The Causes and Consequences of the Current Financial Crisis

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The Elements of the Crisis

- Excessive credit
- Excessive leverage
- Excessive “funding” illiquidity=>insolvency>panic

What are the roots? What are the links?

The roots of excessive credit

- Emerging market crises in late 1990s
  - The global mismatch between desired savings and realized investment
  - Emerging markets and developing countries focus on exports, and generate substantial domestic savings

  =>Demand for high rated paper

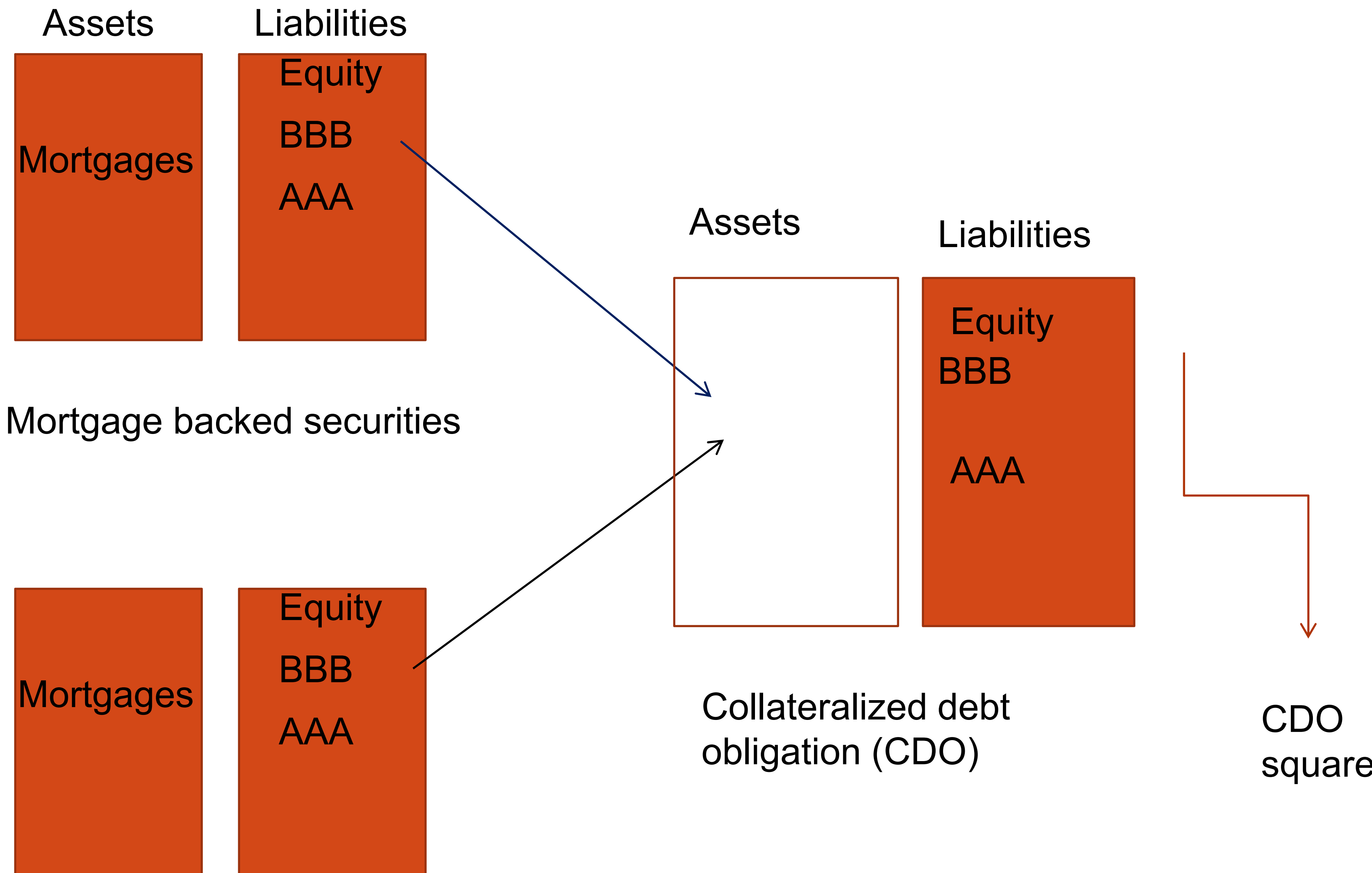
  => Demand for short maturities
- Accommodative monetary policy in developed countries after collapse of IT bubble
  - Expansion in domestic demand
- Corporate savings and subdued investment

=> Rise in asset prices, especially housing, and therefore construction.

  - Not just US – Ireland, Spain, UK…

Why problems first in US?

- Innovations went further to supply the highly rated paper foreigners wanted.
  - Kind of mortgages as well as process of refinancing
    - So long as the house price was rising…
  - Structured products : turning lead into gold
    - $100 of sub prime mortgages into $70 to $80 of short maturity AAA securities


Assets
Liabilities
Mortgages
Equity
BBB
AAA
Mortgage backed securities
Mortgages
Equity
BBB
AAA
Assets
Liabilities
Equity
BBB
AAA
Collateralized debt obligation (CDO)
CDO square

Outcome

- Only hard information mattered, not soft.
- Securitization reduced the quality of credit originated
- Not understood till too late.

Where did credit evaluation breakdown?

- Buyer: “Dumb” money ? Regulatory arbitrage?
  - Bureaucratic (passive investors): search for yield in high rated securities
- Rating agencies
  - Structure to rating
- Original lender/packager
  - Breakdown of market discipline : selling toxic waste
- Home buyer – liar loans

But why did banks hold the high rated structured securities?

- Competitive pressures at top
- Lack of full internalization of risks in banks (UBS)
  - Compensation structures
    - Rewards for origination
    - Tail risk seeking
  - Breakdown in risk management function
    - Power of successful groups

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Excessive short term leverage

- Short term debt is genuinely cheaper when financial assets are not passively held.
  - Banks
  - Investment banks
  - Conduits/SIVs
- Abundant financial liquidity (and Greenspan put) reduced liquidity risk.

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Illiquidity and Insolvency

- As mortgage defaults mount, securities become more complex, pricing of mortgage backed securities becomes harder.
- Securities become hard to sell or borrow against.
- Financing difficulty
- Capital buffers start looking inadequate.
- Maturing short term debt
- Potential insolvency

Panic

- Banks survive on a myth – the money will be there when you go for it, even though everyone knows it is not enough when everyone goes for it.
- Lehman bankruptcy made clear
  - Run could happen
  - Firm would not be bailed out.
  - Investors would face significant losses
  - Others would run
- Runs began everywhere
  - Mutual funds, banks, Goldman/Morgan Stanley, Hedge funds
- Panic

With hindsight -- policy response innovative but inadequate

- TARP I
- TARP II
- What Next
- Why Citi not GM?
- Democrats vs Republicans
- Zombie firms and banks
- Cleaning out system
  - Bad assets
  - Small and medium banks
  - Private capital including dividends

Macroeconomic outlook

US

- Not the Great Depression!!!

But

- Credit crunch will slow investment
- Consumption slow down
  - Wealth effects
  - Labor market
  - Credit

  \+ Energy prices
- Europe and Japan not much better

Emerging markets

- External demand collapse
  - Commodities producers
- Stretched domestic demand
  - House prices
  - Leveraged households
- Credit constraints -- IMF

Tools

- Monetary policy
  - Inflation quiet
  - Remember what happened last time
- Fiscal policy
  - Infrastructure spending
    - But pork barrel
  - Stimulus to get households to spend more?
- Global demand
  - Expanding the role of the International Monetary Fund

Lessons learned (or to be learned)

- Excessive credit growth can emerge from anywhere in the system and impinge on the entire system. Illiquidity is contagious.
  - Unregulated brokers
- Regulators often are focused on the wrong places in monitoring risks
  - Hedge funds
- Ever stricter regulation of the regulated part will push activity into the unregulated part.
  - SIVs and Conduits
- Too much of our regulation assumes management has control and cares about the long run.
- Having a variety of markets and institutions can help the system regain equilibrium more quickly
  - Hedge funds, private equity, Buffet, and sovereign wealth funds
- It is important to strengthen the infrastructure to deal with disaster because periodic disaster is inevitable.

Broad principles for regulatory reform

- Don't just fight the last war.
  - Next crisis will not be in AAA-rated subprime tranches.
  - Heavy handed regulation will increase search for arbitrage.

- Improving incentives at the top important, but many sources of breakdown.
  - Do what you can, but recognize it will not be enough.

- More emphasis on anticipating clean-up and making the private sector pay.
  - Focus on sprinklers, not just fire code.
  - Important to rein in the extent of the safety net that has now been extended to financial institutions.

A Proposal: Capital Insurance

- Raise capital requirements, but give banks option to satisfy some portion with contingent capital that flows in only in crisis, based on pre-specified triggers.
  - Basically, an insurance policy.
  - Economic logic: banks do not sit on costly idle capital all the time: get infusion only in states when social value of bank capital is at its highest.
  - This lowers agency costs, makes contingent scheme cheaper than uncontingent capital held on balance sheet.
  - Specifically targeted at preventing systemic spillovers.
    - Does not pre-judge source of crisis
  - Retains firm-specific incentives.
  - Buffers authorities.
- Compare not to ideal, but to realistic alternatives, e.g., higher capital requirements with no flexibility.

Future developments

- Monetary policy will be more open to leaning against the wind when asset prices ramp up too fast.
- More regulation in the financial sector including of pay.
    - Writing insurance and paying out the premiums as bonuses instead of setting up reserves
    - Pay over the long run, with claw back options
    - Level of pay
- Superiority of banking model?
- Consolidation and limitation on competition.
  - How will we deal with too big to fail/too connected to fail?

Future developments

- Less innovation and more implicit or explicit capital requirements across the board (including for entities that are currently more lightly regulated) => profitability and return to capital of active levered financial institutions is likely to decline even after accounting for losses.
- Concerns about financial liberalization will slow pace of financial sector reform in emerging markets.
- Are we doomed to lurch into the next crisis? Where will it be?