Towards better measurement of guarantee costs for TBTF institutions

Deborah Lucas
Sloan Distinguished Professor of Finance and
Director MIT Center for Finance and Policy

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Pressing need for more serious cost-benefit analysis of financial regulations

- TB(I)TF is not going away
- Viewpoints are polarized, politics fierce
- More emphasis on measurement could help build a consensus about which rules best promote stability while minimizing regulatory costs
E.g., costs and benefits of high capital reqs

• **Admati and coauthors:**
  – Private benefits of debt arise from distortions (taxes and guarantees) that create social costs. Beyond losing those benefits, banks would not bear any cost from much higher capital requirements
  – Large behavioral distortions, excessive risk-taking

• **Industry:**
  – High capital requirements significantly increase the cost of doing business and make some useful products and services uneconomical
  – Lots of incentives for prudence already
E.g., costs and benefits of high capital reqs

• **Critical questions for bankers:**
  – Why, other than tax and guarantee benefits, is equity more costly than debt? How big is that cost? (e.g., in bps for WACC)

• **Critical questions for proponents of high capital requirements:**
  – What happens when (inevitably) the capital of a large institution is not enough to prevent distress? How should regulators prepare? Should there be a TBTF guarantee fee to pay for residual risk and encourage downsizing?
The importance of properly measuring (and thinking clearly about) guarantee costs

• Key inputs into measuring the benefits of regulation
  – Also can be used to reduce regulatory requirements on institutions that curtail risky activities

• Public discourse on this issue is woefully undisciplined
  – “Cost is potentially trillions of dollars”
  – “The government made money on the bailouts”

• “Best-practices” in measurement produce credible cost estimates
  – Official cost estimates are systematically downward biased
  – Aversion by policymakers to assigning cost to implicit guarantees makes them free
Measuring guarantee costs:
Conceptual issues

- **Cost is an ex ante concept**
  - *Ex post* outcome is not a measure of cost
  - Guarantees do not cost trillions of dollars, nor do they make money for taxpayers

- **Relevant measures use fair value or economic cost**
  - Actuarial measurements significant understate costs to government and ultimately taxpayers

- **How broadly should cost be measured?**
  - Economic cost to government/taxpayers of providing guarantees
  - Economic benefit to banks (if those exceed gov’t cost)
  - Economic benefits plus externalities
Incentive effects of guarantees depend on solvency
- Emphasis is often on incentive for increased risk-taking
- Theory suggests this is only true when banks are distressed
- Guarantees should induce risk aversion by solvent banks because they create charter value that is destroyed by bankruptcy

How should guarantee costs be measured?
- Rate spreads between similar insured and uninsured institutions
- Contingent claims approach
  - Information on assets and liabilities from balance sheets
  - Information about volatility and cost of risk from stock prices
Example 1: Cost of TARP assistance

- Congressional Oversight Panel commissioned study to find **net cost of TARP capital infusions**
  - Fair value estimates of net cost
    - Executed by Duff & Phelps (with oversight from A. Blumenthal, W. Goetzmann, and D. Lucas)
    - Dated Feb. 2009
  - Considered capital infusions to 10 largest TARP recipients and warrants received; extrapolated to all 2008 capital purchases
  - “Treasury paid $254 billion, for which it received assets worth approximately $176 billion, **a shortfall of $78 billion**”
  - Contrast to Secretary Henry Paulson’s claim that “This is an investment, not an expenditure, and there is no reason to expect this program will cost taxpayers anything.”
Example 2: Cost of Federal Reserve Emergency Facilities

- CBO Study, “The Budgetary Impact and Subsidy Costs of the Federal Reserve’s Actions During the Financial Crisis,” May 2010

- Reports **total ex ante fair value cost of only $21 billion**, primarily from Term Asset-Backed Securities Loan Facility (TALF)

- Most facilities involved little credit risk, transactions were at fair value, or TARP absorbed losses
Example 3: Implicit guarantees to F&F

• What was the fair value of the implicit government guarantee of Fannie and Freddie as of year-end 2005?
  – Options pricing approach with dynamic capital structure
  – Government infuses cash if default boundary breached
  – Combined ex ante cost of about $25 billion over 10 years
  – Translates to insurance premium of 23-27 bps annually on $1.5 trillion of liabilities, or $3.5 billion

• CBO estimate of fair value cost in 2009 of $291 billion
Conclusions

• Examples illustrate:
  – Methods that can be used to estimate costs of implicit and explicit guarantees of TB(I)TF institutions
  – The magnitude of some of those costs leading up to and during the financial crisis

• Charging TB(I)TF a premium based on estimated guarantee costs could:
  – Create a focal measure of guarantee cost
    • To use in cost-benefit analysis of regulations
    • To complement measures of systemic risk
  – Encourage institutions to reduce premiums by curtailing risk
  – Provide compensation to the public for bearing risk
• Thank you!