The doom of structured credit: lessons for future regulation

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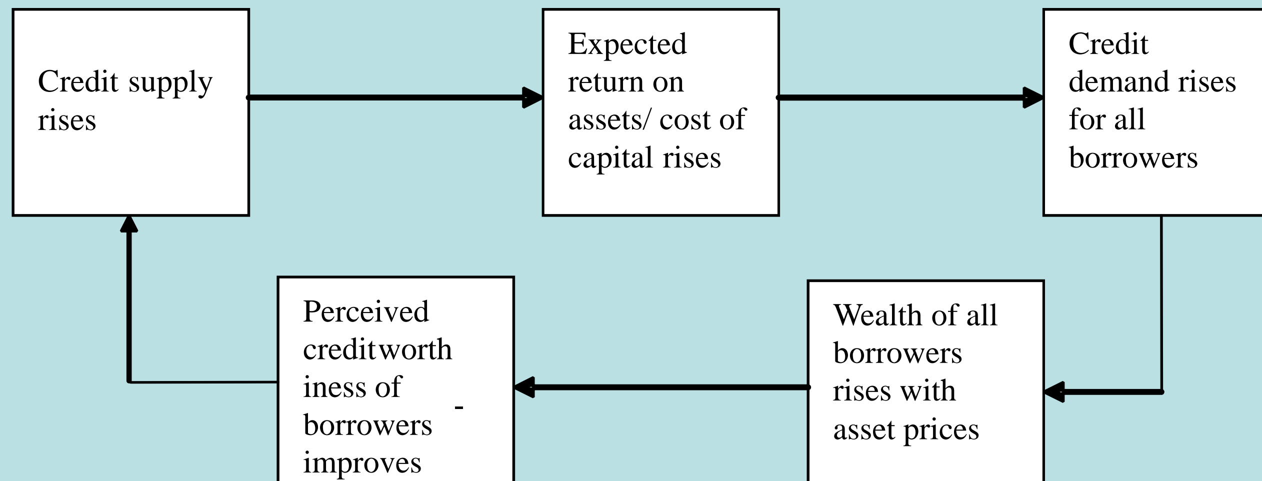
Hard questions that should be asked

- Why are market-financed economies systematically prone to recurrent financial crises?
- Why has the investment bank model of credit (O&D) so miserably failed?
- Why has the valuation of risk been so misleading for the investing community?
- What are the lessons to be drawn for future regulatory reform?

Embedded instability in market finance dynamic

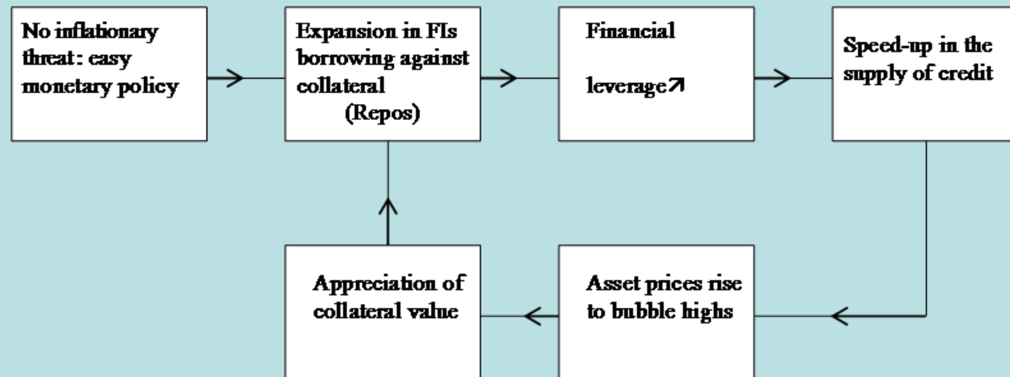
- Credit markets are not standard supply and demand markets:
  - For price to drive an adjustment to equilibrium between supply and demand the *demand curve must be independent of the supply curve*
  - This is not so with credit while debt is issued against promises of future asset price appreciation and not against future income of individual borrowers : *credit supply creates its own demand in a roundabout way* ⟶ non-stabilizing positive feedback process
  - *Individual credit demand functions are not independent:* they contribute to the rise in asset prices, therefore to the general increase in wealth



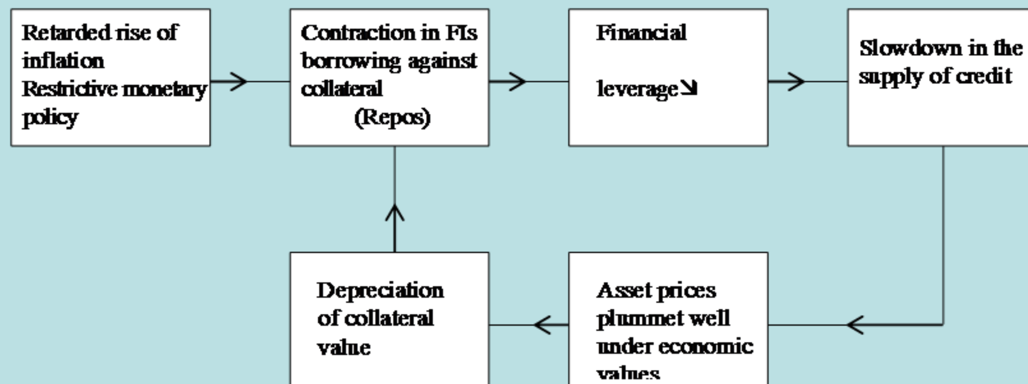
Embedded instability in market finance dynamic

- Monetary policy is not well-equipped to monitor the financial cycle because the credit-induced asset price bubble formation is largely decoupled from the concern with price stability

Euphoric stage of credit expansion and asset price rise



Depressive stage of credit contraction and asset price slump



Securitization is not the problem, the behavior of all financial intermediaries and rating agencies is

Benefits of properly managed securitization

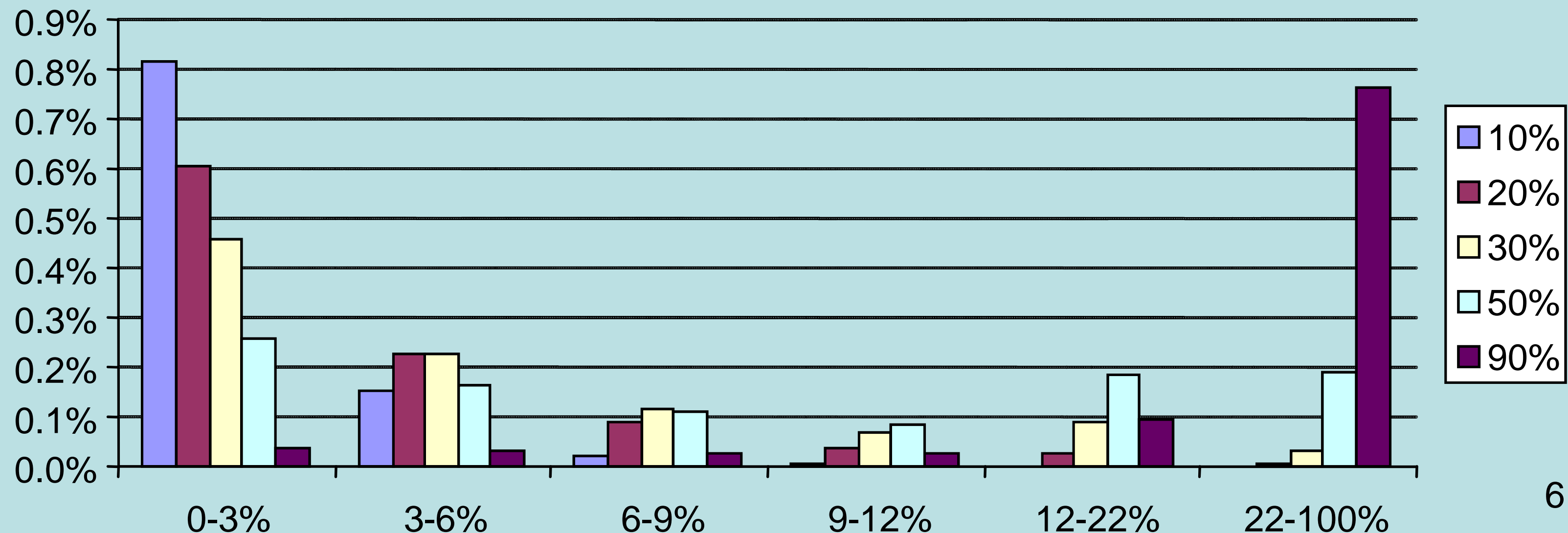
- *Benefits:*
  - Financing costs ↘
  - Risk spread more evenly
  - Larger portfolio choices
- *Proper management*:
  - Credit to be packaged secured and standardized
  - Liquidity secured by secondary market or by regulating agencies
  - No deterioration of credit quality at origination
  - Ultimate holders of risk able to make independent assessment and exert market discipline on intermediaries

Damages inflicted by the unsecured O&D model

- *Loss of info, conflicts of interests*
  - Securitization for regulatory arbitrage
  - Incentive structure favors volume against quality of credit at origination
  - Risk packaged in unconsolidated and unregulated off-balance sheet structures
- *Massive flaws in risk valuation by rating agencies*:
  - Ratings are highly misleading as assessment of risk
  - Investors were deprived of infos for an independent evaluation

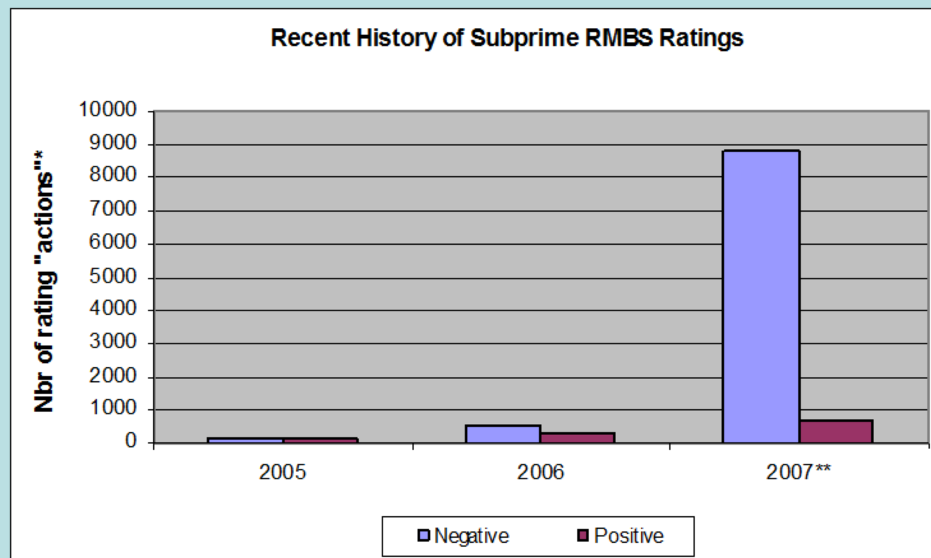
The pitfalls in valuing risk of complex structured instruments

- *Rating agencies fooled by randomness*: a record of no more than 10 years for ABS led them to assume that no general decline in housing prices could arise: ⟶ inference of correlations amongst credits in pools to be structured <30% . Super senior tranches should be protected in all circumstances warranting AAA (*Hyp of a black swan ruled out)*
- Simulation of likely losses for the different tranches built upon a pool of mortgages for different levels of correlation with a 1% individual default loss



The demise of securitization in all its stages

- Origination: O&D model ⟶ *no control of risk to be sold*
- Arrangers conceived totally unregulated and unconsolidated shadow banks to store the ABS and CDO to be transferred to investors, *minimizing capital requirements and maximizing financial leverage*
- Downstream investors had no info and no ability to make an independent assessment of risk ⟶ *market discipline was a mockery*
- The massive downgrading of subprime RMBS attacked the super senior tranches and destroyed trust of investors ⟶ *market financing of the shadow banking system seized all at once*



Connection between credit and liquidity risk in the shadow banking system

- Conduits and SIV (hedge fund-like structures) were highly leveraged : *illiquid long-maturity assets financed by short-term liabilities*

Financial Structure of a typical SIV ($2b in assets) granted the highest rating

Asset Portfolio			Financing		
Structure	Rating	Size(%)	Structure	Size ($ mil)	Size (%)
RMBS	AAA	47.3	Primary dealer credit + ABCP	1820	91.0
CMBS	AAA	15.4	Senior Securities	120	6.0
CDO	AAA	25.0	Mezzanine Sec	57	2.85
Other ABS	AAA	12.3	Capital	3	3

- While rating agencies had downgraded securitized assets across the board, ABCP could no longer be rolled over. Off-balance sheet structures became entirely dependent on primary dealer financing. Because of huge counterparty risk, investment banks decided to reconsolidate what they had unwisely deconsolidated ⟶ *very large and recurrent liquidity requirements in the global money market*

Regulatory reforms: counter-cyclical tools

- **Central banks should play a broader role in prudential regulation**:
  - Investment banks have been brought under the umbrella of the LLR → *too big-to-fail replaced by too interconnected-to-fail*
  - hands-off policy in leverage-induced asset price dynamics (Greenspan) has become untenable (Mishkin) → Dual mandate (financial stability / price stability) needs other tools than the interest rate: *reforming regulatory instruments to mitigate leverage in the euphoric stage of financial cycle*
- **Reforms impinge upon capital requirements and liquidity management**:
  - In squeezed spread cum asset bubble stage of the financial cycle, market value is everything but fair value → *modulating capital adequacy according to an averaging formula over the cycle*
  - *Bank supervisors should look more closely to maturity mismatches,* including shadow banks tightly connected to primary dealers (disclosure should be imperative)
  - *Central banks should provide flexible liquidity schemes* to avoid stigma pbs in crisis and induce banks to hold adequate liquidity in normal times

Regulatory reforms: market discipline

- **Strengthening the securitization process:**
  - Close all incentives for regulatory arbitrage: *securitize for sound economic reasons*
  - Prohibit securitized instruments whose risk assessment by arrangers and risk traders escapes cross-valuation by ultimate risk holders
  - Undertake an in-depth review of the methodology of rating agencies applied to structured credit: meaning of the uniform rate scale for pools of assets whose time structure is fixed against credit events, lack of sensitivity to tail risks, exacerbated conflicts of interests
- **Two ways of market discipline**
  - *standardize pools of credit so that tranches of securities are traded on organized Exchanges*: trades against the clearing house, multilateral netting, daily mark-to-market of exposures, margin requirements
  - *Enhance transparency among all intermediaries in the securitization process* (hedge funds included) *so that investors are capable of risk evaluation of their owns*: compulsory disclosure in composition of asset pools, assumptions on systematic risk factors, impact of shocks on asset return correlation.