Balance Sheet Repair: Cross-Country Lessons

Stijn Claessens Research Department, IMF

Conference on Balance Sheet Repair Central Bank of Ireland

Dublin, January 30th 2015

Disclaimer! The views presented here are those of the author and do NOT necessarily reflect the views of the IMF or IMF policy, or those of the World Bank, or of the Federal Reserve Board

Outline

- General lessons from financial crises
- Lessons on crisis management
- Lessons on corporate restructuring
 - Large and SMEs
- Lessons on household restructuring

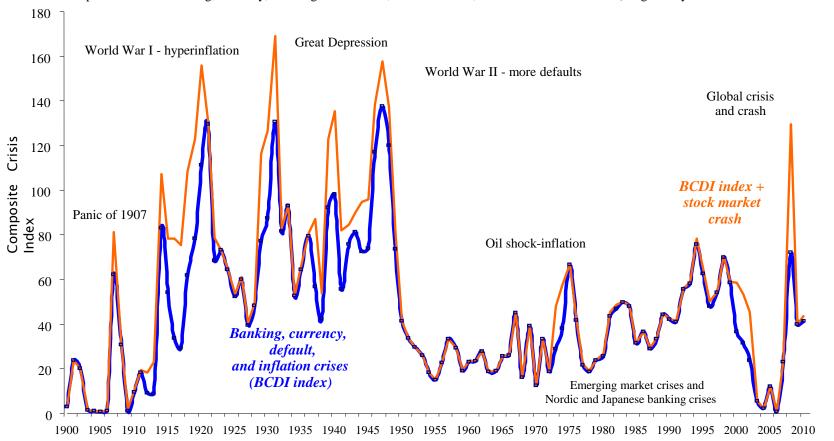
Outline

- General lessons from financial crises
- Lessons on crisis management
- Lessons on corporate restructuring
 - Large and SMEs
- Lessons on household restructuring

As crises are recurrent events, we could learn from history.....

Varieties of crises: World aggregate, 1900-2010

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



Source: Reinhart and Rogoff, 2014

Crises, Now and Then, Here and Everywhere, and Varying in Types...

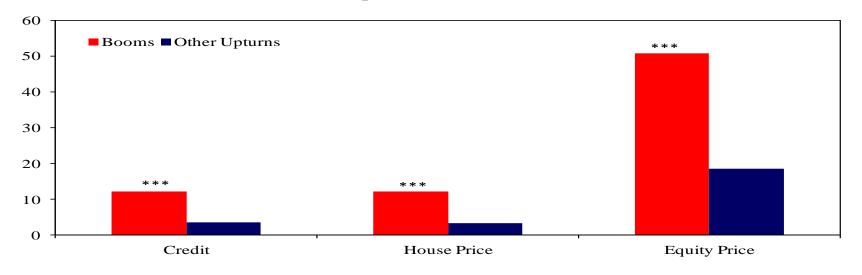
- There have been many crises over centuries
 - More common in emerging markets in the past but recently affecting predominantly advanced countries
 - Come in (regional) waves: Latin America, Asia, US/Europe,...
- Various types, which relate, causes overlap
 - Banking, currency and sovereign crises, some can overlap when one leads to the other
 - Causes can be similar, "booms followed by busts"
- But identifying crises is still science and art
 - Samples vary, and so do related causes, consequences
 - "Near misses" also important, but unknown

What do we know? For one, crises have some common causes

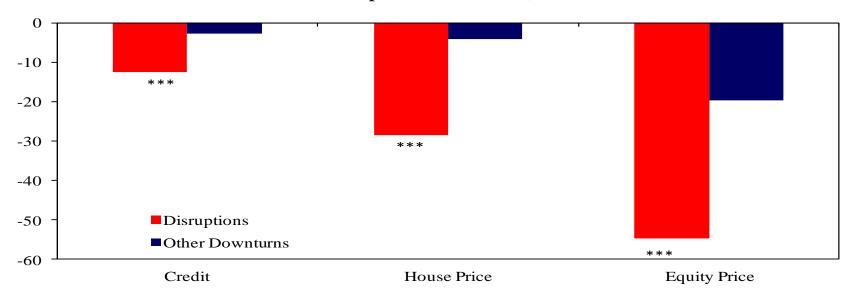
- Crises are often preceded by booms in asset prices and credit
- Booms have multiple causes: productivity increases; financial liberalization; external shocks (interest rate, capital flows); etc.
- Booms can be long, more than business cycles. Busts are large and long as well

Booms and busts can be large

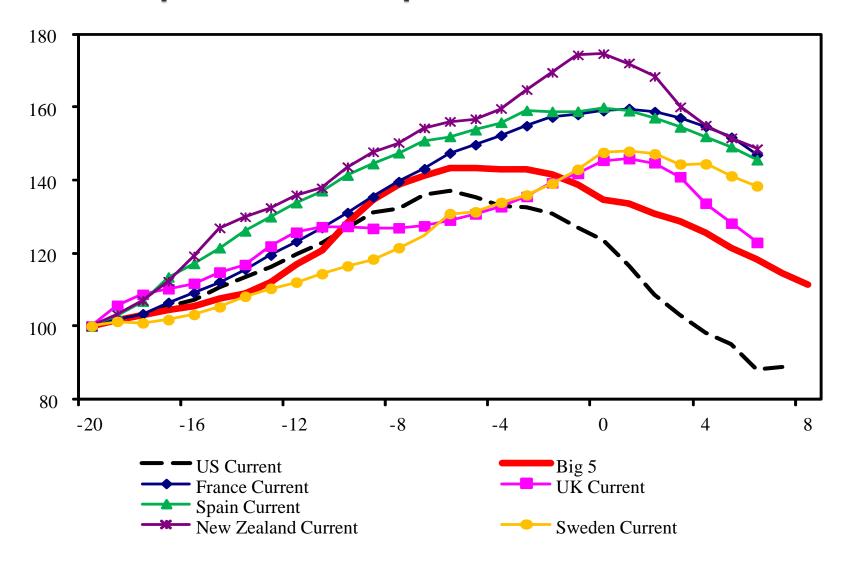
Booms (percent increase)



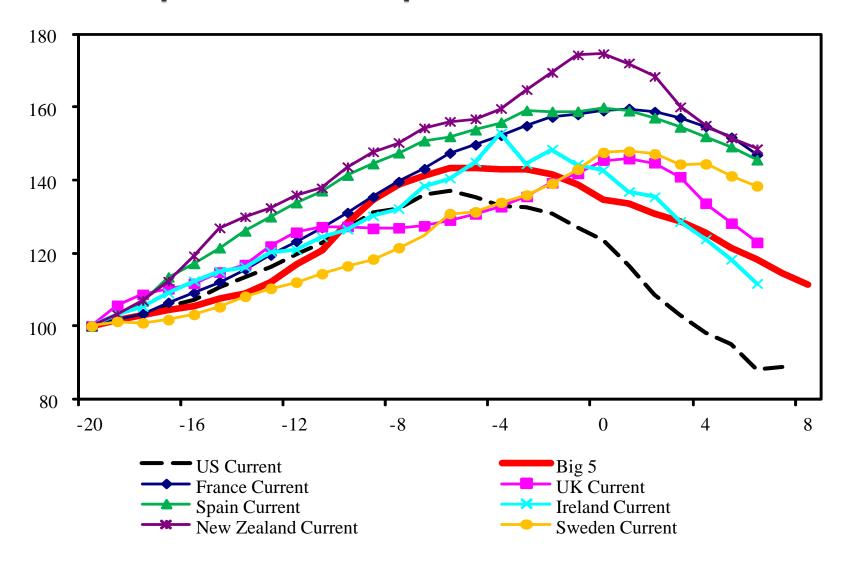
Busts (percent decrease)



Recent house price booms-busts match past crises patterns



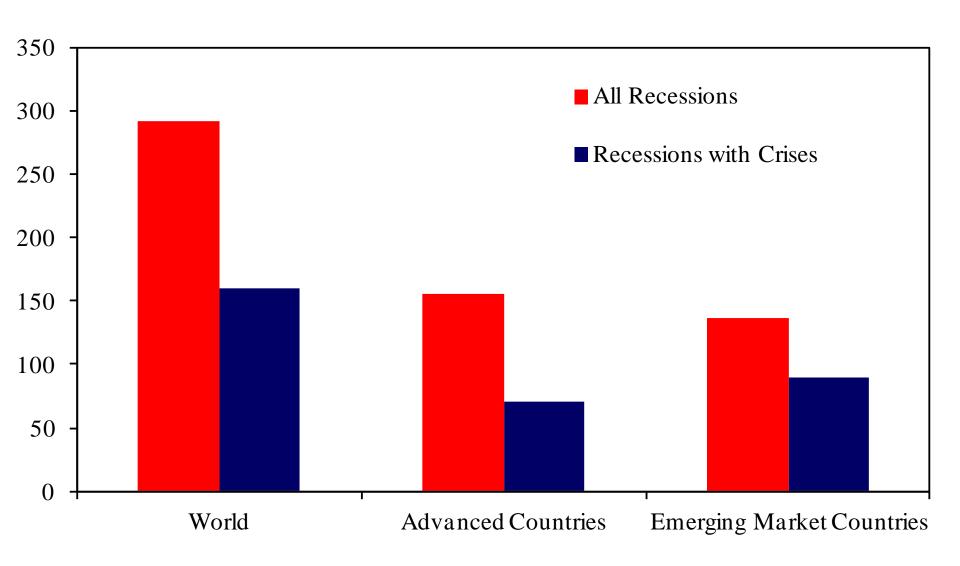
Recent house price booms-busts match past crises patterns



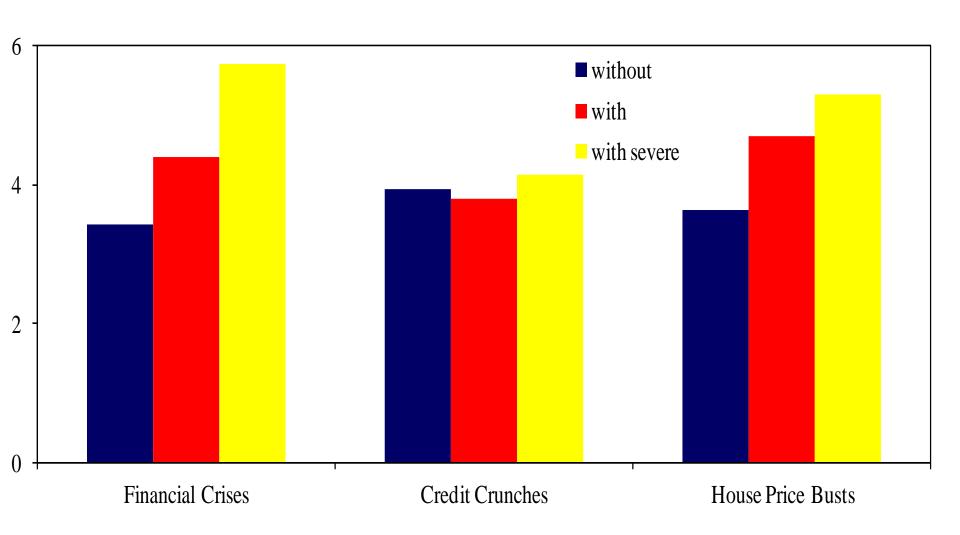
Crises have adverse financial and economic consequences

- Crises are associated with recessions
 - Longer lasting and deeper than normal
- Some types of crises are worse
 - Banking crises worse than currency
 - Sudden stops in capital flows worst, especially for emerging markets

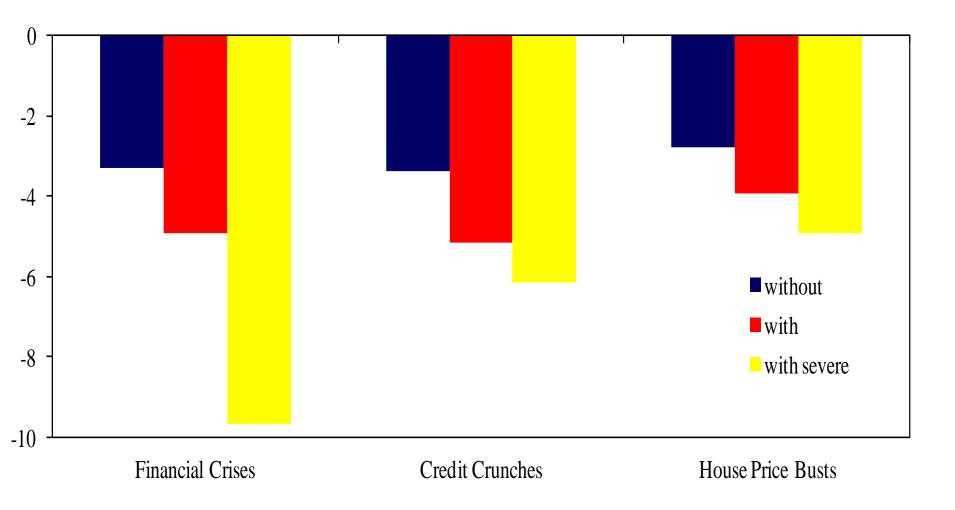
Crises coincide with recessions (number of events)



Recessions with crises, busts last longer (# of quarters)

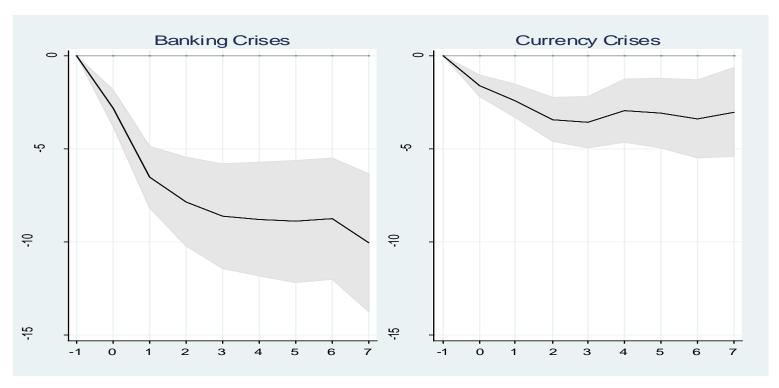


And such recessions have higher losses (GDP loss over recovery period)



Banking crises especially can have large and long-lasting real effects

Output Evolution after Banking and Currency Crises (Percent of precrisis trend)



Note: Figure reports mean difference from year t = -1; 90-percent confidence interval for estimated mean; first year of crisis at t = 0; years on x-axis.

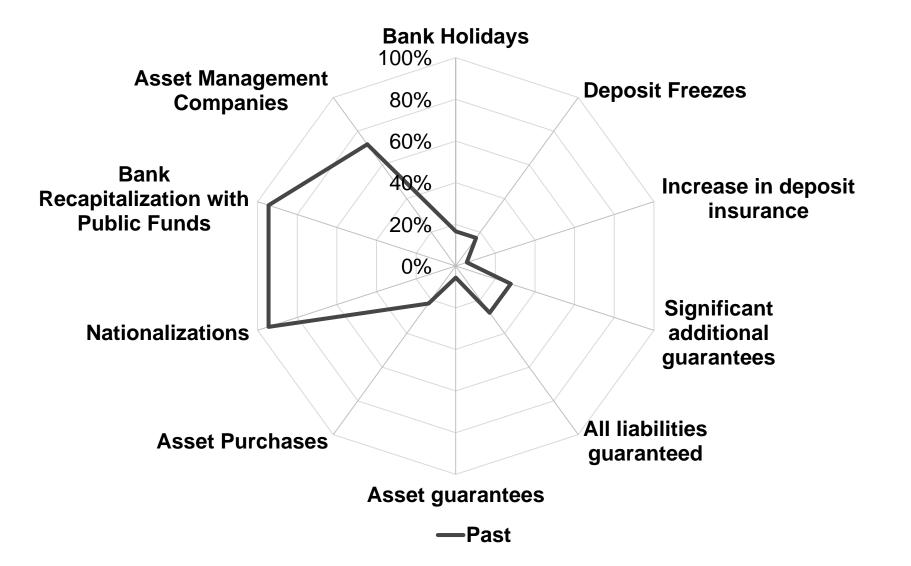
Outline

- General lessons from financial crises
- Lessons on crisis management
- Lesson on corporate restructuring
 - Large and SMEs
- Lessons on household restructuring

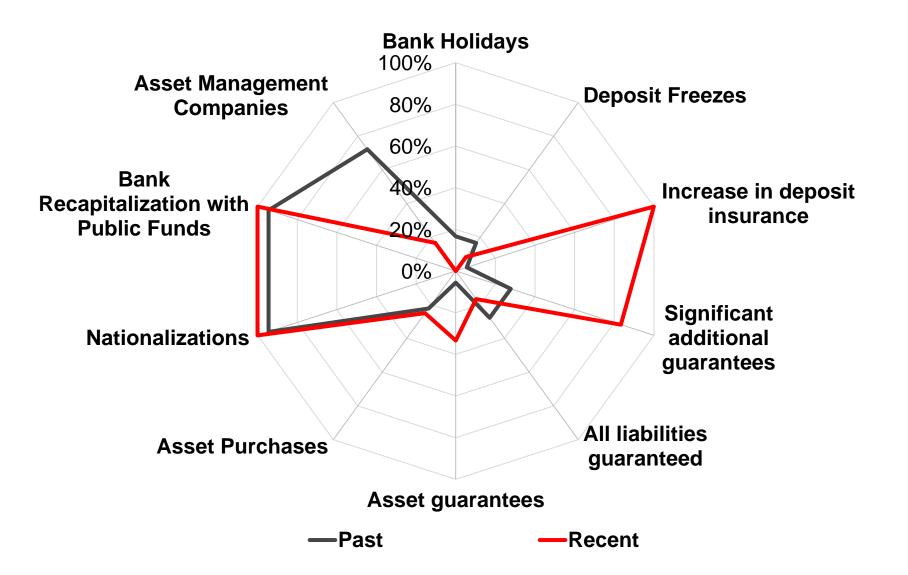
Lessons on Crisis Management

- "Best Practice" exists, but not always applied
 - Policies differ and this matters
- Banking crises in a sample of countries:
 - Recent Crises: 12 countries, o/w 10 advanced
 - Past Crises: 18 countries, o/w 4 advanced
- How do policy choices and outcomes differ?
 - Recent crisis unique in causes, more global
 - Still some lessons can be obtained

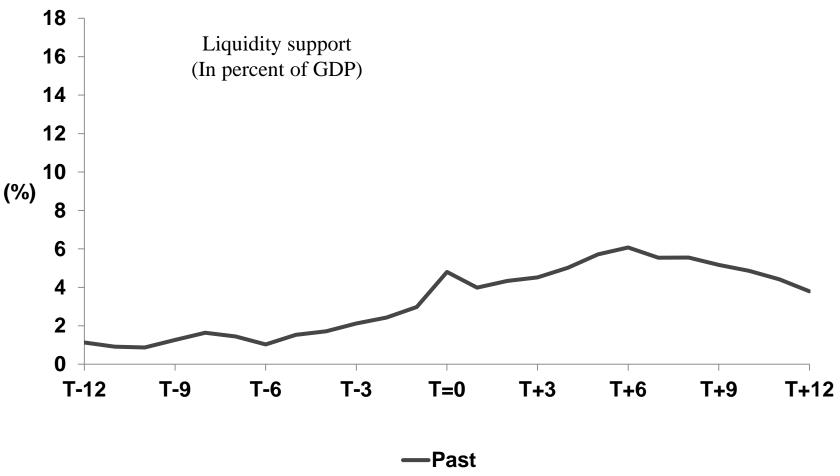
Recent vs. past restructuring: qualitatively similar, except for guarantees and AMCs



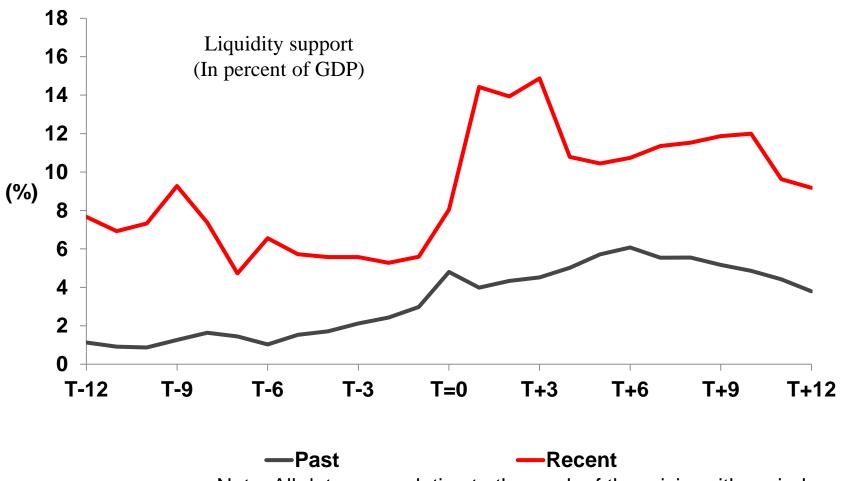
Recent vs. past restructuring: qualitatively similar, except for guarantees and AMCs



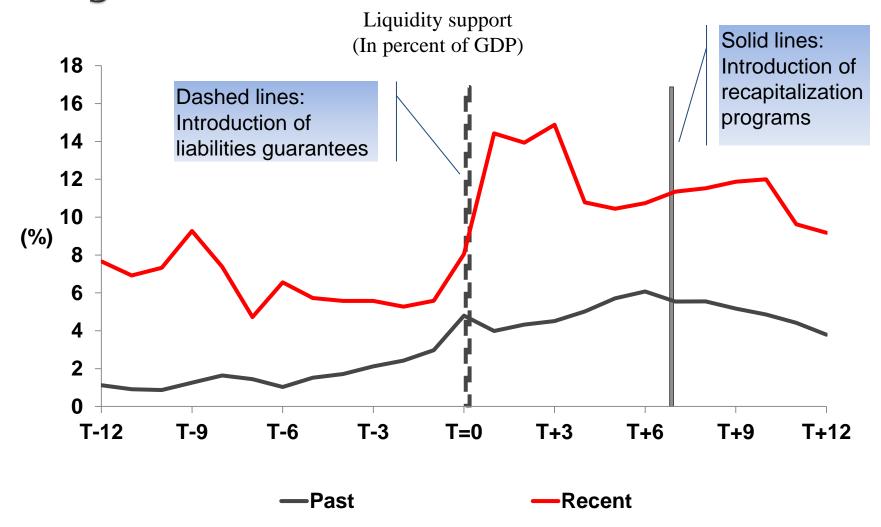
Also liquidity support



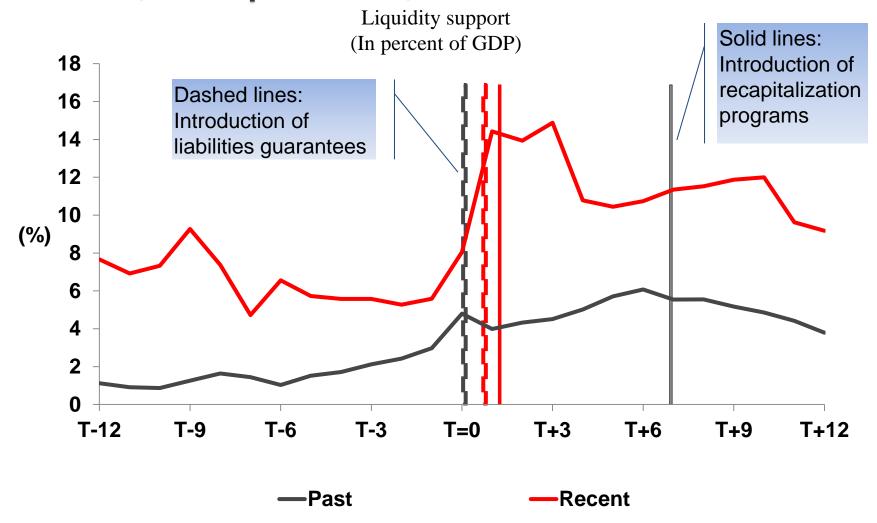
Also liquidity support much larger this time



Past public recapitalization: seven quarters after guarantees

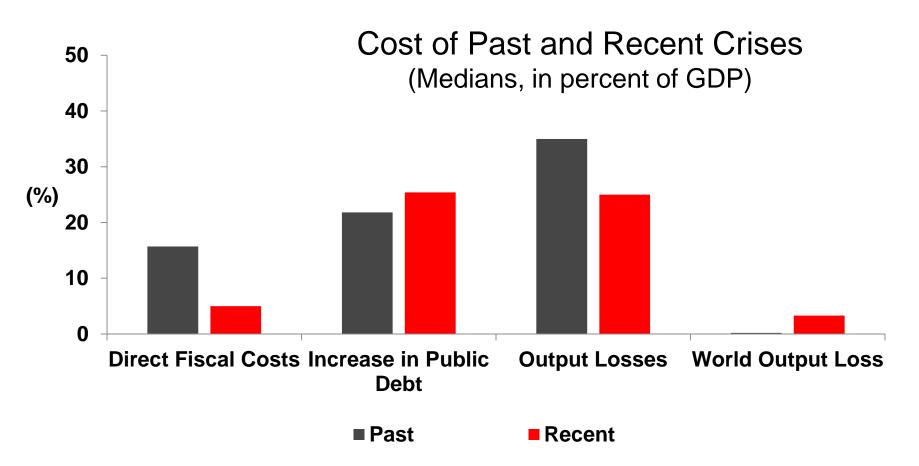


This time public recapitalization: much sooner (two quarters)

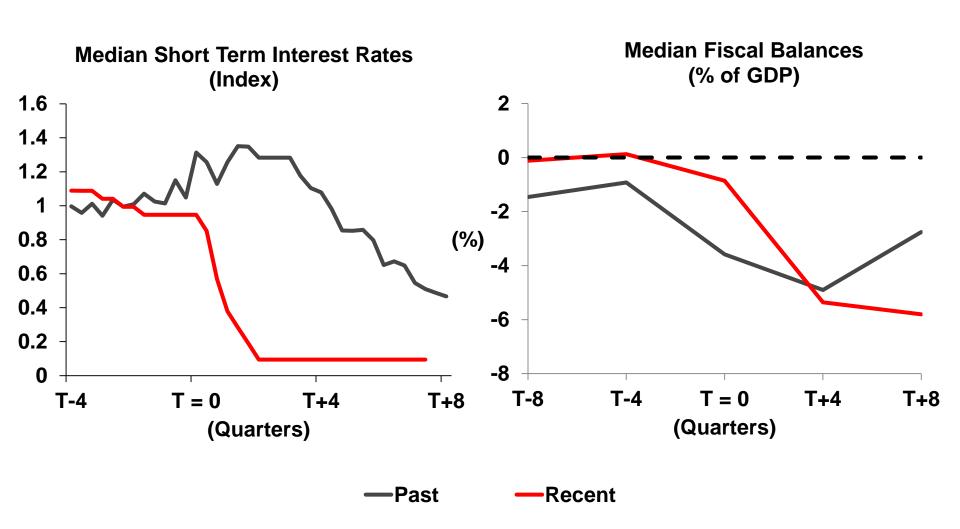


And as private markets contributed more, Lower Initial Direct Fiscal Costs...

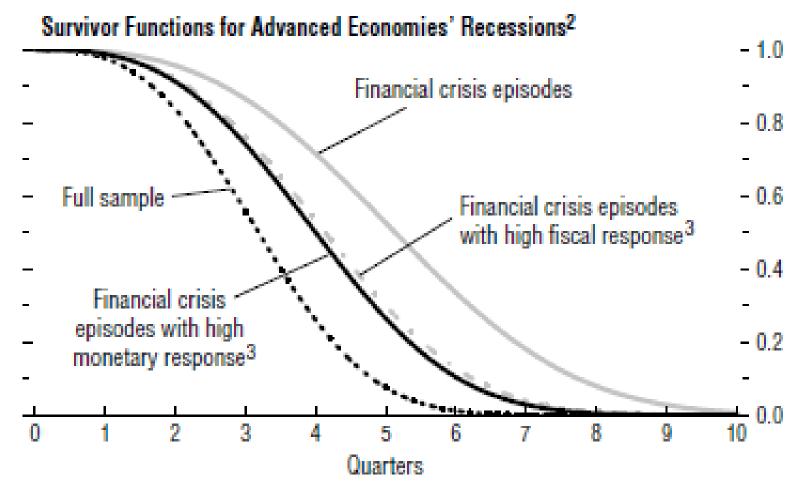
...but **Higher Public Debt** (countercyclical fiscal) and **Higher Global Costs** (a more severe crisis)



As monetary and fiscal policies provided more support than in the past



Real effects were mitigated, but at an overall higher fiscal cost

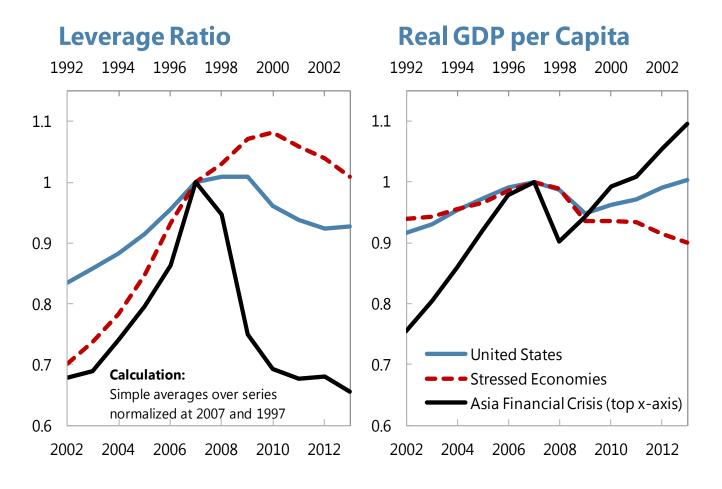


Probability of remaining in a recession in a sample of recessions with and without financial crises.

Lessons: less differentiation, limited 'conditionality' → less restructuring

- Viability assessments limited ex-ante
 - Stress tests ex-post, of varying quality
- Conditions for assistance limited
 - More/easier support to potentially non-viable institutions ("open bank assistance")
- 'Traditional' restructuring less used
 - Limited asset restructuring, e.g. mortgages

Speed of deleveraging (total private sector debt) matters for growth



Stressed economies: Greece, Ireland, Italy, Portugal, and Spain

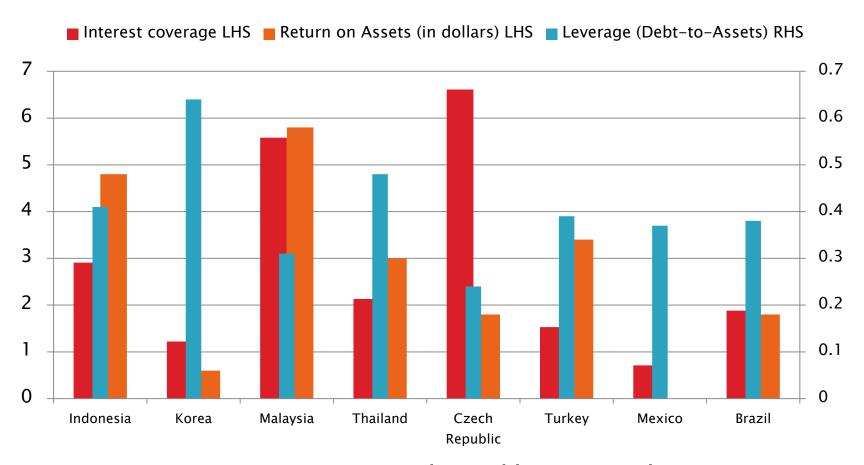
Outline

- General lessons from financial crises
- Lessons on crisis management
- Lessons on corporate restructuring
 - Large and SMEs
- Lessons on household restructuring

Lessons on corporate sector restructuring

- Eight crises involving corporate distress
 - Brazil, Czech Republic, Indonesia, South Korea, Malaysia, Mexico, Thailand, Turkey
- Assess which policies were (in)effective given country circumstances, and why
- Note: do not review causes, initial start
 - Causes, initial conditions ought to condition responses. E.g., fiscal headroom, foreign exchange exposures, banking system, etc., may determine scope for some actions

Initial conditions: pre-crisis corporate sector financial conditions



Data one year prior crisis: Asia 1996, Czech Republic 1996, Turkey 2000, Mexico 1994, Brazil 1998.

Approaches used for corporate restructuring

- 1. Government-sponsored, workouts schemes for large firms
- 2. Restructuring by public asset management companies (AMCs)
- Court-supervised restructuring and bankruptcy
- Voluntary workouts outside governmentsponsored and in-court frameworks Other, supporting policy changes

1. Government-sponsored voluntary workouts schemes

- London type schemes adopted by 6 out of 8 countries (Brazil and Czech Republic not)
- Enhanced in various ways
 - 1. All (or most) financial institutions sign on to the accord under regular contract or commercial law
 - 2. Formal arbitration with deadlines
 - 3. Penalties for failure to meet deadlines
- Not all had these three features in place immediately, as they learned over time
- Mostly useful for large corporations

Strengths of frameworks determined in part restructuring

- Number and speed depends on strength
 - Korea, Malaysia stronger than Thailand initially, Turkey quickly up, Indonesia less, Mexico least
- Much restructuring cosmetic -- soft terms, few debt-equity conversions, limited operational restructuring. Many reverted
- Out of court needs well-functioning bankruptcy system as threat and to finalize

2. Restructuring by public asset management companies (AMCs)

- All East Asian, Mexico, Turkey, Czech Republic established an AMC or (used) insurance for buying NPLs from banks
- Purposes of AMCs differed: some largely to support weak banks; others also to dispose asset and/or restructure
- Asset disposition slow in most cases
 - Difficulty in valuing assets, thin markets for selling assets, fears of selling too cheaply, and social and political pressures slowed down

Most AMCs ended up with large role in restructuring

- Regardless of purposes, most AMCs ended up restructuring, especially large firms
- With large holdings, some special powers, most AMCs played a large role in and set pace and intensity of restructuring
- Social impact, political connections or fear to reveal "skeletons" slowed restructuring
 - E.g., in Mexico essentially no sales w/ FOBAPROA

Restructuring by AMCs often poor

- Initially, AMCs often delayed, rather than sped up operational restructuring
 - Many worried throughout whether AMCs facilitated sufficiently deep restructuring
- Holdings by AMCs remained large in most countries for several years after crisis, four Asian had some \$150 billion in mid-2002
- Disposition accelerated, however, over time, and restructuring improved in quality

3. Court-supervised restructuring and bankruptcy/insolvency

- Initial weaknesses in bankruptcy regimes made court-supervised restructuring unattractive, except for Korea and Malaysia
- Limited use due to pro-debtor bias in legal system aggravated by limited judicial efficacy
- Some legal deficiencies corrected, more in East Asia, Turkey, less so in Latin America
- But effectiveness of systems remained low, with long periods and high costs

4. Voluntary workouts outside government-sponsored and in-court

- In most countries, smaller firms more adversely affected by shocks and credit crunch
- Special programs (forced roll-over, trade and working capital financing, SME workouts programs) helped in some countries
- M&A, triggered by policy changes, helped with financing, less so with restructuring directly
- Over time, foreign entry helped with enhancing institutional quality, especially in banks

Other, supporting policy changes

- Many countries: no or slowly adopted proper loan classification and loan-loss provisioning rules, e.g., "forward-looking criteria"
- Many other tax, legal and accounting barriers
 - E.g., tax losses only allowed with write-offs;
 treatment of mergers taxable event; debt to equity conversions only allowed for shareholder loans; etc.
- Corporate governance important, but slow
 - Source of vulnerabilities, needed for restructuring
 - But implementation often remained incomplete

Regulatory and loan restructuring frameworks, early 1997 vs. 2003

Country	Loan classification		Loan loss provision		Interest accrual		Overall index	
	Early 1997	2003	Early 1997	2003	Early 1997	2003	Early 1997	2003
Indonesia	2	2	1	3	1	2	1.3	2.3
Rep of Korea	2	2	3	3	3	4	2.7	3.0
Malaysia	2	2	1	2	3	3	2.0	2.3
Thailand	1	2	1	2	1	4	1.0	2.7
Country	Loan classification		Loan loss provision		Interest accrual		Overall index	
	1999	2003	1999	2003	1999	2003	1999	2003
Czech Rep.	2	2	2	2	n.a.	n.a.	n.a.	n.a.
Turkey	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	1	2	2	1		n.a.	1	n.a.
Brazil	3	3	2	2	n.a.	n.a.	n.a.	n.a.

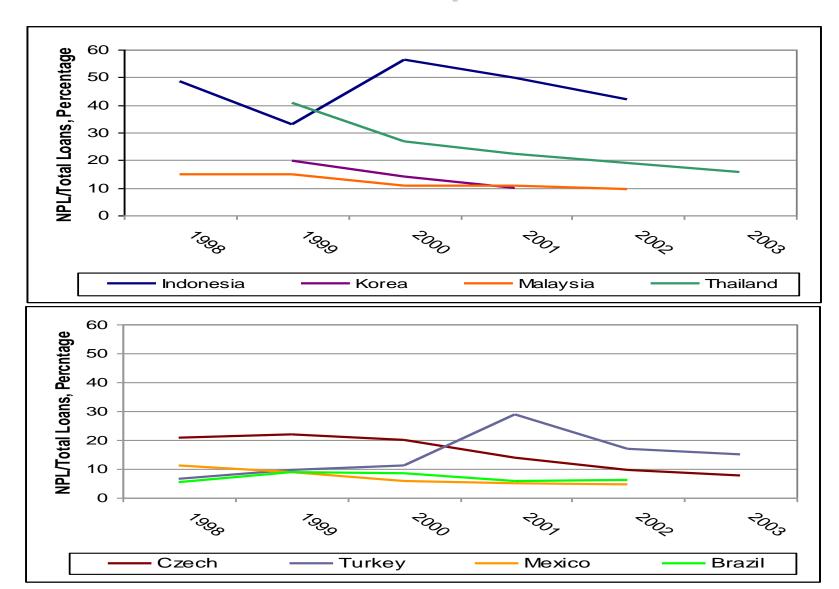
Other legal and regulatory changes

- Need many options, not only debt rescheduling, principal and interest reductions, also debt-forequity swaps, assets sales+spin-offs, securitization
- Relative importance to vary over time, with demand of investors and type of assets to be restructured
- Tools often missing. Lack of Corporate Restructuring Vehicles (CRVs) and venture funds, equity partnerships, other especially hindered restructuring
 - Korea gave only in 2000 CRVs a formal role in outof-court restructuring, no CRVs until 2002

Outcomes in corporate restructuring NPLs and financial indicators

- NPLs rose initially sharply, depending on reporting standards; slow decline after
- NPL fell only in Asia after 1999; only in 2001 Korea and Malaysia in single digits
- In other countries, NPLs already high due to high interest rates: also FX effects
- Mexico: long time for NPLs to come down

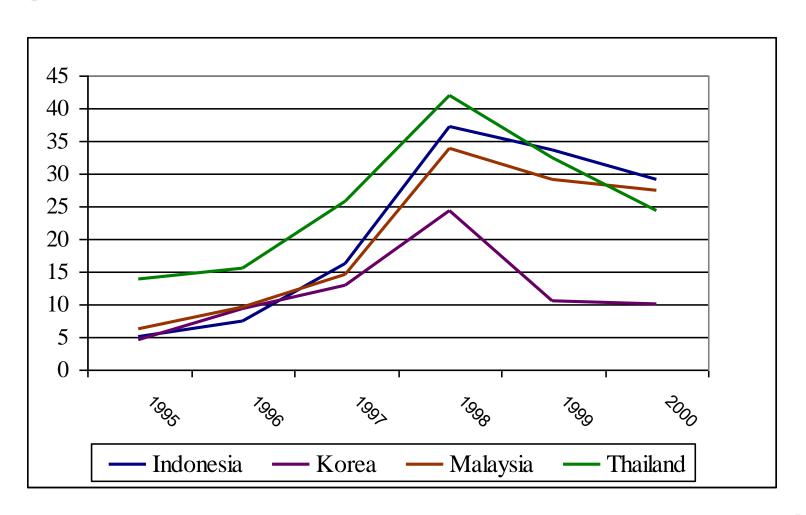
Share of NPLs, including NPLs transferred to AMCs (percent)



Financial indicators: corporate leverage and interest coverage

- Leverage initially sharp increase, in part due to FX shock, rescheduling; slow decline after
- Structure of financing lengthened, for good and bad reasons (reschedulings, bonds)
- Interest coverage worse in East Asia, but declining in other countries before crises
- Interest coverage low in many countries years after crisis, w/ many distressed firms

Financially distressed corporations (percent with IC < 1)



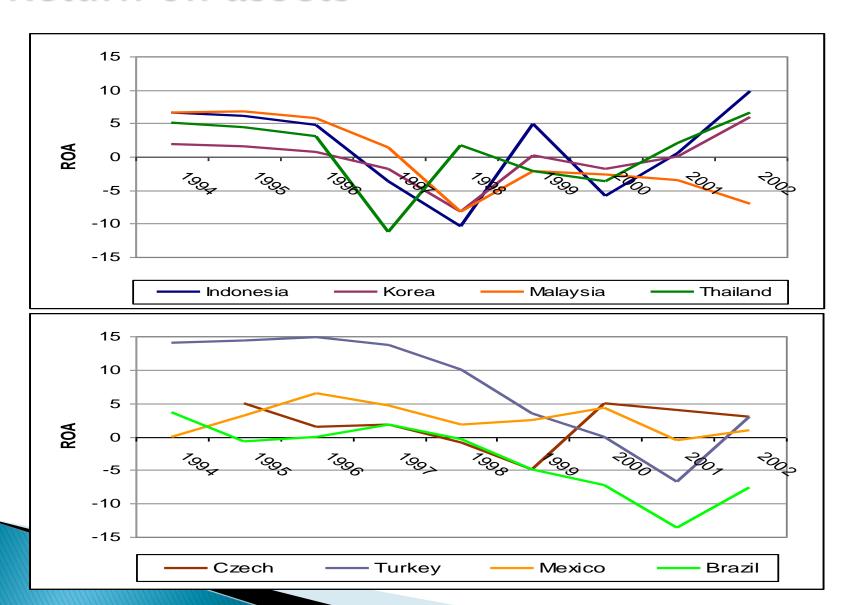
Operational restructuring measures

- Financial restructuring only a means to achieve improved operational performance
 - To create incentives for deeper, more sustainable operational restructuring
 - Can be through changing management, bringing in new owners, changing financial structures
- Financial restructuring not always promoted operational restructuring
 - Much was response to systemic crisis
 - While it achieved temporary financial stabilization, was not always sustainable

Return on assets

- Longer-run decline in ROAs in many countries
- After sharp decline, some rebound, followed by varying return to more "normal" ROAs: East Asia saw strongest recovery
- But profitability and cash flow of corporations in many of the crisis-affected countries remained low, even negative in Brazil, Turkey
- Large deals continued to emphasize financial over operational restructuring

Return on assets



Lessons on SME restructuring

- SMEs often large part of economies and NPLs
 - Hit hard by economic downturns, with adverse feedbacks
 - Suffer more from access to finance constraints
 - But typically not covered in performance/financial data
- Yes, SMEs are "special" for restructuring
 - Smaller, yet high fixed cost to restructuring. Can be more leveraged. Worse financial reporting. Harder to get new financing
 - Single proprietor typically. Concentrated debtholders (banks). Real estate/fixed assets related loans
 - Social consequences more or less, but politics differ

Options for SME restructuring

- Centralized options (1 and 2) not realistic
- Decentralized options (3 and 4) more sensible
 - Much thus depends on other supporting policies and institutional infrastructure, notably bank restructuring, and loan-loss provisioning, tax rules
 - Insolvency regime can be barrier to restructuring, but rarely solution as typically largely out of court
 - Specialized out-of-court mechanisms can help at the margin. Rarely do across the board mechanisms help while they can lead to moral hazard
 - Key is to allow for and encourage a quick triage

Overall lessons on corporate restructuring, large and SMEs

- a) A menu of approaches is needed
- b) An efficient insolvency system, as a "backdrop"
- c) Loss absorption capacity in financial institutions
- d) A proper framework for financial institutions
- e) Tax, corporate governance and other reforms
- f) Limited role of the state and state-owned banks
- g) Disclosure and time-tables on restructuring

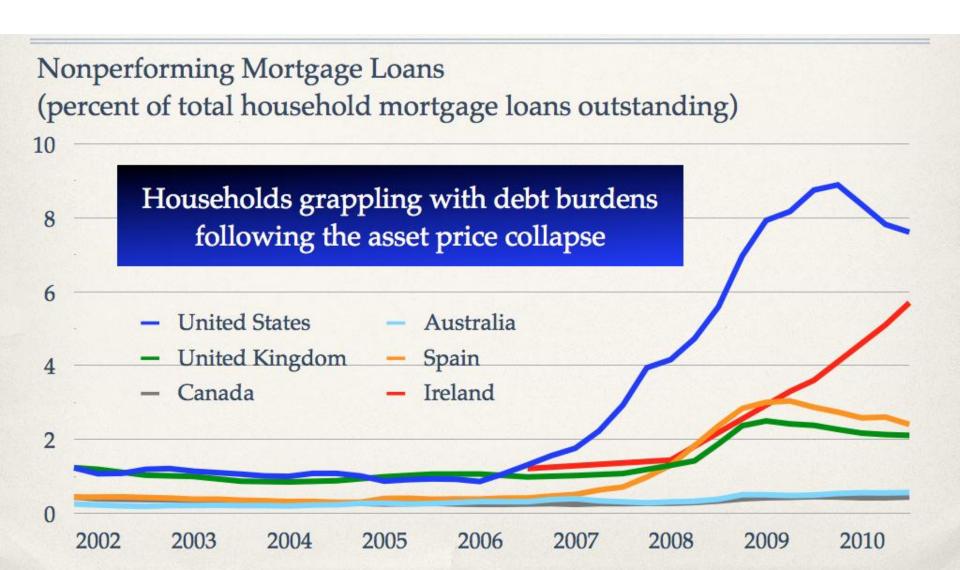
Outline

- General lessons from financial crises
- Lessons on crisis management
- Lessons on corporate restructuring
 - Large and SMEs
- Lessons on household restructuring

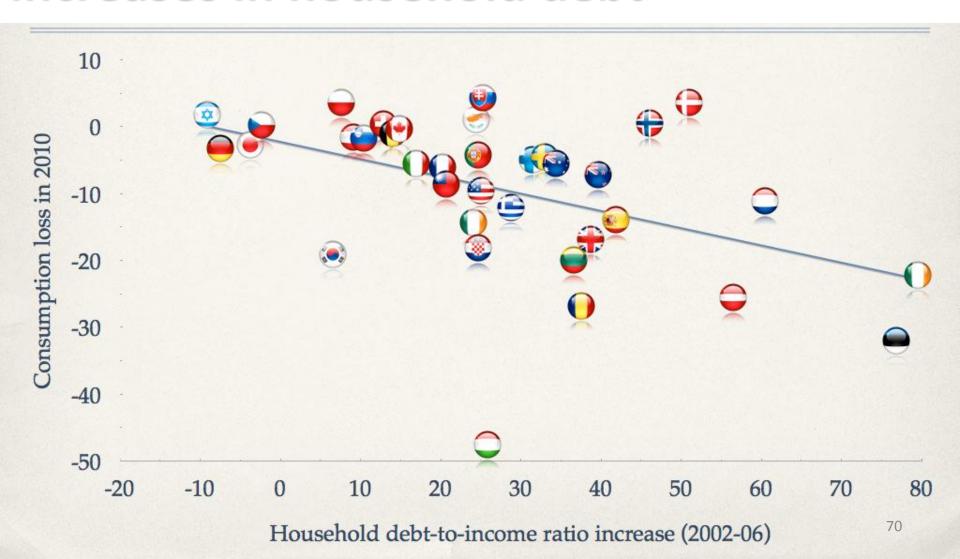
Lessons on household restructuring

- Current crisis: more housing finance driven
- Adverse feedback loops (macroeconomic, consumption; and financial stability, NPLs)
 - With debt nominal → redistributes income from debtors to creditors, with lower MPC → reduces aggregate C. → shock amplified, more persistent
- Risks of Fisherian debt deflation and debt driven slumps w/ deleveraging (Japan, EA, US)
 - Creates an oversupply of savings, stagnation
 - Aggregate demand externalities through quantities, do not self-correct (differs from credit busts)

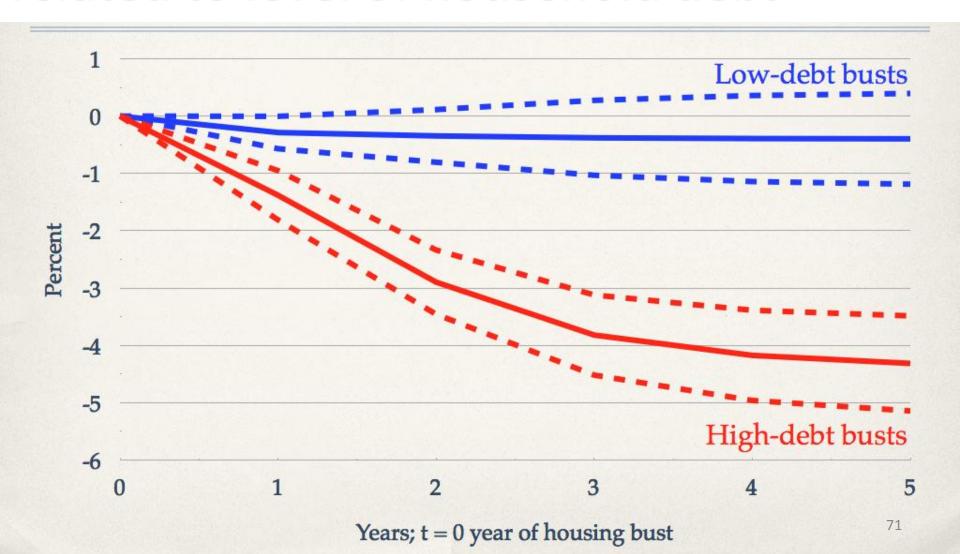
Household NPLs large part of crisis



Consumption decline related to prior increases in household debt



Historically, consumption decline is related to level of household debt



House price effect though small part of overall consumption decline



Household debt restructuring

- Challenges (many like those of SMEs)
 - Large number of loans of small size. Much diversity and large information asymmetries
 - Single lender more common
 - Risks of moral hazard and political outcries with generalized schemes
 - Yet, adverse feedback loops of debt overhang
 - Speed and comprehensive of restructuring important
 - Effects function of debt (e.g., asymmetry, less savings during booms, but no more in bust/deleveraging only for low consumer debt levels)

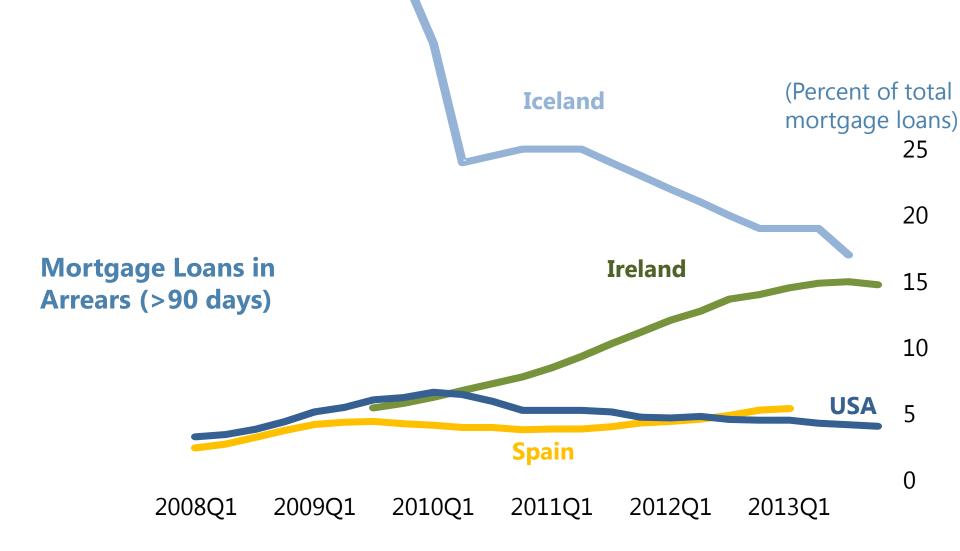
Some cross-country lessons

- Hard to generalize given the large variation across countries (and sometimes within)
 - E.g., recourse vs. non-recourse; securitization and chains vs. single lender; 2nd lien, consumer debt; personal bankruptcy regime/stigma; etc.
- Still many common elements
 - \circ Macroeconomic support, obviously, interest rate \downarrow
 - Financial support, for recapitalization and liquidity
 - Enabling environment (tax, regulation, bankruptcy regime, LLP/C, etc.)

General approach

- Decentralized preferable (and often only feasible)
 - With requirements similar to SME restructuring
 - Possibly standardized approaches (e.g., pre-pack
 - Consider liquidity support (funding, link with pension
- Centralized rarely feasible
 - Demands high, e.g., lots of data (credit bureau, tax)
 - Political risks/fall-out considerable
 - Large-scale systemic approaches limited scope/effect, except for US Great Depression. However:
 - Intra-creditors conflicts and court bottlenecks can make for other government roles, including targets (e.g. MART

Comparing Arrears in Recent Crises Shows Some of the Differences



Case studies on households debt restructuring: more centralized

Program	Features	Take-up
US 1933 HOLC	Bad bank, extended terms, lower rates,	20%
	principal write-down	
Colombia 1999	Banks take over property, interest rate	~100%
	reductions, large losses for banks, credit	
	crunch	
Hungary 2011	Mandatory principal write-down (full	15%
	prepayment), large losses for banks, credit	
	crunch	

Case studies on households debt restructuring: more decentralized

Program	Features	Take-up
USA 2009	Extended terms, lower rates, some principal	2%
HAMP	write-down	
Iceland 2008	Case by case restructuring + partial debt	15+%
	forgiveness	
Spain 2011	Low LTVs, few specific mortgage programs	NA
Scandinavia	No specific mortgage, but large social	NA
	support	

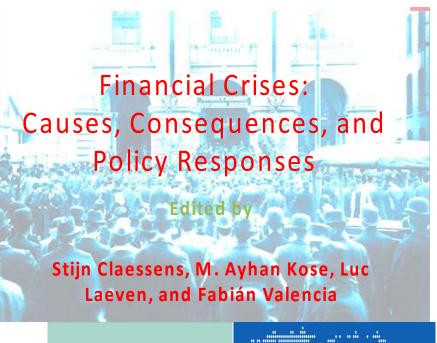
Lessons on household debt restructuring

- Can (and need to) deliver meaningful support
 - USA 1933, Iceland 2008
- Support relevant where limited scope for more macro stimulus, already helped banks
 - Not so Scandinavia, some in Spain 2011
- Not too restrictive
 - US 2009
- Not too broad
 - Colombia 1999, Hungary 2011

Broader lessons on restructuring

- Preserve private sector incentives to restructure weak financial institutions and NPLs
 - Consistent framework with sufficient loss-absorption
 - Private agents to face right sticks and carrots
- Be not only cognizant of political and social factors, but adjust pro-actively and up-front
 - Be aware of social/political economy factors behind the causes of a crisis and its resolution
 - Change structures so that recovery is expedited and more sustainable outcome results
- Use crisis to start deeper structural reforms

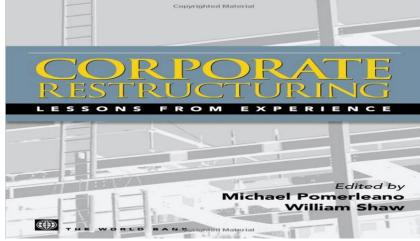
Sources used



Crisis Management and Resolution: Early Lessons from the Financial Crisis

Stijn Claessens, Ceyla Pazarbasioglu, Luc Laeven, Marc Dobler,

Fabian Valencia, Oana Nedelescu, and Katharine Seal



Policy Approaches to Corporate Restructuring around the World: What Worked, What Failed?

Stijn Claessens





Private Sector Deleveraging and Growth Following Busts

> Sally Chen, Minsuk Kim, Marijn Otte, Kevin Wiseman, Aleksandra Zdzienicka

Resolving Residential Mortgage Distress: Time to Modify?

Jochen R. Andritzky

