Banking in the 21st Century

Gabriella Chiesa
Liquidity Creation

- Not much through deposits, but rather
- Business loan commitments, credit lines
- Consumer commitments
- Securitization

(see Strahan Figures 1,2)
Useful references


• Gorton, Gary (2009), “Securitized Banking and the Run on Repo”, Yale ICF Working Paper No. 09-14. [see Figure 1 (traditional banking), Figure 2 (securitized banking)]
Securitization

• With securitization banks transform pools of illiquid loans, such as mortgages or credit card receivables, into liquid securities:
  Security is backed by a pool of loans
  - diversification helps to create informationally-insensitive assets;
  -- by transforming pool of loans into securities liquidity is enhanced:
• Securities can be traded (like bonds)
• ***Securities can be transformed into cash via REPOs
Originating Firm Creates Assets

Sells Cash Flows From Pool of Assets

Master Trust Pool of Assets

Securitization Investors

Senior Tranche AAA

Next Tranche AA

Next Tranche A

Last Tranche BBB

Proceeds of Sale of Assets
REPOs

• Repurchase Agreements (repo):
A sale and repurchase agreement, known as a “repo” for short, is a sale of a security combined with an agreement to repurchase the same security at a specified price at the end of the contract.
(it’s like a loan collateralized by a security, but it’s more than that...
REPOs

• The party that gets the security (in exchange for cash) can use the security for a REPO with another party:

• Thanks to “REPOs” securities are like cash (can be transformed into cash):
  securities become means of payments
  (like having a deposit/current account you can use to make payments by issuing checks)
Liquidity Creation

The combination of:

• Securitization of (otherwise illiquid) loans
• REPOs

Is the very innovation for creating liquidity
Thanks to securitization you create securities
Thanks to REPOs securities become means of payments
How much liquid is a security?

• How much cash can you get with a REPO? the key is the “haircut”:
  The haircut is the percentage difference between the market value of the pledged collateral (the security) and the amount of funds you get (in exchange for the security)
  • The less information sensitive the security the smaller the haircut: the more liquid is the security
REPO

• Repo is essentially depository banking, built around informationally-insensitive debt.

In a repo transaction, one side of the transaction wants to borrow money and the other side wants to save money by “depositing” it somewhere safe. Think of the borrowers as a “bank” and the lender as a “depositor,” although the lender is another firm, such as a bank, insurance company, pension fund, institutional investor, or hedge fund. The depositor receives a bond as collateral for his deposit.
Deposits and REPOs: Who Uses What

• Retail investors use deposits: deposit their money in a bank – get liquidity by issuing checks

• Institutional investors park (deposit) their money in securities and get liquidity by using REPOs
What ensures liquidity

- **Deposits** are liquid because they are protected by **deposit insurance**, but only up to a limit – retail investors are protected by deposit insurance.

- **Securities** are liquid if backed by **informationally - insensitive assets** (diversified pool of loans, and of course non-risky Government Debt)
REPO

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Vulnerability (runs) in the 21st century

- The key is again *maturity mismatch*: Financial claims are backed by real assets. And financial claims:
  Ordinary deposits and REPO contracts have a maturity much shorter than that of the real assets

REPOs have very short maturity - often *overnight.*
Vulnerability (runs) in the 21st century

• In a traditional (*old-fashioned*) banking system: Depositors run by withdrawing deposits.

• In a REPO system depositors can “withdraw” their funds by not rolling over their repo agreements, and returning the security, or they can withdraw by increasing the haircut on the collateral.

This is depository banking in a different form, but banking nevertheless. Like demand deposits at regulated commercial banks, this system is vulnerable to panic.

We have seen that!!