FEDERAL RESERVE BANK of NEW YORK

Discussion of “When the River Runs Dry …”

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Changes in banks' funding structure

"traditional" bank balance sheet

Core
Deposits

Equity

"modern" bank balance sheet

Core
Deposits

Wholesale
funding

Equity

Core deposits stable source of funding
- transactional motive
- deposit insurance

Wholesale funding less stable
- Institutional investors
- Market sensitive
- No insurance
- More prone to runs

Claudio’s paper

- Significant increase over time in WF
- Is WF a source of vulnerability for banks?
- Was WF reliance an important factor in the crisis of 2007-2009?
- Did it contribute to propagation to the real economy?

Claudio’s contribution

- Is WF a source of vulnerability for banks?
  - ✓ Yes
- Was WF reliance an important factor in the crisis of 2007-2009?
  - ✓ Yes
- Did it contribute to propagation to the real economy?
  - ✓Yes

Empirical strategy

- Test of market impact (CARs) on banks based on their reliance on WF
- Test of balance sheet transmission. Impact on asset side (loan growth and total asset growth)

Empirical strategy

- Quasi natural experiment approach:
- Compare performance measures pre and post event.
- Treatment/control groups: High vs. Low ex ante levels of reliance on WF.

Findings

- WF reliance by banks a big vulnerability factor.
  - Market penalization quite substantial
  - Transmission to asset side also very large
- Very nice dataset, very careful analysis, very smooth paper.
- Very little to criticize!!

Put paper in a broader perspective

- Is WF a good thing or a bad thing?
- Why do banks increase reliance on WF?
- Causality question: if WF is a “bad thing”, it is the “disease” or just a “symptom”?
- Questions very loaded when it comes to discussing normative implications

Bright side of WF (Calomiris and Khan, AER 91)

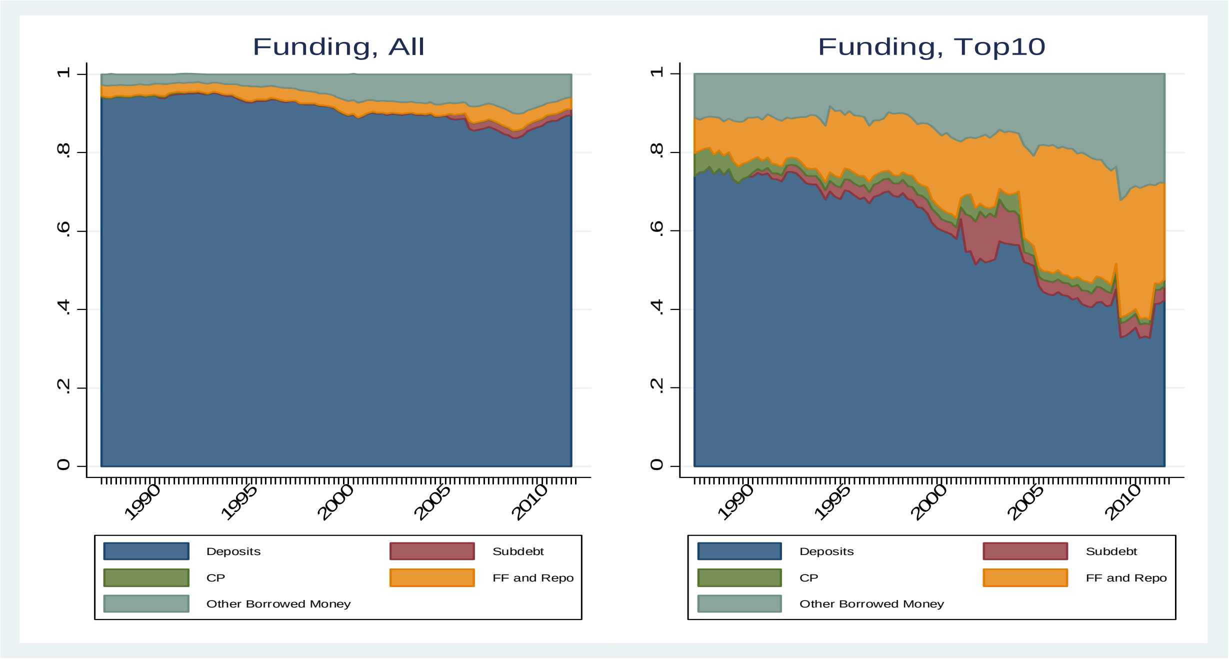
- WF suppliers are sophisticated investors that can effectively monitor banks, thus imposing discipline.
- Withdrawals occur when bank take “bad” actions, hence socially good.

Dark side of WF (Huang and Ratnovski, JFI 2011)

- WF investors have an imperfect monitoring technology
- Rely more on noisy public signals
- Problems worse depending on the type of bank assets
- Withdrawals may occur when it is “too late” from a social perspective

Why do banks increase WF reliance?

1. TBTF argument: largest banks should be the ones more likely to expand WF sources. TBTF “subsidy” on this funding cost for them.



Share of U.S. BHCs funding sources. Source: Santos 2012

Why do banks increase WF reliance?

2. Balance sheet management argument: Banks manage their optimal leverage level. When marked-to-market asset value increases – with corresponding increase in value of equity - leverage goes down. Banks with reliance on (more reactive) WF sources can more effectively expand funding to increase leverage again.

   Hence, WF reliance gives banks balance sheet flexibility.

Why do banks increase WF reliance?

3. Intermediation technology has changed. From an originate-to-hold model of banking to an originate-to-sell model.

   Reliance on WF a reflection of transformation on the asset side of balance sheet.

Funding a reflection of evolving intermediation

"traditional" bank balance sheet

Loans	Deposits
	Equity

"modern" bank balance sheet

Loans	Deposits
	Wholesale funding
	Equity

Funding a reflection of evolving intermediation

“traditional” bank balance sheet

Loans	Deposits
	Equity

Loans stay on banks’ books to maturity.
Stable (deposit) funding is needed

“modern” bank balance sheet

Loans	Deposits
	Wholesale funding
	Equity

High degree of loan “churning”
Loans stay a shorter time on banks’ books
Reduced need to rely on stable (deposit) funding
More reliance on rolling over shorter term WF sources

Funding dynamics a function of asset side

- Then question is whether WF flees banks indiscriminately or whether instead withdrawals are especially high among banks with worse asset performance
- Some evidence of the second. U.S. banks with higher charge-offs the one losing more WF during the crisis (Santos, 2011).

Regulator seems to follow this principle

- Net Stable Funding Ratio approach based on asset buckets, by degree of liquidity
- "... developed to provide a sustainable maturity structure of assets and liabilities. ..." (BCBS 2010)

Back to Claudio's paper

- None of this a criticism to his results
- But interpretation may depend on which argument prevails
- Is WF at the root of the problem or just one of its manifestation?