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Housing finance: some International trends after the crisis

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1. Housing market: the origin of the crisis
2. Sounder underwriting
3. Sounder securitisation
4. Macroprudential tools
5. Disclosure of market practices
6. Variable vs fixed rates
7. Recourse vs transfer of property

Housing market: the origin of the crisis

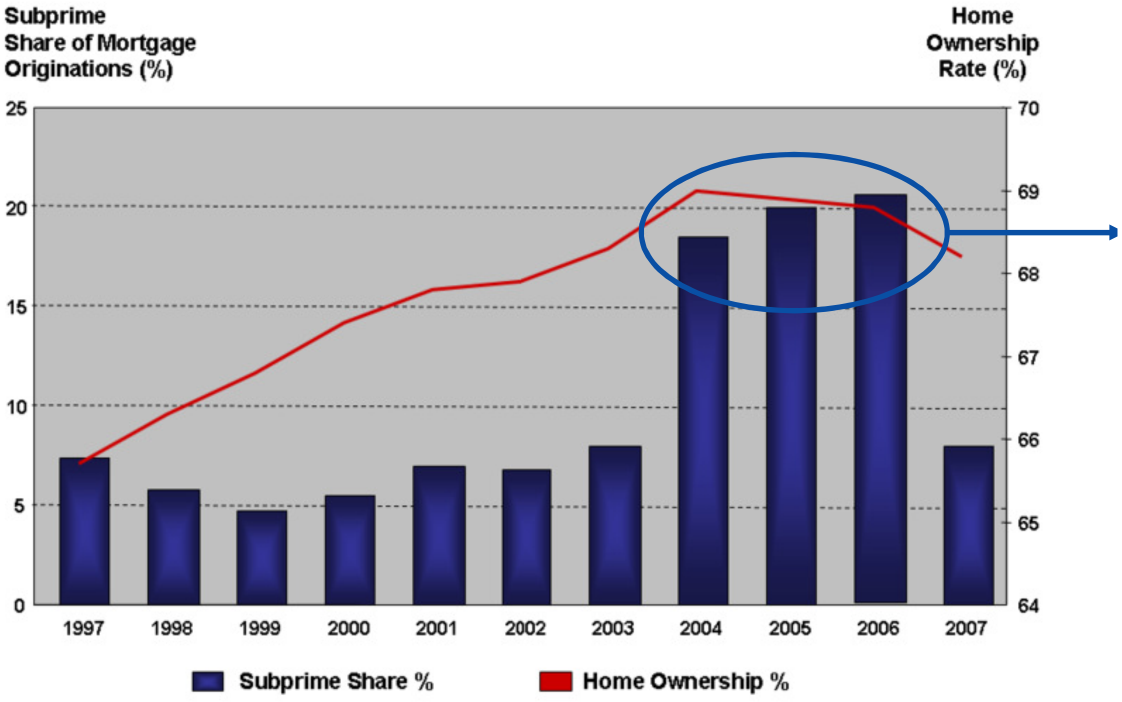
- The bigger the housing bubble, the more devastating impact on the countries' economic activity
- Propagated through securitisation schemes

No surprise a significant part of the reform effort is concentrated in housing finance:

- Sounder underwriting
- Sounder securitisation mechanisms
- Macroprudential tools to prevent/fight housing bubbles
- Disclosure of market practices in securitised markets

Sounder underwriting in mortgage lending

US subprime lending: perfect example of poor underwriting



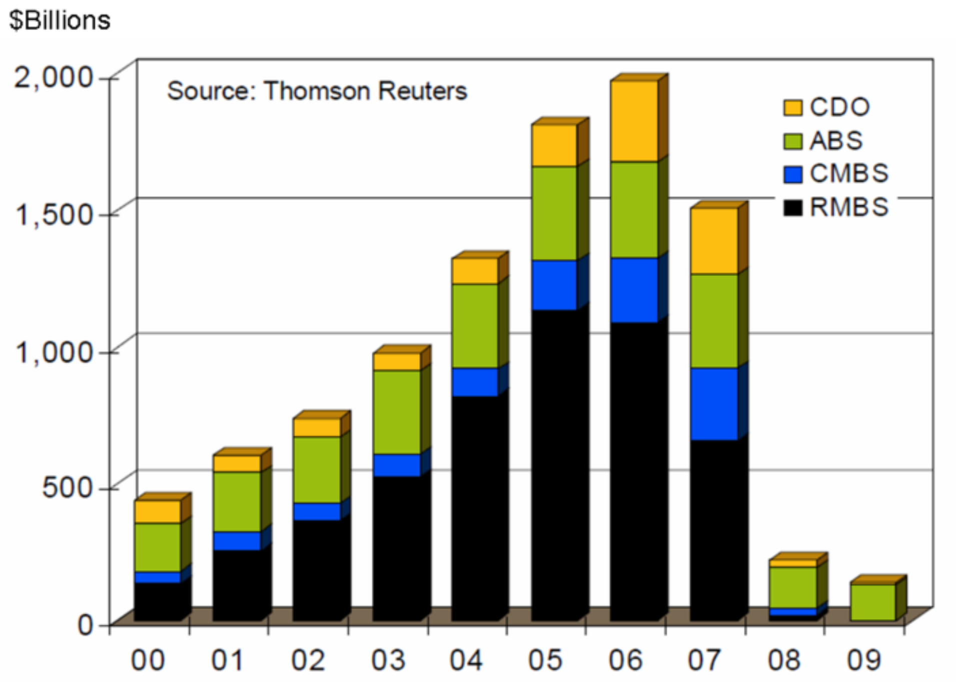
Sources: U.S. Census Bureau; Harvard University- State of the Nation's Housing Report 2008

Need to restore basic underwriting rules:

- Verification of the borrower’s income
- Payment capacity of the borrower during the whole life of the loan
- Setting of reasonable references for debt service coverage
- Use of both LTV and LTI (affordability) ratios
- Reliance on house price increase expectations should be avoided
- Independence of appraisers
- Other practices: limits to LTV, mortgage insurance (the Canadian model is seen as a good practice)

Sounder securitisation mechanisms

Securitisation market activity



- Almost halted by the crisis, and will never be the same
- But its rationale is still strong: (i) helps mobilising illiquid assets; (ii) transfers credit risk to more diversified holders, willing to hold this risk; (iii) contributes to correct maturity mismatches; (iv) reduces the cost of credit; and (v) in emerging markets, fosters financial deepening, helps develop capital markets and promotes housing development
- Challenge now: to make securitisation compatible with financial sector soundness and restore the correct incentives: (i) better underwriting; (ii) increase transparency; (iii) improve standardisation and simplicity of ABS; (iv) issuers should retain more exposure (skin in the game); and (v) avoid regulatory arbitrage to Off-Balance Sheet Entities.

Macroprudential tools (I)

Table 1

Macroprudential instruments by vulnerability and financial system component

		Financial system component				
		Bank or deposit-taker		Non-bank investor	Securities market	Financial infrastructure
		Balance sheet*	Lending contract			
Vulnerability	Leverage	• capital ratio • risk weights • provisioning • profit distribution restrictions • credit growth cap	• LTV cap • debt service / income cap • maturity cap		• margin/haircut limit	
	Liquidity or market risk	• liquidity / reserve requirements • FX lending restriction • currency mismatch limit • open FX position limit	• valuation rules (eg. MMMFs)	• local currency or FX reserve requirements	• central bank balance sheet operations	• exchange trading
	Interconnectedness	• concentration limits • systemic capital surcharge • subsidiarisation				• central counterparties (CCP)

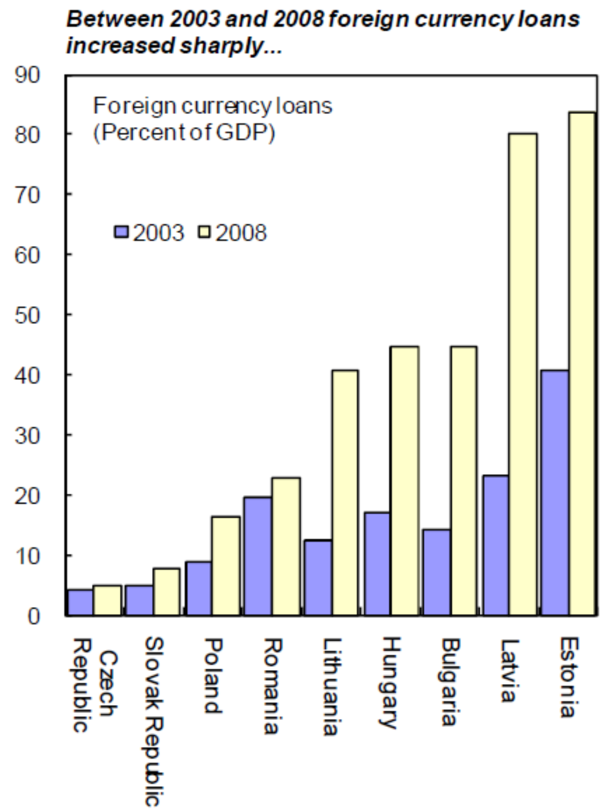
* Capital and other balance sheet requirements also apply to insurers and pension funds, but we restrict our attention here to the types of institutions most relevant for credit intermediation.

Source: CGFS, 2010

- Some initiatives designed to deal explicitly with housing bubbles:
  - LTV ratios: caps or adjustment factor to correct house price increases in LTV valuations
  - Affordability: limits to debt servicing / income ratios (EU Directive sets an indicative range: 33% - 50%
  - Credit growth: introduction of limits or a capital surcharge when credit growth exceeds a certain threshold
  - Mortgages denominated in foreign currencies (next slide)

Macroprudential tools (II)

Foreign currency-denominated mortgages in Central and Eastern Europe



- Source of risk in CEE countries (previously in Latam)
- Attractive (for the customers):
  - Lower nominal rates
  - Absence of long-term funding in local currency
  - Monetary illusion, especially in a boom: rising house prices + capital inflows + appreciating domestic crisis
- However, credit risk remains: even if there is matching in forex, borrowers' income is still denominated in their own currency
- Consumer protection issue
- Several measures implemented to limit this practice: ,higher risk weight in CAR; higher downpayment; higher provisions; higher reserve requirements; liquidity requirements; ceilings; outrigjht prohibition
- Recent case of Hungary: posibility to convert mortgages into domestic currency at an exchange rate favourable for the borrower

Macroprudential tools (III): Asian countries

- Asian countries particularly active with regards to the use of macroprudential instruments to counteract housing bubbles:
  - Lessons learned in the Asian crisis
  - Only region in the world where the housing boom has resumed in the recent period
  - The case of Korea especially interesting: reduced LTV limits for lending in certain geographic areas (declared as "speculative zones") since 2003

Asian experience with macroprudential tools

Objective	Tools	Examples
Manage aggregate risk over time (ie procyclicality)	• Countercyclical capital buffers linked to credit growth	• China[1]
	• Countercyclical provisioning	• China, India
	• Loan-to-value (LTV) ratios	• China, Hong Kong SAR, Korea, Singapore
	• Direct controls on lending to specific sectors	• Korea, Malaysia, Philippines, Singapore
Manage aggregate risk at every point in time (ie systemic oversight)	• Capital surcharges for systemically important banks	• China, India, Philippines, Singapore
	• Liquidity requirements / funding	• India, Korea, Philippines, Singapore
	• Limits on currency mismatches	• India, Malaysia, Philippines
	• Loan-to-deposit requirements	• China, Korea

Source:Source: Caruana,J: Macroprudential policy: working towards a new consensus, 2010

Disclosure of market practices to ensure discipline in securitised markets

Securitisation:
immense potential for contagion across borders

Investors:
Holders of ABS have no idea of underlying assets

Contrast:
Local primary markets vs global secondary markets

Implications:

- Market practices and regulation present wide international differences …
- … but risks are widely dispersed across borders

A public **disclosure** of the main aspects concerning the soundness of the national mortgage markets and underwriting practices is necessary:

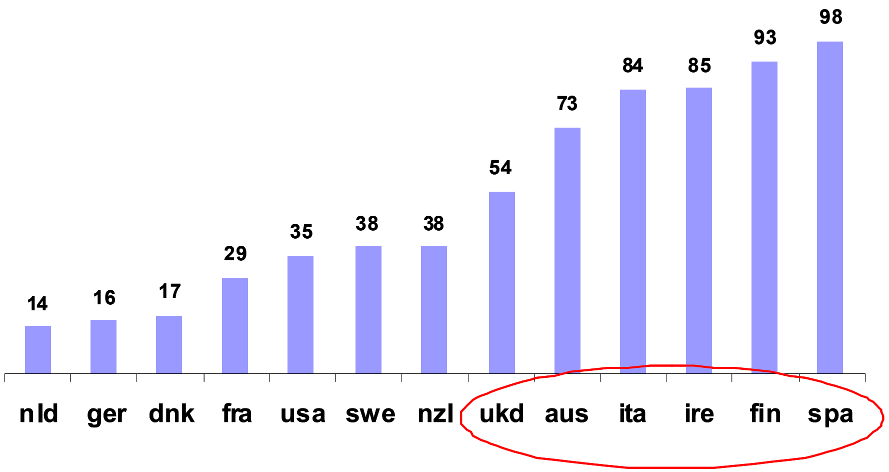
FSB Peer Review of mortgage underwriting and origination, March 2011

Variable vs fixed rates & Early Repayment Fees (I)

- Sharp contrast between countries

Variable rate mortgages

% of total mortgages



- Very positive in countries like Spain during this crisis (low interest rates)…
- …but it could be different in a typical crisis, if rates rise
- It is a serious vulnerability

These difference among countries suggests the existence of failures in the supply side of the market in those countries where a certain type of mortgage is prevalent

- Possible explanation: Early Repayment Fees

Variable vs fixed rates & Early Repayment Fees (II)

Country	Interest Rate and Market Share*	Early Prepayment Fee*	Typical LTV ratio**	Typical Term**	Residential mortgage debt to GDP	Owner occupation rate
Denmark	ARM → 45% Fixed → 55%	• Unique model: FRM can be repaid through repurchase of a bond in secondary market. No penalty or fee	80%	30 years	92,8%	54,0%
France	Fixed → 70%-80%	• Limit: the lower between (i) six month's interest payments or (ii) 3% of the outstanding mortgage amount. • No fee if early payment due to death, involuntary redundancy or job-related location	75%	15 years	34,9%	56,5%
Greece	ARM → 27%	• No re-payment fees for ARM	75%	17 years	30,2%	80,1%
Germany	Renegotiable with a fixed period of 5-10 years → 55%	• No repayment possible during first 10 years of a FRM, unless good cause and full compensation to lender • Fees on ARM strictly prohibited	70%	25 years	47,7%	43,2%
Italy	ARM predominant since 4Q2006	• Law 40/2007: no penalties on mortgage contracts executed after Feb.2007. Also reduction in the amount applied to mortgages prior that date. • Previously, informal agreement ≤ 5% principal	50%	15 years	19,8%	80,0%
Spain	ARM → 93%	• Penalty for early repayment: Law Dec. 2007 sets ceiling in of 0,5% of prepaid amount during the first 5 years of the mortgage loan, and 0,25% after that. • Compensation for interest rate losses: only for mortgages with interest rate revision > 1 year (in practice a very small percent of total mortgages) • Previously, maximum fees were 1% and 2.5% for variable and fixed rate mortgage contracts respectively.	70%	20 years	61,6%	86,3%

Source: *Hypostat 2007. A Review of Europe's Mortgage and Housing Markets. European Mortgage Federation and **IMF (2008), information referring to the period 2003-2006

Note: F means that majority of mortgage loans are fixed rate (fixed at least for a period of 5 years); V means majority of variable rates
1: as % of outstanding residential loans

Recourse vs transfer of property

- The possibility to pledge the house in lieu of payment already exists in various countries.
- In other countries the tradition is "recourse": the debtor is liable for the whole of the debt even after foreclosure
- When both possibilities coexist, it is a matter of pricing.
- In some states in the US, the possibility of pledging the house in lieu of payment has arguably led to a rapid spread of the crisis
- If introduced retroactively:
  - the impact on the banking sector would be extremely negative
  - would introduce legal uncertainty
- Moreover the ABS market might be impacted, and future securitisations too.
- Possible solution:
  - clients should be offered different types of mortgages (fixed/ flexible; with/ without recourse) so that they can choose between them