### The Aftermath of Global Financial Crises

### Carmen M. Reinhart, University of Maryland, NBER, and CEPR

Brookings Institution
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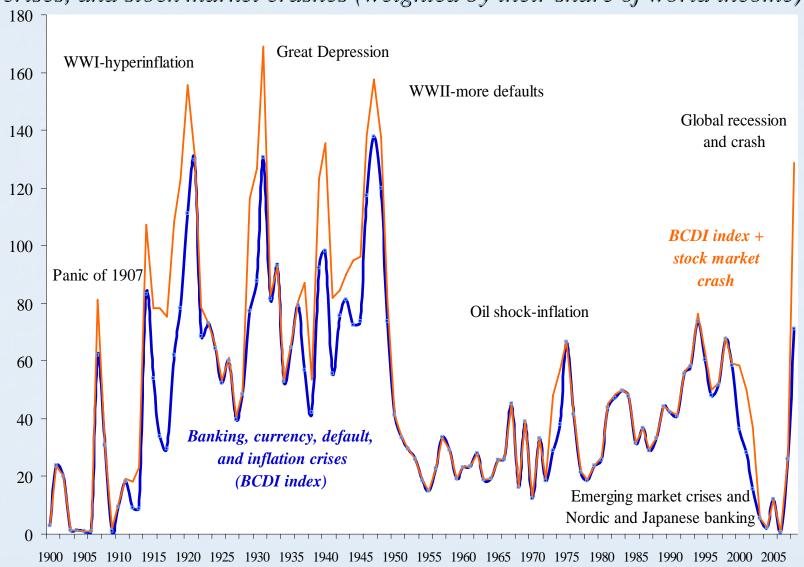
## This talk is based on several works with Kenneth Rogoff:

- "Banking Crises: An Equal Opportunity Menace"
   NBER Working Paper 14587, December 2008.
- "The Aftermath of Financial Crises," American Economic Review, forthcoming, May 2009.
- This Time its Different: Eight Hundred Years of Financial Folly (Princeton University Press, 2009)

# Where are we at present in a historical global context?

#### Varieties of crises: World aggregate, 1900-2008

A composite index of banking, currency, sovereign default and, inflation crises, and stock market crashes (weighted by their share of world income)



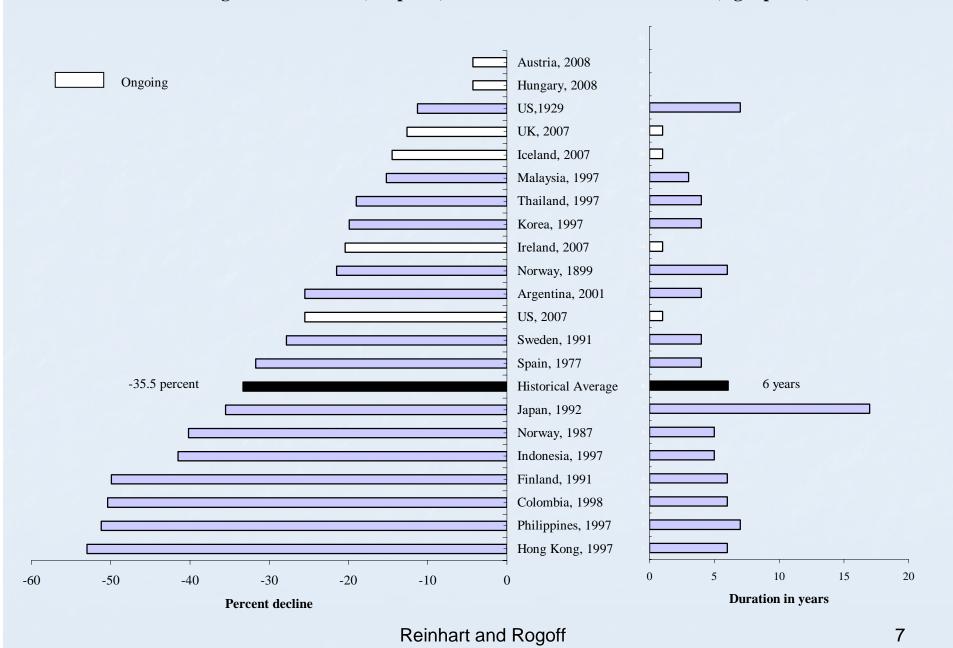
# The incidence and number of banking crises is quite similar in high and middle-to-low income countries...

On the duration and depth of the post-banking crisis crash for selected indicators.

Financial crises are protracted affairs...

#### Past and Ongoing Real House Price Cycles and Banking Crises:

#### Peak-to-trough Price Declines (left panel) and Years Duration of Downturn (right panel)



### Indices of total building activity in selected countries (1929 = 100)

Country	Indicator	1932
South Africa	Buildings completed (value)	100
Argentina	Permits (area)	42
Australia	Permits (value)	23
Belgium	Permits (number)	93
Canada	Permits (value)	17
Chile	Permits (area)	56
Colombia	Buildings completed (area)	84
Czechoslovakia	Buildings completed (number)	88
Finland	Buildings completed (cubuc space)	38
France	Permits (number)	81
Germany	Buildings completed (rooms)	36
Hungary	Buildings completed (number)	97
	Buildings completed	
Netherlands	(dwellings)	87
New Zealand	Buildings completed (value)	22
Sweden	Buildings completed (rooms)	119
United Kingdom	Permits (value)	91
Unites States	Permits (value)	18
Average		64
Memorandum item:		
United States	Permits (number)	
September 2005 peak = 100		23

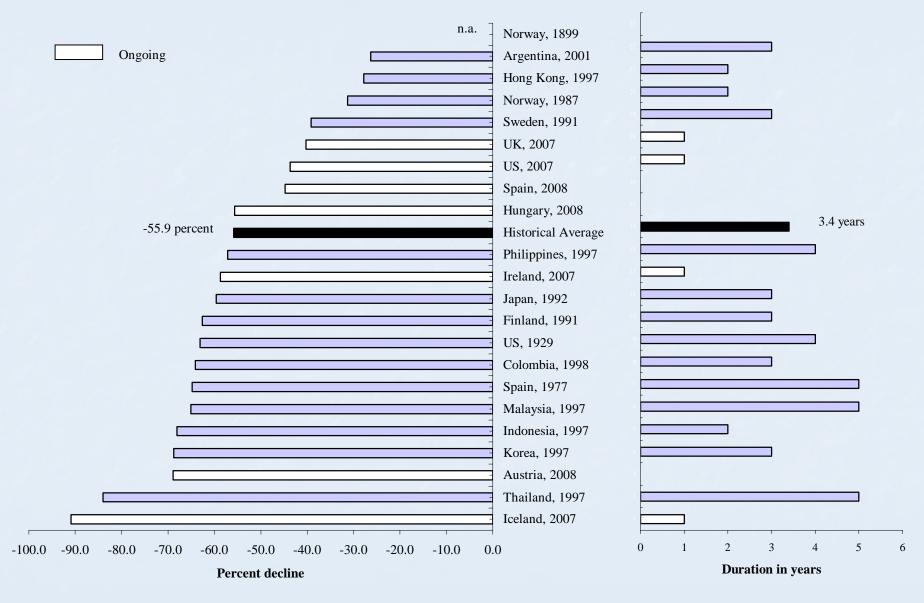
Sources: League of Nations, *World Economic Survey* (various issues), Historical Statistics of the United States (2003).

Notes: Note differences in the definition of the indicator cross-country.

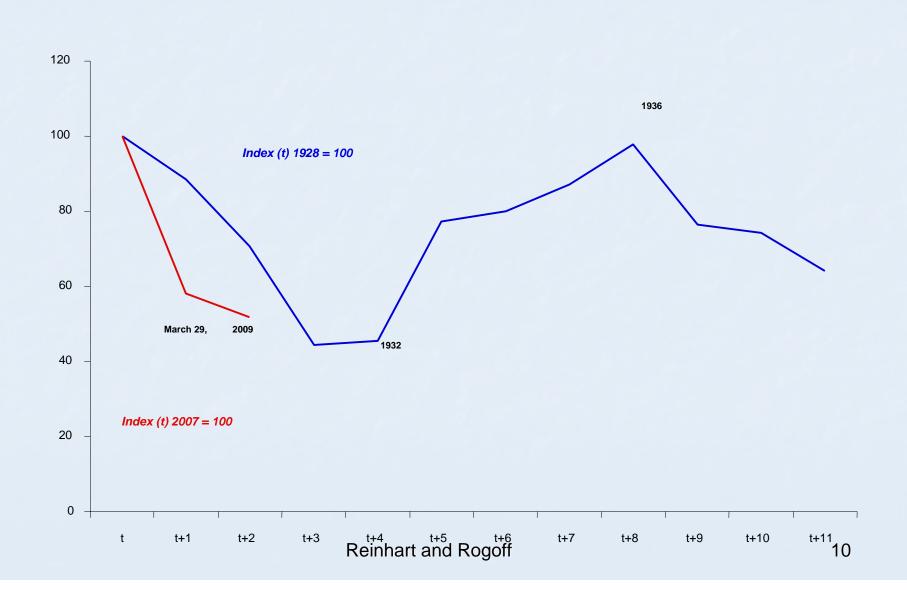
<sup>1</sup> Through March 2009.

#### Past and Ongoing Real Equity Price Cycles and Banking Crises:

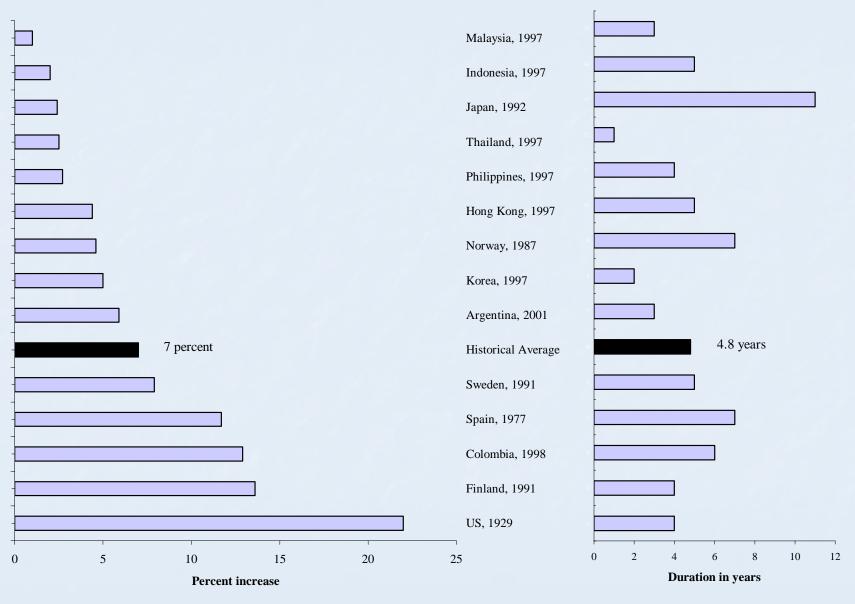
#### Peak-to-trough Price Declines (left panel) and Years Duration of Downturn (right panel)



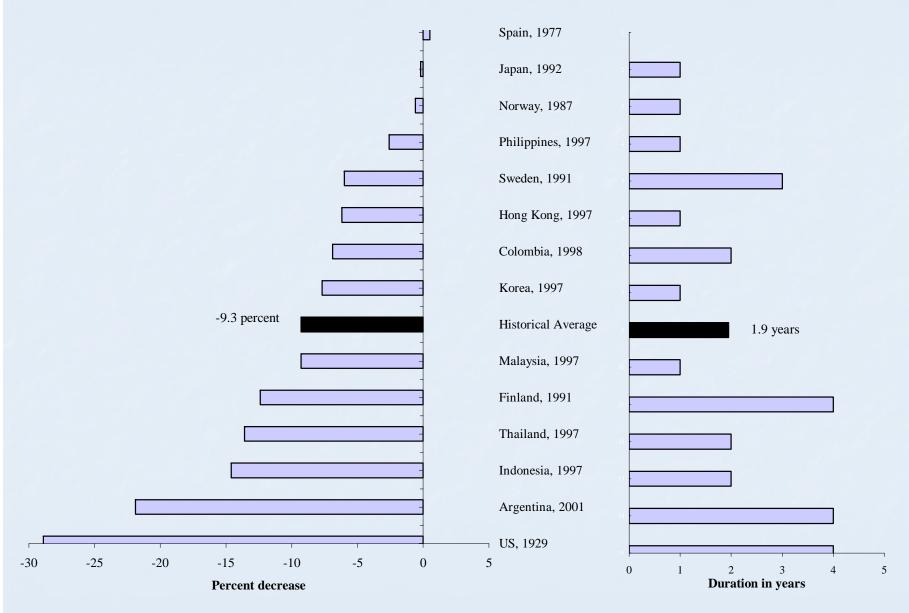
### . Global stock markets during global crises: Composite real stock price index (end-of- period)



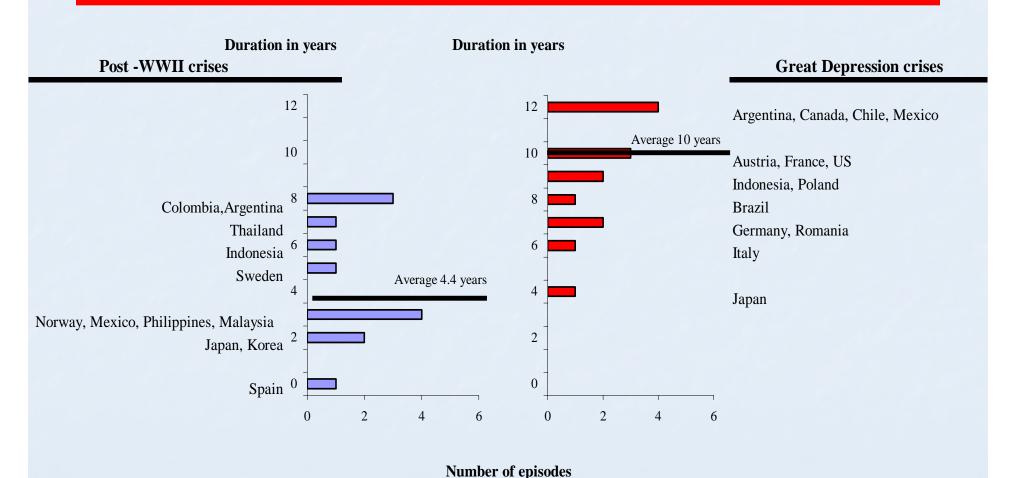
### Past Unemployment Cycles and Banking Crises: Trough-to-peak Percent Increase in the Unemployment Rate (left panel) and Years Duration of Downturn (right panel)



### Past Real Per Capita GDP Cycles and Banking Crises: Peak-to-trough Percent Decline in Real GDP (left panel) and Years Duration of Downturn (right panel)



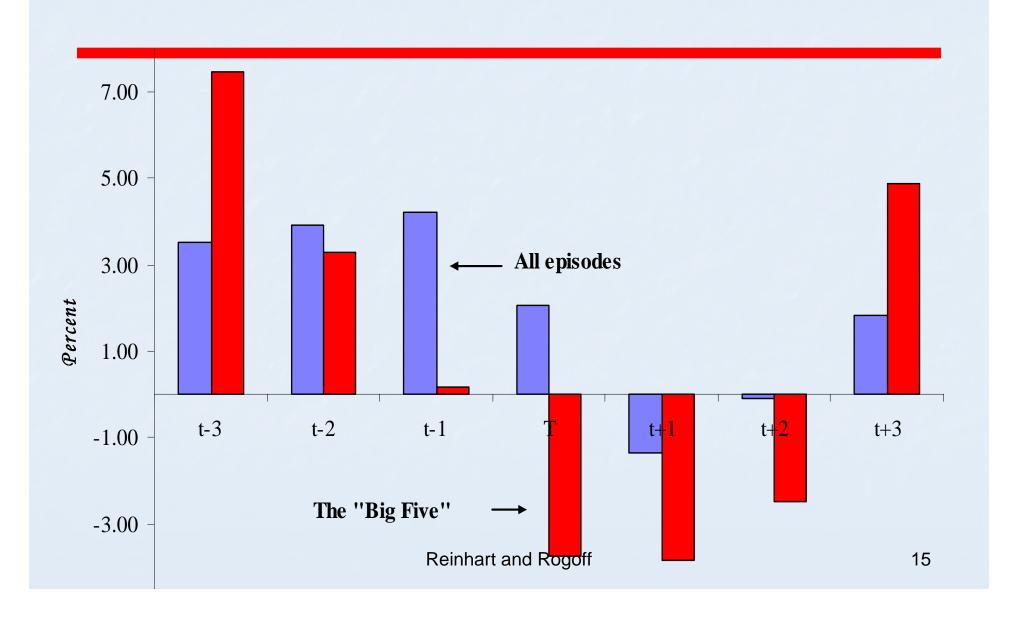
### The duration of major financial crises since the Great Depression: The downturn, peak-to-pre-crisis peak in real per capita GDP in 28 episodes



## As to the fiscal aftermath of banking crises, we find:

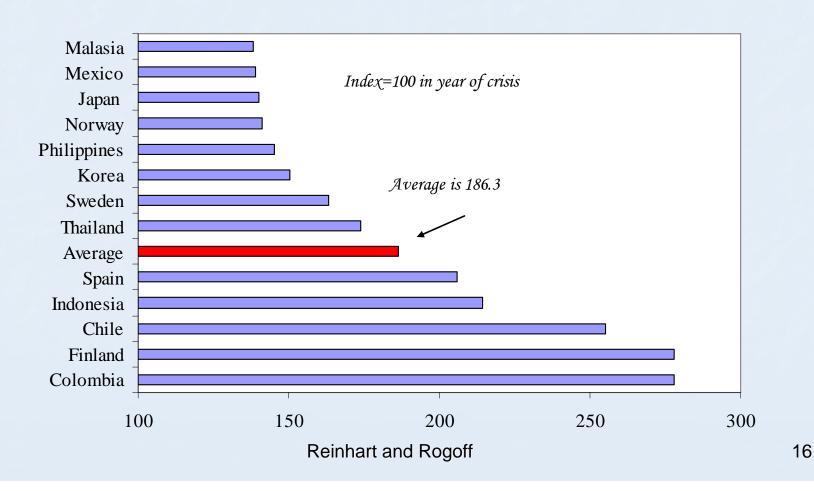
- That the nearly universal focus on calculations of bailout costs as the centerpiece of the fiscal consequences of banking crises is misguided and incomplete.
- Banking crises weaken fiscal positions beyond the costs of bailouts, as government revenues contract and stimulus plans find favor.

Real Government Revenue and Banking Crises, Advanced Economies, 1815-2007 (annual percent changes)

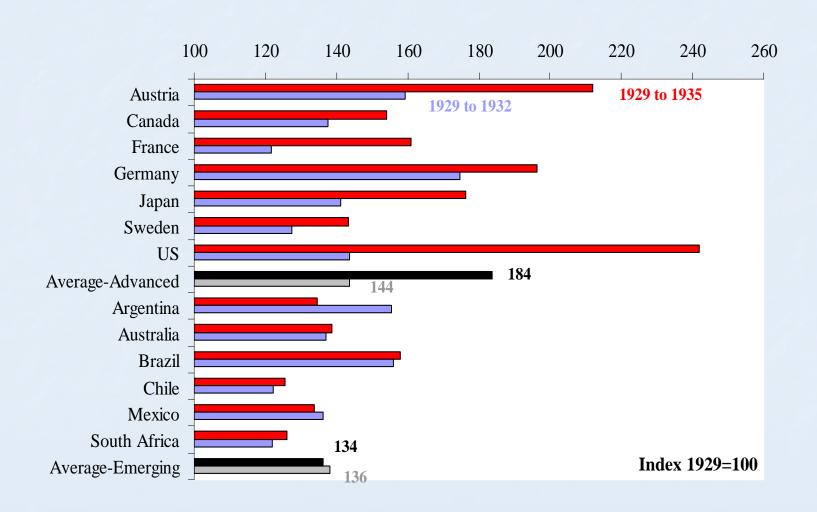


# Thus, the true legacy of financial crises is more government debt...

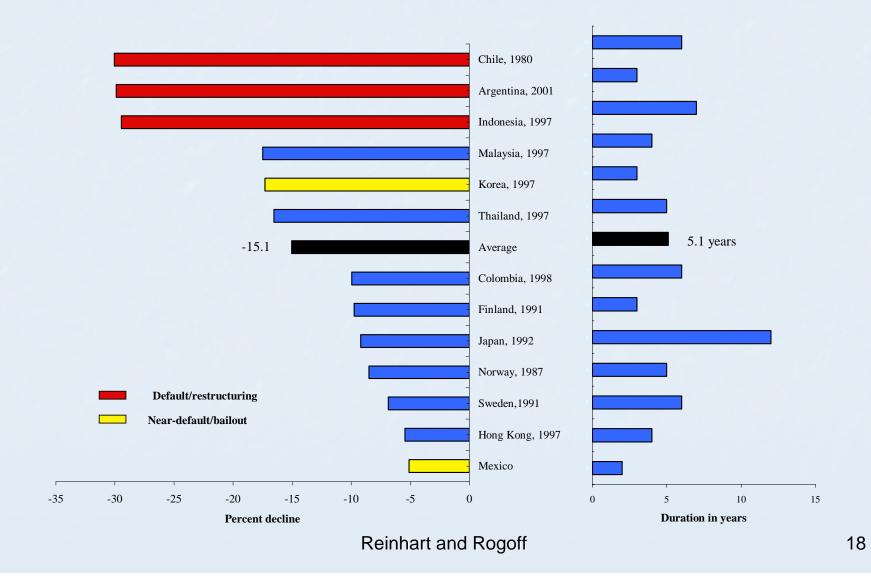
Cumulative increase in public debt in the three years following the banking crisis



# Cumulative increase in real public debt in three and six years following the onset of the Great Depression, 1929



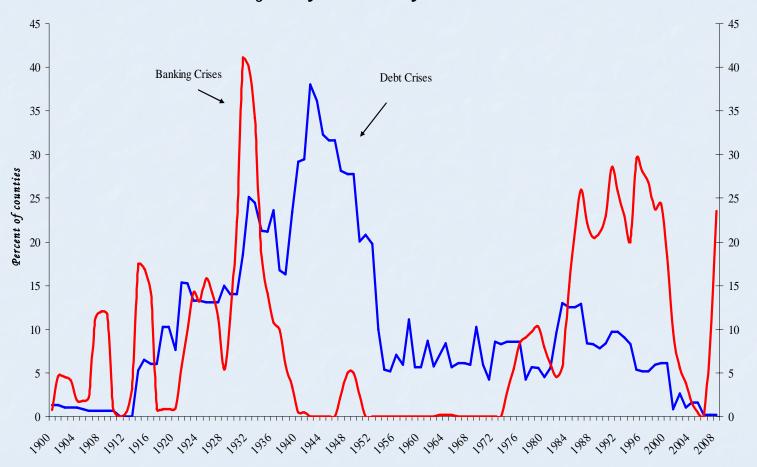
Institutional Investor sovereign ratings cycles and banking crises: Peak-to-trough index declines (left panel) and years duration of downturn (right panel)



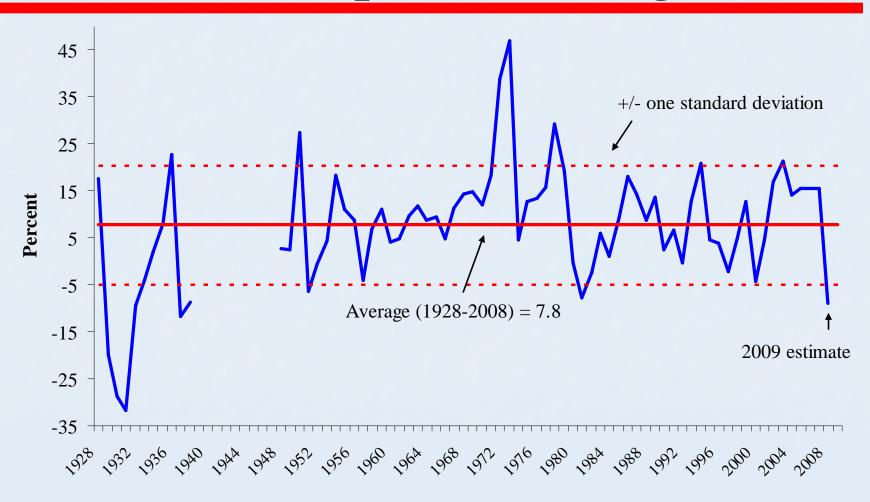
# Banking crises and default cycles on external debt

- This lull in sovereign defaults may also be temporary.
- A high incidence of global banking crises (such as at present) has historically been associated with a high incidence of sovereign defaults on external debt...

### Proportion of Countries with Banking and Debt Crises Weighted by Their Share of World Income



## World export growth, 1928-2009 (annual percent change)



### Policy issues going forward

- Swift implementation is critical—delays are terribly costly in both terms of the economy and of the cost of the crisis (speed should take precedence over polish)
- Soaring debt: Policy makers should be concerned about the debt levels (explicit and implicit) that it is likely to take on as it works its way out of the crisis.
- Financial crises are "hardy perennials"— regulation needs to be constantly revised and revisited to "keep up" with market innovation.