Discussion of Marvin Goodfriend’s

“I Pull No Punches Essay”

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Three Contributions

- Introduce a taxonomy of policy
- Provide a diagnosis of the crisis of 2007–2009
- Articulate principles of Fed-Treasury interactions
My Discussion

- Think taxonomy useful
- Find diagnosis may well be right
- Set out alternative principles
- Provide data for improving academic research
Diagnosis

- Marvin suggests Fed/Treasury converted a somewhat worse than garden variety recession into a full-blown Great Recession.

- Speculative, of course.

- Just as speculative as “We will not have an economy on Monday if Congress does not pass this bill.”

- Need cross-country evidence.
Theory Behind Principles

- Interest on reserves good idea
  - Gets us closer to Friedman Rule

- Credit allocation policy dangerous

- Fed getting into fiscal policy undermines independence
Theory Behind Principles

- Interest on reserves good idea
  - Gets us closer to Friedman Rule

- Credit allocation policy dangerous

- Fed getting into fiscal policy undermines independence
  - Is Fed’s independence gone for good?
Principles

- We solemnly promise not to get into credit allocation
Principles

- We solemnly promise not to get into credit allocation
  - Except when the Great Depression monster lurks under our beds
Principles

• We solemnly promise not to get into credit allocation
  – Except when the Great Depression monster lurks under our beds

• Message from Fed to Treasury: Take these assets away

• We will all cooperate

• We will not inflate too much

• Everyone gets interest on reserves

• We will all cooperate
The Logic Behind My Principles

- No commitment technology: Bailouts will happen
- Government bailouts create externalities
- Private agents will not internalize these externalities
- Ex-ante regulation should focus on reducing costs of bailout externalities
Translating Logic into Principles for Policy

- Ask when governments will bail out
- Ask how anticipated bailouts will affect private discussions
- Tailor policies to alter private decisions
- Lots of short-term debt makes bailouts necessary
- Costly bankruptcy makes bailouts necessary
Principles for Policy

- Impose limits on short-term debt
- Force long-term/uninsured debt to be convertible to equity
- Make money market mutual funds truly into mutual funds
What Academics Need to Think About

- How important is access to financial markets for firms’ investment decisions?
- What business are banks in, anyway?
Importance of Financial Market Access
Key Ingredients in Many Financial Friction Models

- Typical firm needs external funds to finance investment
- Agency costs induce wedge between internal and external funds
- Binding collateral constraints
- Fluctuations in wedge/constraint affect investment in a big way
Does Typical Firm Use External Funds to Finance Investment?

- Use data from Flow of Funds for all nonfinancial corporations

- Available Funds (AF) = Revenues – Wages – Materials
  – Interest payments – Taxes

- In Flow of Funds, AF = Internal funds + Dividends
  Alternatively, AF = Retained earnings + Dividends
  + Depreciation

- In Flow of Funds use Gross Investment for Capital expenditure
Does Typical Firm Use External Funds to Finance Investment?

- Available Funds – Dividends + Net new debt issue
  + Net new equity issue
  = Capital expenditure

- Suppose   Net new debt issue = 0
  Net new equity issue = 0

- That is, firms lose access to financial markets

- Can they finance all investment internally?
Available Funds and Capital Expenditures
Source: Flow of Funds and BEA

Sample Average:
Available Funds / Corporate GDP = .18

Data for U.S. Nonfinancial Corporations
Available Funds and Capital Expenditures
Source: Flow of Funds and BEA

Sample Average:
Available Funds / Corporate GDP = .18
Capital Expenditure / Corporate GDP = .15

Data for U.S. Nonfinancial Corporations
Noninterest Flow from Households to Firms,
Source: Flow of Funds and BEA.

Sample Average:
\[
\frac{(\text{Capital Expenditure} - \text{Available Funds})}{\text{Corporate GDP}} = -0.03
\]
Noninterest Flows From Households To Firms

Quarters with positive flows (19):
1973 Q 1,2,4 1974 Q 1-4
1978 Q 2,4 1979 Q 1-4
1980 Q 1,2,4 1981 Q 1,3,4

Lag       Correlation
-4   -0.16677
-3   -0.05204
-2   0.09986
-1   0.25439
 0   0.40629
+1   0.42766
+2   0.41376
+3   0.34244
+4   0.25599

Does Typical Firm Use External Funds to Finance Investment?

- No, for aggregate of U.S. corporations

- Financial markets may play a big role in reallocating funds from cash-rich, project-poor firms to cash-poor, project-rich firms

- Use disaggregated data to analyze reallocation
Does Typical Firm Use External Funds to Finance Investment?

- Use data from Compustat

- Compute available funds for each firm, each time period

- $AF_{it} = $ Available funds for firm $i$ in period $t$

- $I_{it} = $ Gross investment by firm $i$ in period $t$

- How much would $I_{it}$ fall if no firm can invest more than $AF_{it}$
Does Typical Firm Use External Funds to Finance Investment?

- Use of external funds to finance investment

\[
\frac{1}{T} \sum_{t=1}^{T} \frac{\sum_{i} \left( (I_{it} - AF_{it}) \mid I_{it} > AF_{it} \right)}{\sum_{i} I_{it}}
\]

- In data, financial market constraints = 16% of investment financed by external funds

- Interpretation: If firms had no access to financial markets, investment would have fallen by 16%

- This is exceptionally extreme exercise
Available Funds and Capital Expenditure Relative to Corporate GDP

Sample Average: Capital Expenditure / Corporate GDP = .10

Source: COMPUSTAT and BEA
Available Funds and Capital Expenditure Relative to Corporate GDP,
Firms Not Using External Funds
Source: COMPSTAT and BEA

Sample Average:
Capital Expenditure / Corporate GDP = .07
Available Funds / Corporate GDP = .13
Available Funds and Capital Expenditure Relative to Corporate GDP, Firms Using External Funds
Source: COMPUSTAT and BEA

Sample Average:
Capital Expenditure / Corporate GDP = .036
Available Funds / Corporate GDP = .019
Fraction of Firms Using External Funds
Source: COMPUSTAT

Sample Average = .43
Fraction of Investment Financed by External Funds

Source: COMPSTAT

Sample Average = .16

Are Banks Special?
Are Banks Special? ____________________________________

- Banks have lots of short-term debt
- More so than pension funds, mutual funds, insurance companies
- Diamond-Dybvig: Technology differences for short- and long-run projects, liquidity shocks
- Popular story: Incentive problems in managing financial assets, can change risk easily. Need short-term debt to discipline managers
Are Banks Special? ________________________________

- Yes, in terms of liabilities
- Not so much in terms of assets
Banks hold lots of mortgages
Bank Loans n.e.c. Relative to Bank Credit

Source: Flow of Funds

Loans smaller fraction of bank assets
Large decline in publicly traded securities
Banks not only holders of mortgages