

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 significantly underestimate 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

Measuring guarantee costs: Conceptual issues

- **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?
 - “Valuing Government Guarantees: Fannie and Freddie Revisited,” D. Lucas and R. McDonald
 - 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!