

# Reflections on Debt: A Global Perspective

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# This presentation draws on:

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Reinhart, Carmen M. and Kenneth Rogoff, “**A Decade of Debt,**” Policy Analyses in International Economics No. 95 , September 2011.

Reinhart, Carmen M. and Vincent R. Reinhart, “**After the Fall,**” forthcoming in Federal Reserve Bank of Kansas City Economic Policy Symposium, *Macroeconomic Challenges: The Decade Ahead* at Jackson Hole, Wyoming, on August 26-28, 2010.

Reinhart, Carmen M., Jacob Funk Kirkegaard, and M. Belen Sbrancia, “**The Liquidation of Government Debt,**” Financial Repression Redux, *Finance and Development*, June 2011.

# Themes: Challenges in the aftermath of the crisis

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- ***The advanced economies:*** Public and private debt overhang, deleveraging, lower growth and high unemployment
- ***The emerging markets:*** Sustained large capital inflows, inflationary pressures, overheating/bubble risks

# Themes: Variations on debt themes

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- From financial crash to debt crisis:

*The European risks*

- Growth in a time of debt:

*Most advanced economies*

- The “capital inflow problem:”

*Major emerging markets*

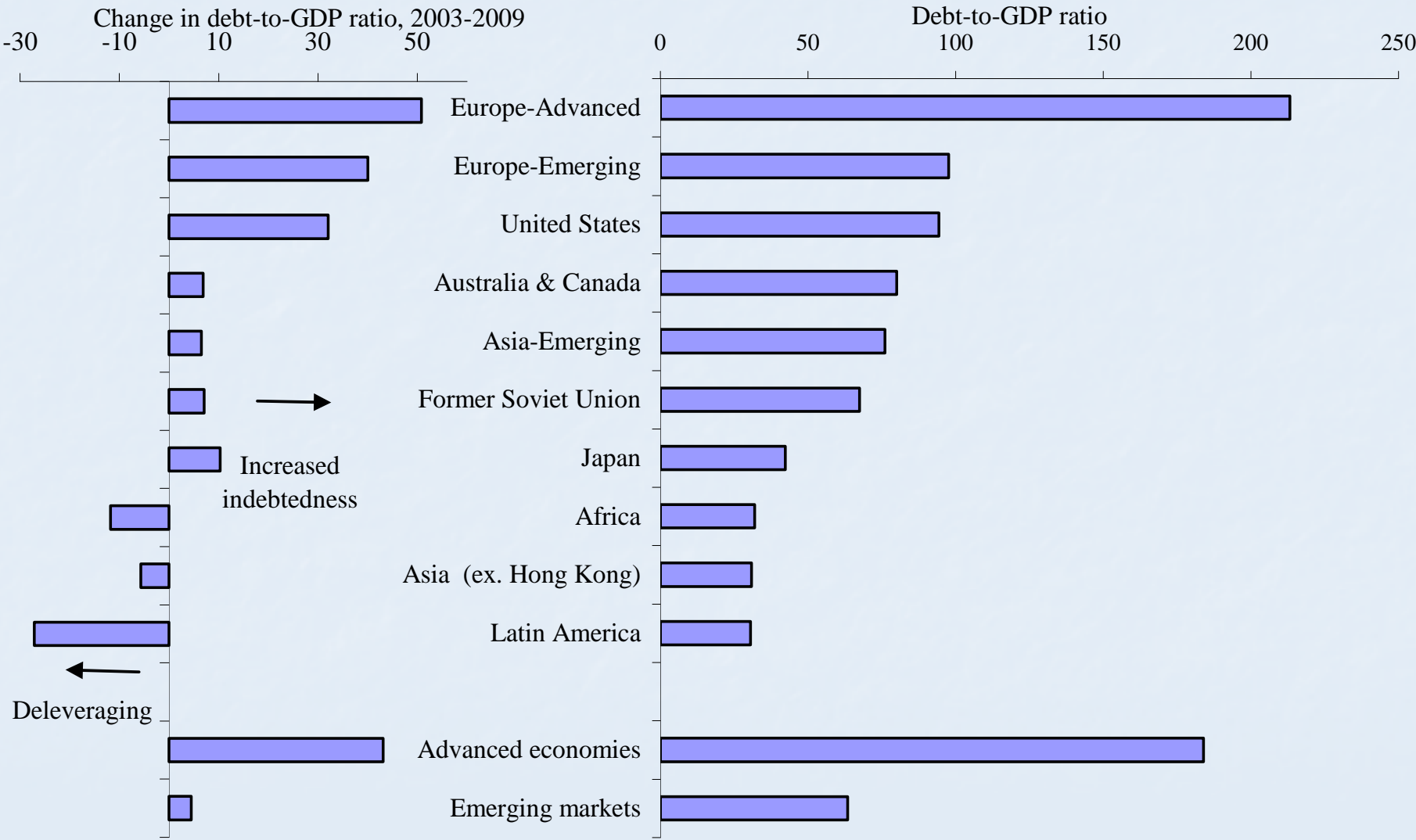
- The return of financial repression?

*A global issue*

# *Private debts on the eve of financial crises*

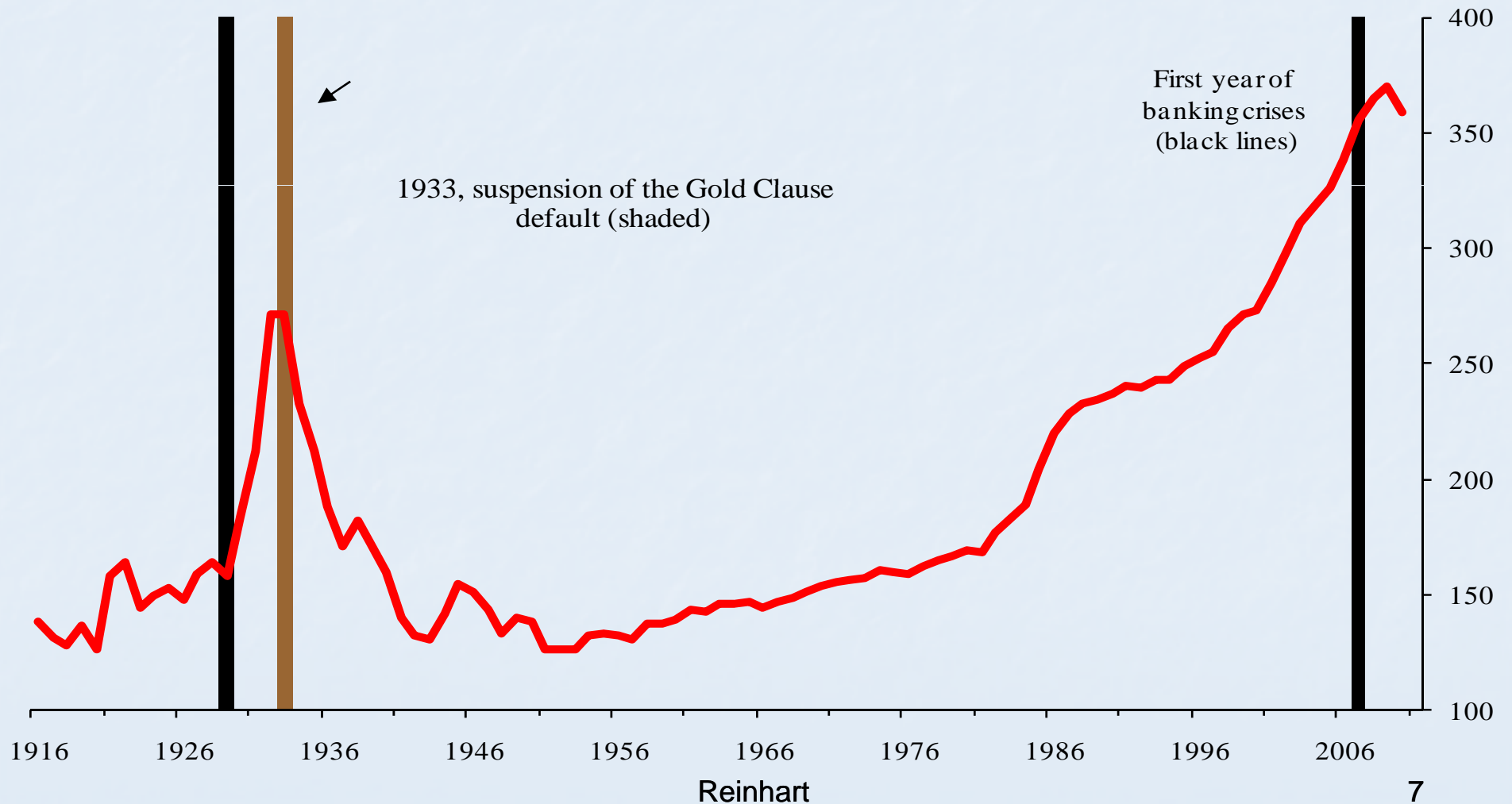
**Prior to the subprime crisis that began in 2007, debts, notably private—domestic and external-- surged in many advanced economies, most notably in Europe.**

# Gross External Debt as a Percent of GDP: Averages for Selected 59 Countries, 2003-2010 (in percent)



Reinhart

# United States: Total Public and Private Debt/GDP, 1916-2010



# The legacy of financial crises: In 2008, we suggested

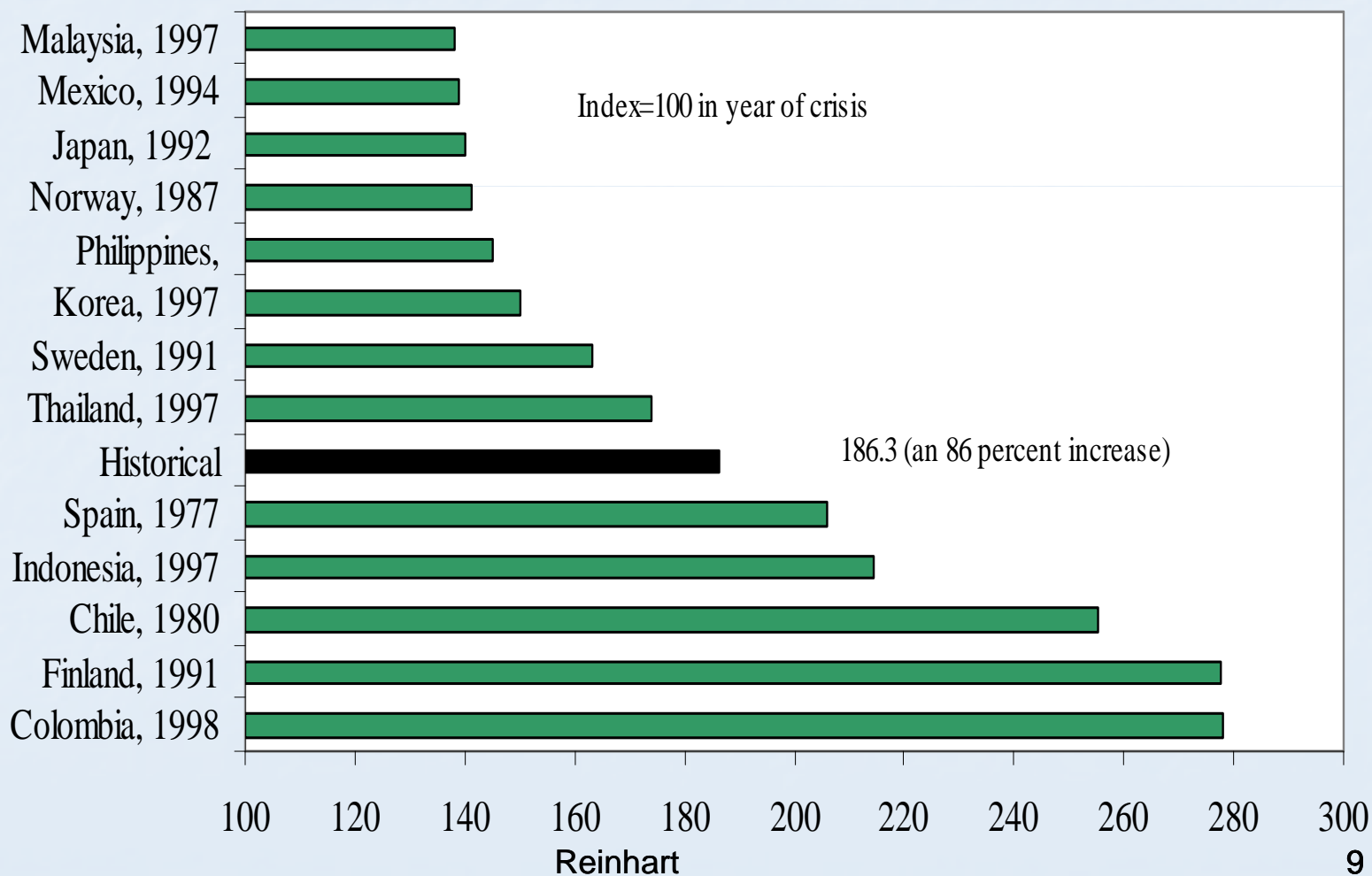
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- **Financial crises were protracted affairs.**
- **Deep financial crises had major adverse consequences for government finances.**
- **The impacts in the aftermath went beyond bailout costs and stimulus packages—revenues implode-leading to a surge in public debts.**

**(“The Aftermath of Financial Crises,” *American Economic Review*, May 2009.)**



# Cumulative Increase in Public debt in the Three Years Following Systemic Banking Crisis: Selected Post-World War II Episodes



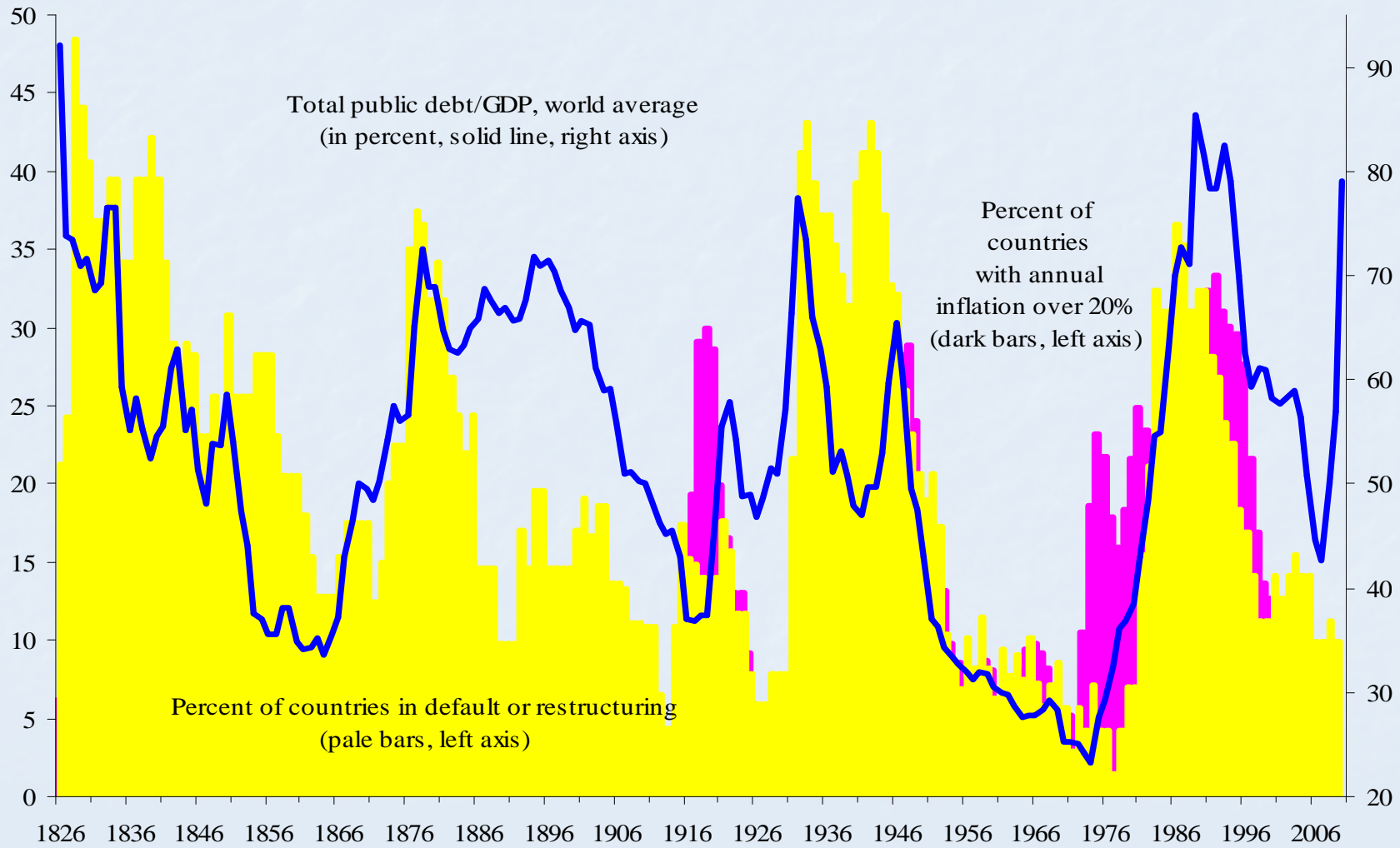
**Since the crisis, public debts in the advanced economies have surged in recent years to levels not recorded since the end of World War II, surpassing previous peaks reached during the First World War and the Great Depression.**

# **From financial crash to debt crisis**

**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)



# Debt and growth

Using and extending the data developed in our recent book, we studied the average economic **growth** and **inflation** performance at different levels of **government** and **external debt**.

Our results incorporate data on forty-four countries spanning about two hundred years. Taken together, the data incorporate over 3,700 annual observations covering a wide range of political systems, institutions, exchange rate and monetary arrangements, and historic circumstances.

# We divided the experience into 4 debt/GDP buckets

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- **0 to 30 percent**
- **30 to 60 percent**
- **60 to 90 percent**
- **90 percent and above—this last bucket is relatively rare**



# Our main results are as follows:

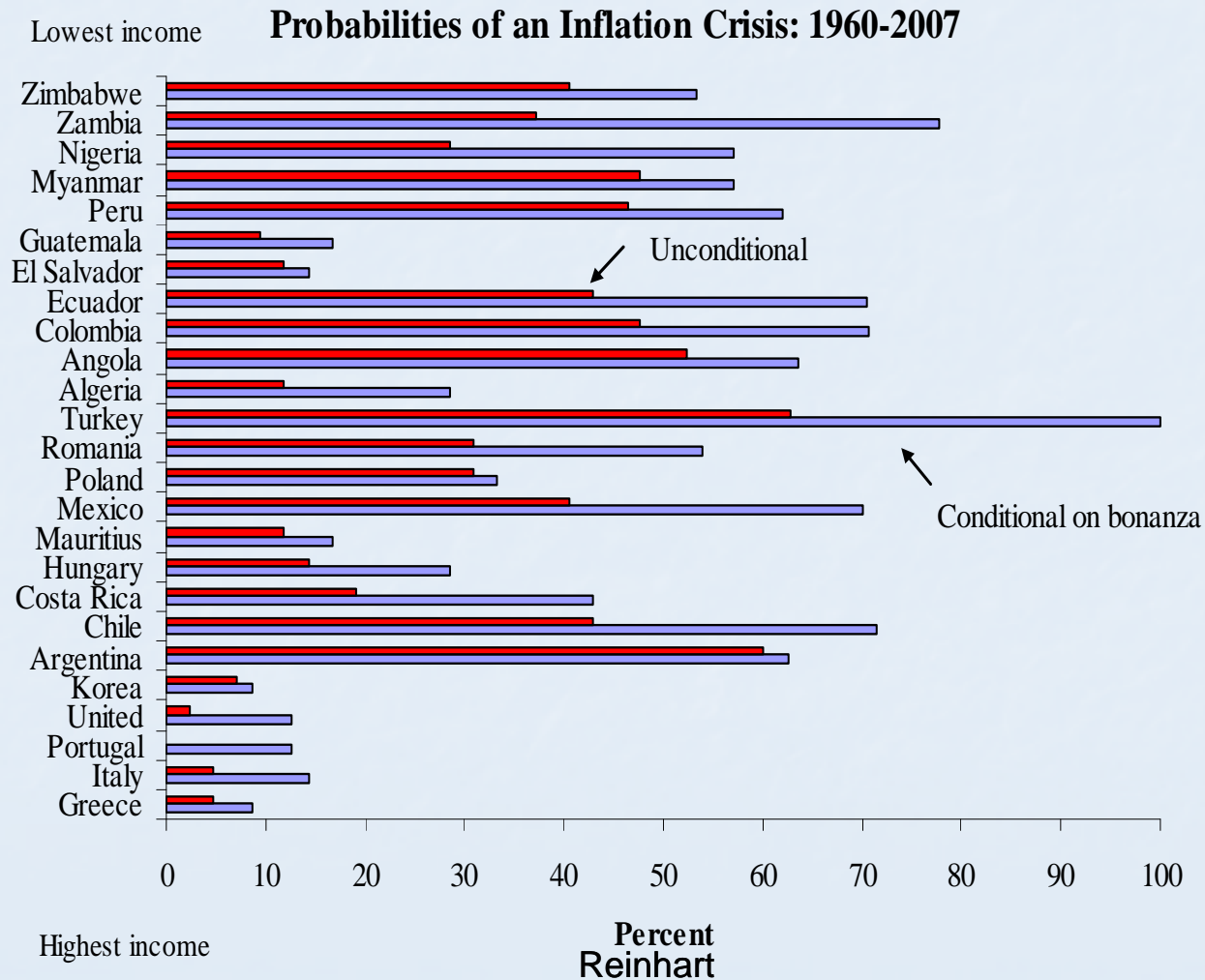
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The empirical relationship between (gross central) government debt and real GDP growth is fairly **weak** for debt/GDP ratios below 90 percent of GDP. **At or above 90 percent, growth deteriorates markedly, with median growth rates falling by 1 percent, and average growth rates falling considerably more.**

*Surprisingly, we find that the threshold for public debt is similar in both advanced countries and emerging markets.*

# Turning to emerging markets, capital flows and crises

# Are capital flow bonanza episodes more crisis prone? Inflation crises (Reinhart and Reinhart, 2009)



**The decade after a  
severe financial  
crisis:**  
*After the Fall*

# Unemployment rates

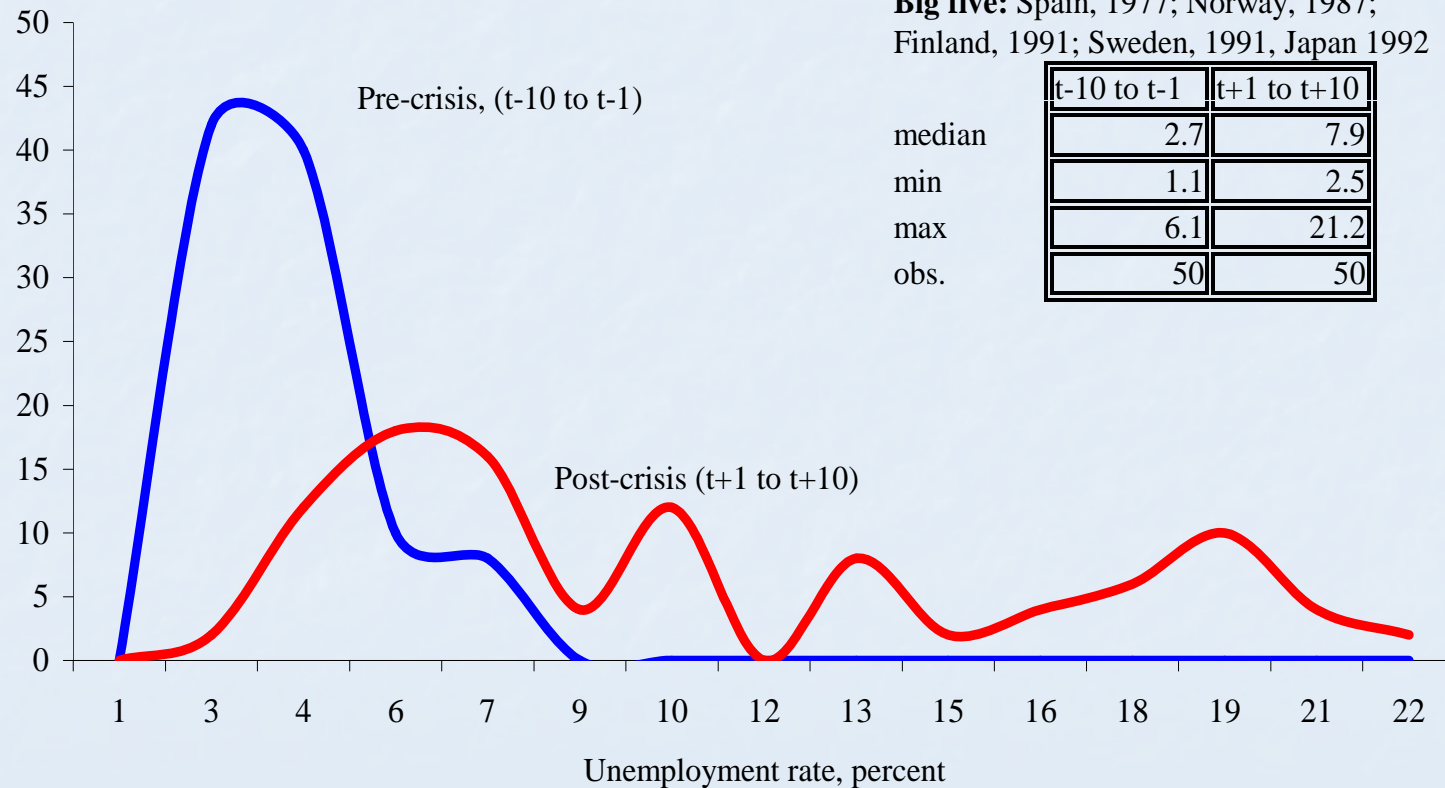
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In the ten-year window following severe financial crises, **unemployment rates** are significantly higher than in the decade that preceded the crisis.

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

# Unemployment Rate in the Decade Before and the Decade After Severe Financial Crises: Post-WWII, Advanced Economies

*Probability density function, five advanced economies*



# 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.**

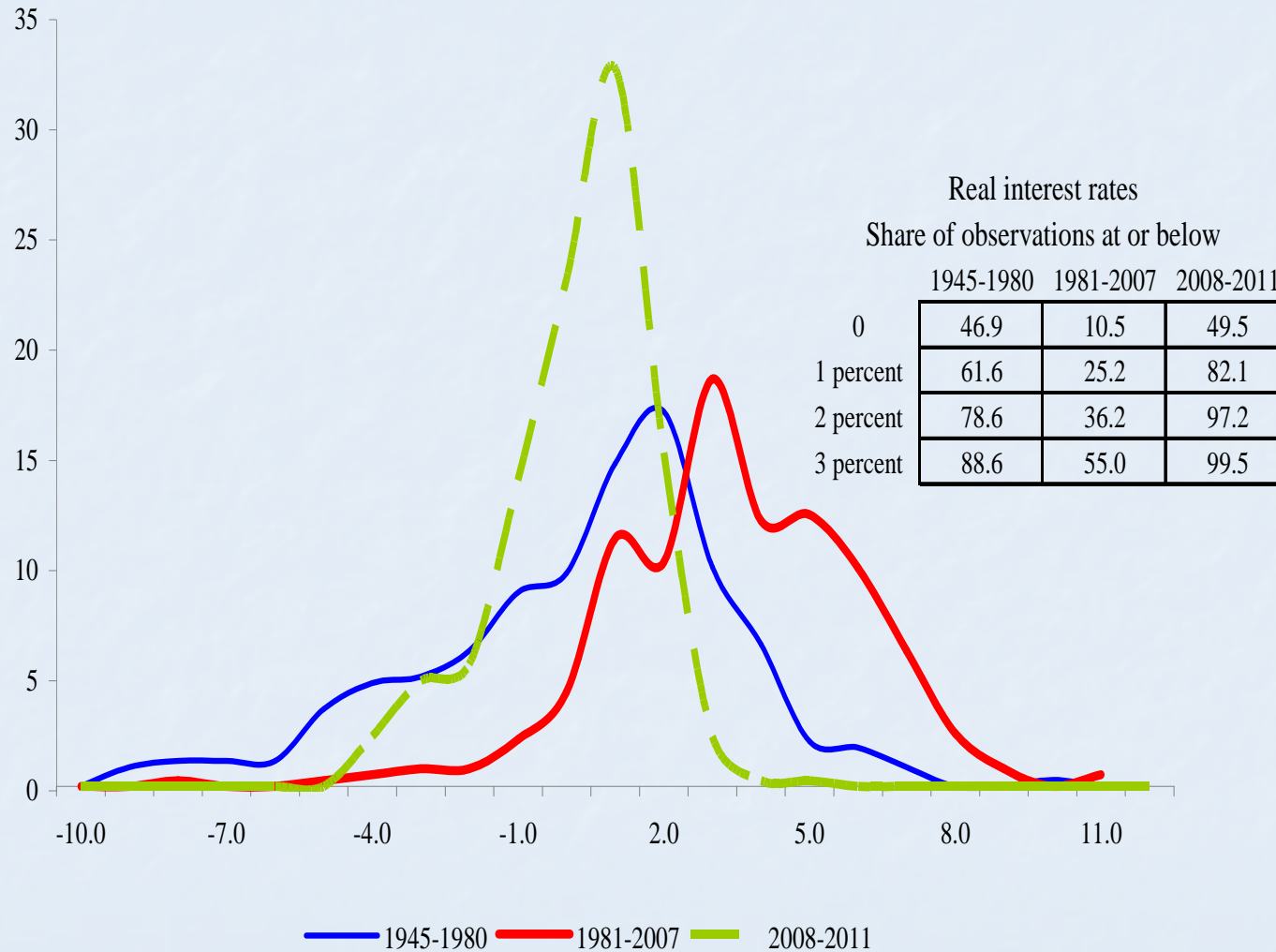
**It is a subtle type of debt restructuring...**

# The return of financial repression?

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- The collective buildup of public debts in the advanced economies during WWI was largely unwound through default in the 1930s
- The even larger buildup in public debts of WWII was unwound partially through steady growth-but, more importantly, through “financial repression”

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



# The return of financial repression?

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**To deal with the current debt overhang, similar policies to those documented here may re-emerge in the guise of prudential regulation rather than under the politically incorrect label of financial repression.**

**Moreover, the process where debts are being “placed” at below market interest rates in pension funds and other more captive domestic financial institutions is already under way in several countries in Europe.**