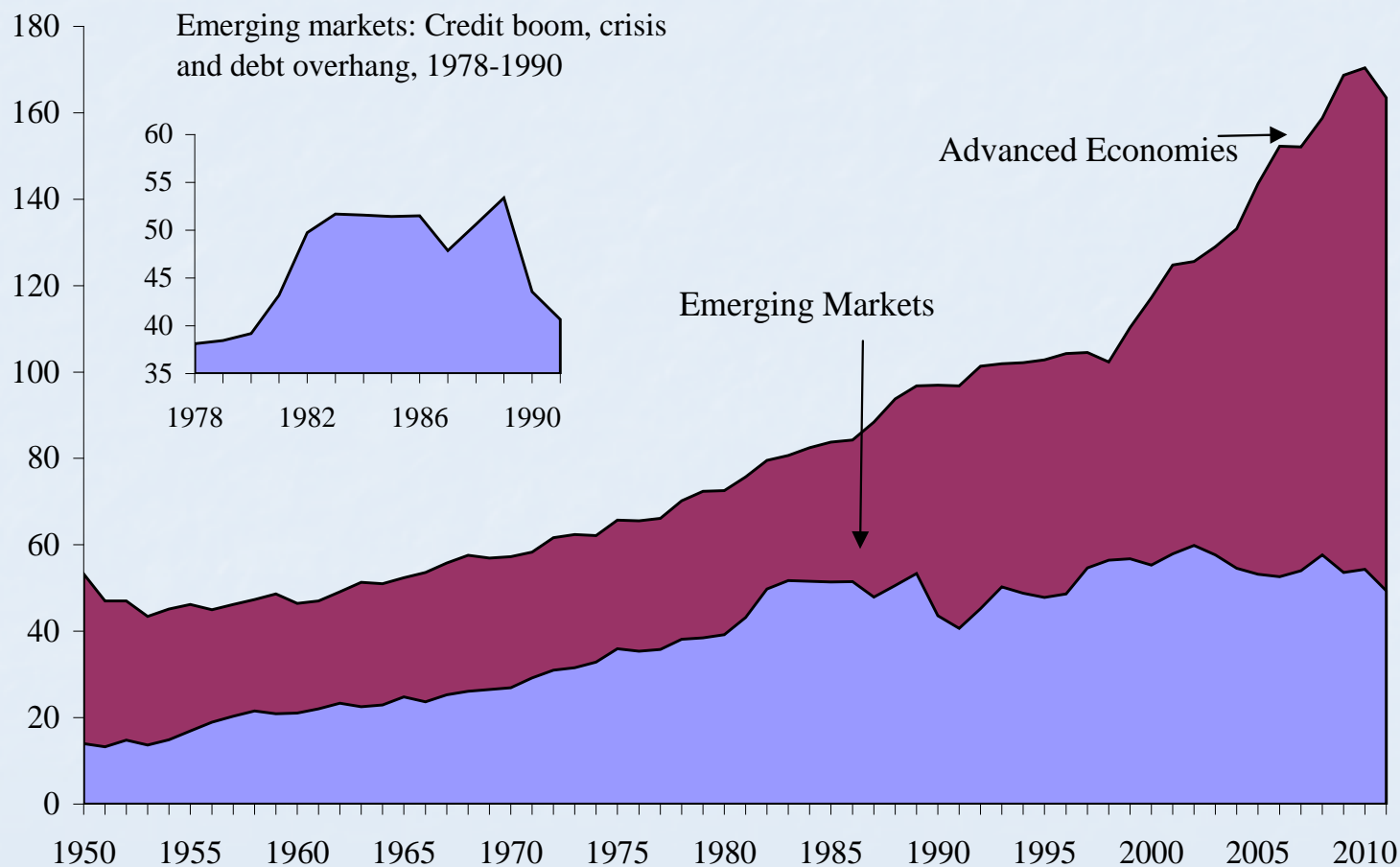
Gross Central Government Debt as a Percent of GDP: Advanced and Emerging Market Economies, 1900-2011 (unweighted averages, from RRR, 2012)



Gross Total (Public plus Private) External Debt as a Percent of GDP: 22 Advanced and 25 Emerging Market Economies, 1970-2011 (from RRR, 2012)



Private Domestic Credit as a Percent of GDP: 22 Advanced and 28 Emerging Market Economies, 1950-2011 (from RRR, 2012)



Real per capita GDP *growth*

(from Reinhart and Reinhart)

Real per capita GDP *growth rates* are significantly lower during the *decade* following severe financial crises and the synchronous world-wide shocks.

The median *post-financial* crisis GDP *growth decline* in advanced economies *is about 1 percent.*

(from about 3.1 to 2.1 percent per annum)

**In 7 of 15 episodes there was a
double dip**

*The renewed weakness had
“external origins”*

Unemployment rates (from RR)

In the ten-year window following severe financial crises, **unemployment rates** are significantly higher than in the decade that preceded the crisis.

The rise in unemployment is most marked for the five advanced economies, where the **median** unemployment rate is about **5 percentage points higher**.

(from 2.7 to 7.9 percent)

**In ten of the fifteen post-crisis episodes,
unemployment has not fallen back to its
pre-crisis level, not in the *decade* that
followed...**

Deleveraging

Deleveraging is often *delayed* and is a *lengthy process lasting about seven years*. The decade that preceded the onset of the 2007 crisis fits the historic pattern.

If deleveraging of private debt follows the tracks of previous crises, credit restraint will damp employment and growth for some time to come.

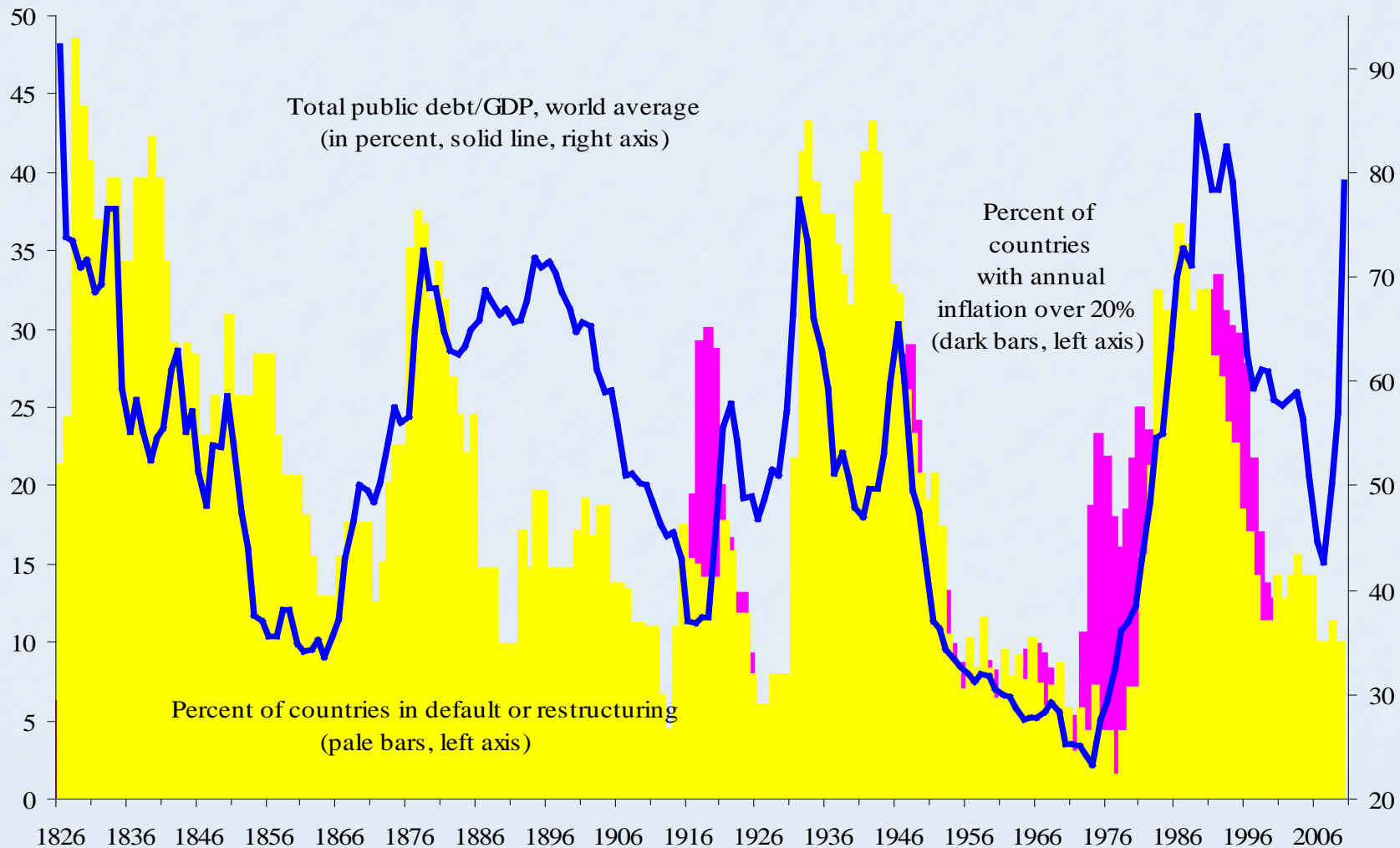
The European risks
—more restructurings?

**Historically, public debt
buildups have often ended
in sovereign debt crises**

*There is a systematic link between
debt/GDP and the incidence of
default*

Sovereign Default, Total (domestic plus external) Public Debt, and Inflation Crises: World Aggregates, 1826-2010 (debt % of GDP)

Reinhart and Rogoff (2011)



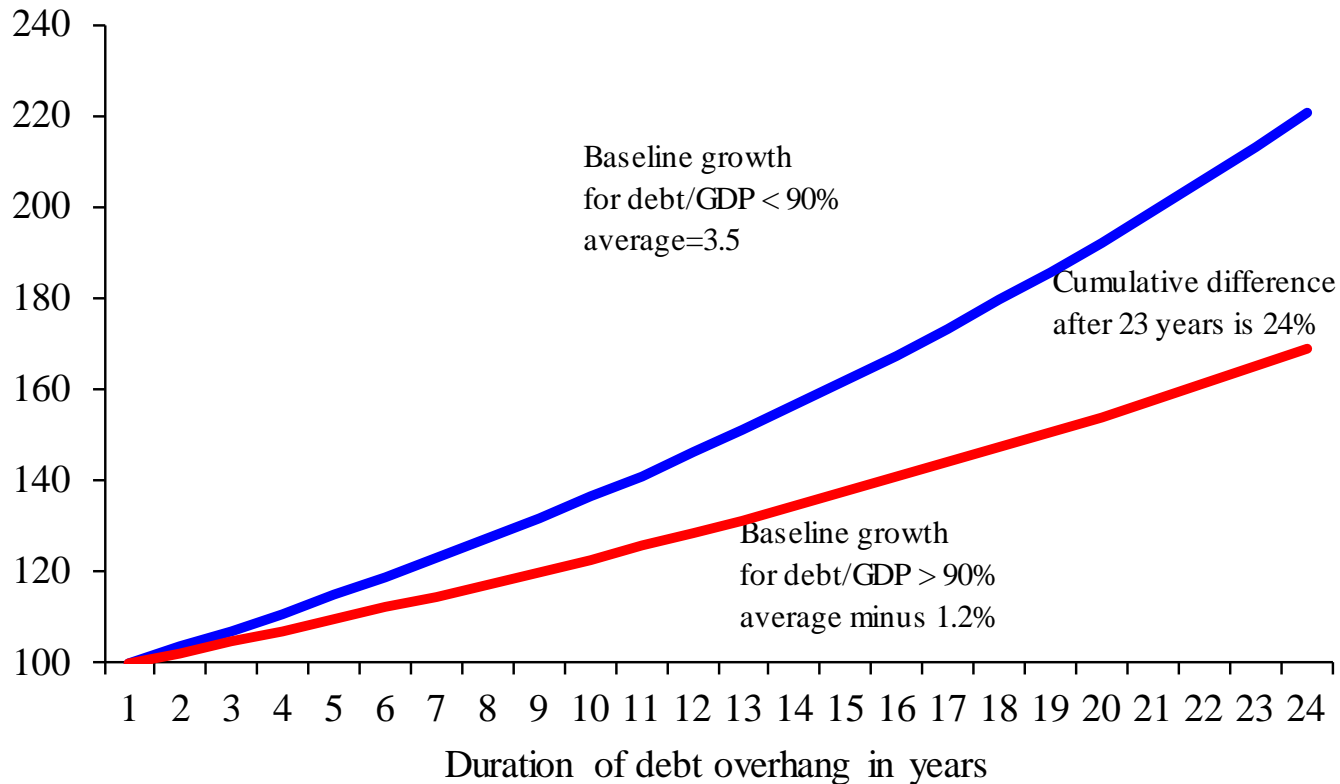
**Our main findings on
debt overhangs are:**

Duration of debt overhangs

- Debt overhangs are protracted...
- **20** of the **26** episodes lasted **more than a decade.**
- The **6** shorter episodes lasted about **7 years** (*5 of these were after WWI and WWII*)
- Across all cases the **average duration is 23 years.**

Real GDP and Debt Overhangs: Basic Calculus of Cumulative Effects

Real GDP
Index (first year =100)

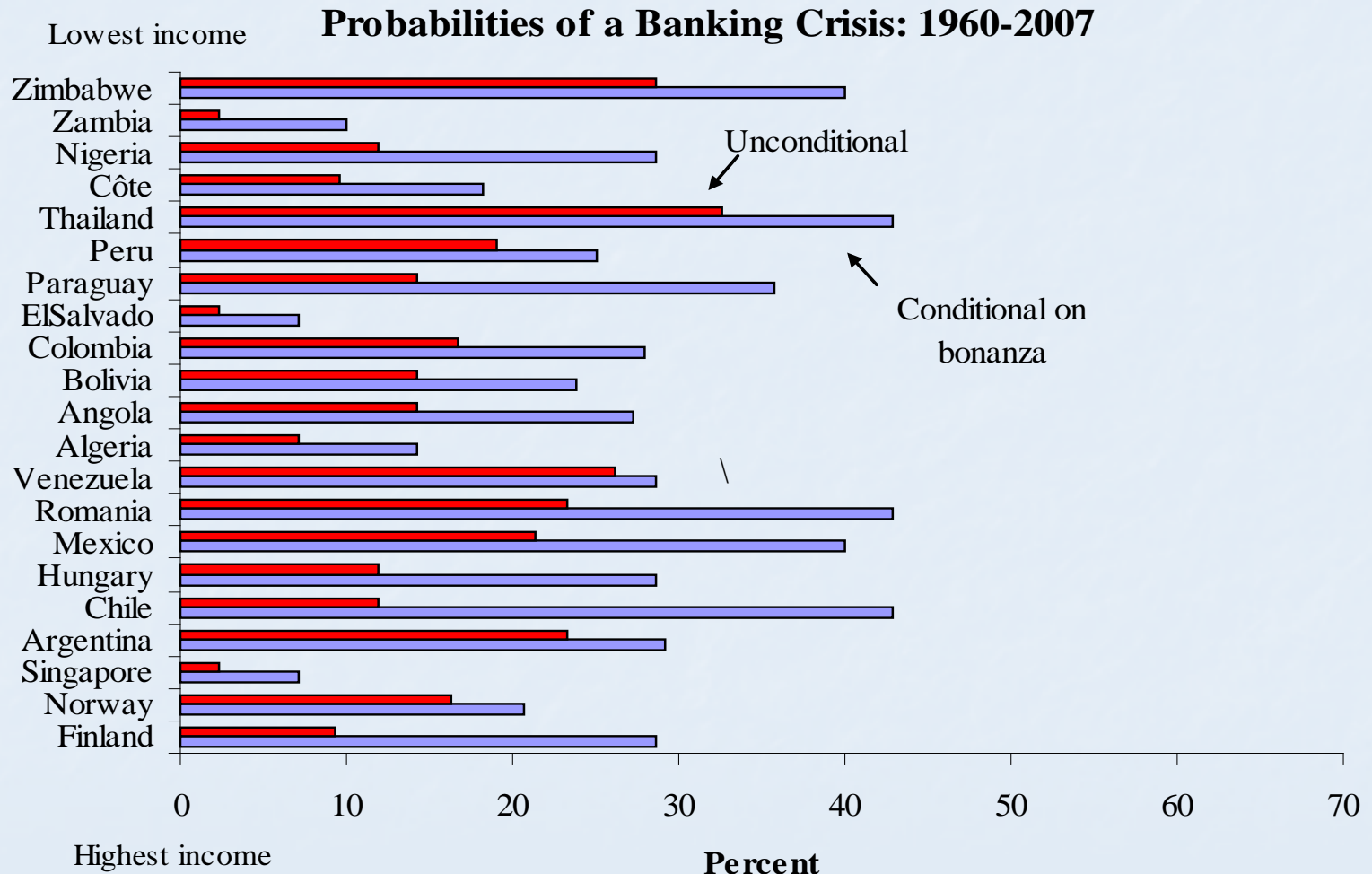


Major emerging markets

**The “capital inflow
problem” again?**

**Sustained large capital inflows
can be *too much of a good
thing...***

Are capital flow bonanza episodes more crisis prone? Banking crises



A global issue

**The return of financial
repression?**

Throughout history, 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).

Financial repression

... includes directed lending to government by captive domestic audiences (such as pension funds), explicit or implicit caps on interest rates, regulation of cross-border capital movements, and (generally) a tighter connection between government and banks.

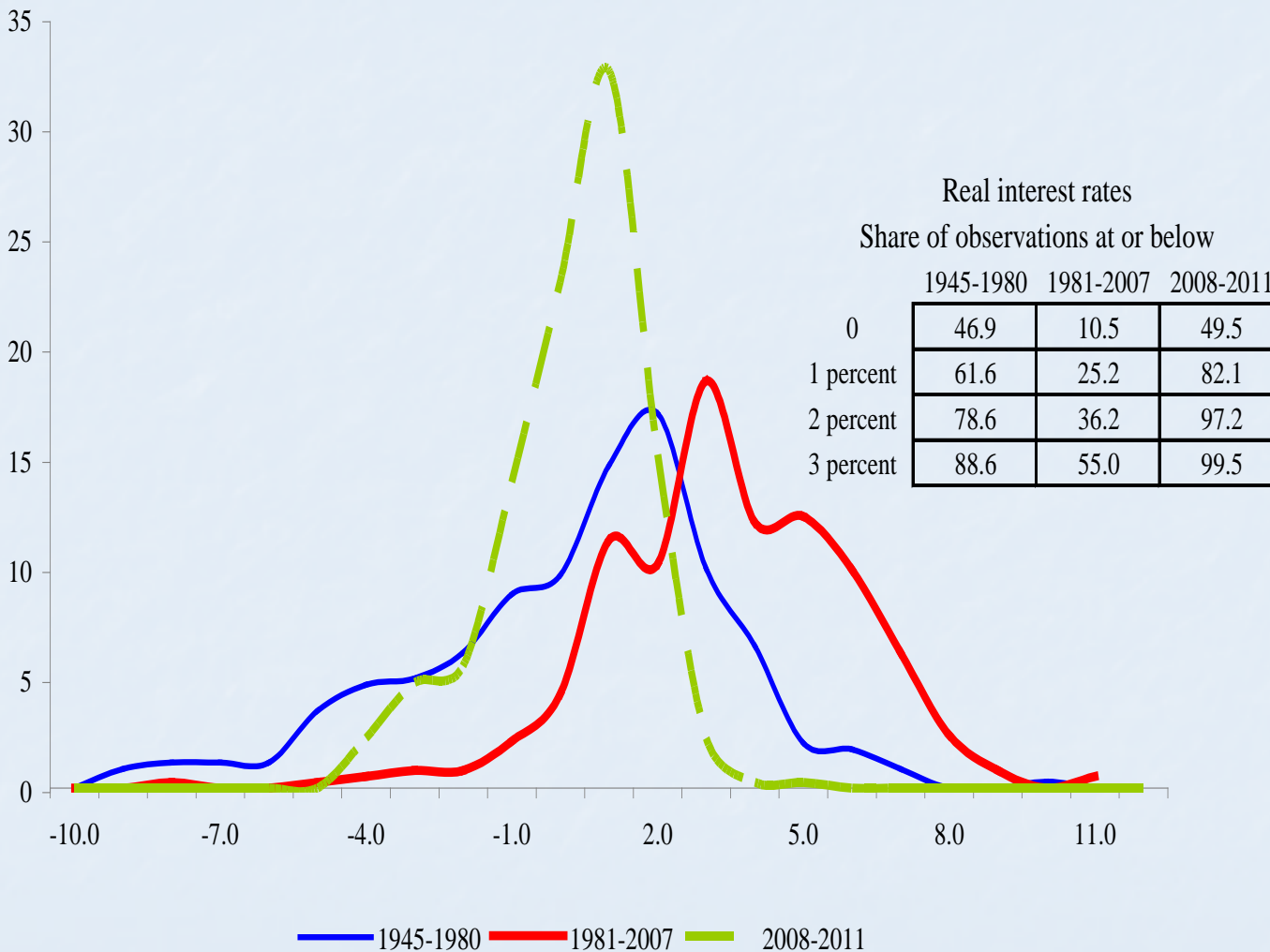
It is a subtle type of debt restructuring...

Main results of Reinhart and Sbrancia (2011)

In the heavily regulated financial markets of the Bretton Woods, restrictions facilitated a sharp and rapid reduction in public debt/GDP ratios from the late 1940s to the 1970s.

Low nominal interest rates reduced debt servicing costs while a high incidence of negative real interest rates liquidated the real value of government debt.

Real Interest Rates Frequency Distributions: Advanced Economies, 1945-2011



Share of “Outside” Marketable U.S. Treasury Securities plus Government Sponsored Enterprises (GSEs) Securities: End-of-period, 1945-2011

