

# **Too-Big-to-Fail: The Role of Metrics<sup>1</sup>**

**Quantifying the “Too Big to Fail” Subsidy Workshop**

**Federal Reserve Bank of Minneapolis**

**Minneapolis, Minnesota**

**November 18, 2013**

**Narayana Kocherlakota  
President**

**Federal Reserve Bank of Minneapolis**

---

<sup>1</sup> I thank David Fetting, Terry Fitzgerald, and Ron Feldman for their help in preparing these remarks.

Thanks for the introduction, Ron. It's a great pleasure to address all of you tonight. First off, let me say welcome to the Minneapolis Fed. I see this workshop as being one more step on an important intellectual journey for the Federal Reserve Bank of Minneapolis. That journey has been going on for many years—long before I became president of the Bank in 2009. As most of you know, my head of supervision, Ron Feldman, and my predecessor, Gary Stern, literally wrote the book on too-big-to-fail nearly 10 years ago.<sup>2</sup> Like many others—and for the good of the country—I hope that our too-big-to-fail journey is complete before another decade passes. The work that all of you are doing is critical to making that hope a reality.

My theme tonight is that metrics should play a key role in the regulation and management of the too-big-to-fail (TBTF) problem. I will proceed in three steps. I'll first define what I see as the TBTF problem. As you will hear, I see the TBTF problem as being about a particular kind of misallocation of resources—more specifically, excessively risky investments that are incited by the prospect of governmental absorption of losses that would otherwise be endured by creditors of financial institutions. Here, I want to emphasize the word “prospect.” In my formulation of the TBTF problem, it's the expectation of government transfers that creates the problematic distortion, not the realization of those transfers.

I'll next turn to why I see metrics as being essential to the management of the TBTF problem. Without metrics, policymakers—and the public they serve—can have no true insight into the effectiveness of the current management of the problem. As this group well knows, any given measure of the size of the TBTF problem is imperfect. But I will argue that the imperfection of any single measure implies that policymakers should track progress using many measures, not ignore all of them.

Finally, I'll talk about two aspects of the use of metrics in the management of the TBTF problem: why it is important to use measures besides size and why it may be important to assess the robustness of TBTF measures to certain kinds of shocks.

My remarks today reflect my own views, and are not necessarily those of others in the Federal Reserve System.

---

<sup>2</sup> Stern, Gary H., and Ron J. Feldman. 2004. *Too Big to Fail: The Hazards of Bank Bailouts*. Brookings Institution Press.

## Defining the TBTF Problem

Let me start, then, by defining what I mean by the TBTF problem. I use this term to refer to a type of inefficiency in the allocation of societal resources. In particular, I'm referring to the excessively risky investments that are incited when creditors of a financial institution believe that there is some likelihood that at least some of their losses will be absorbed by the government.

I know that the nature of this inefficiency is familiar to all of you in this room, but let me talk through it more carefully. Imagine first that creditors did not anticipate any form of governmental loss absorption. Then, if a financial institution decided to increase the risk level of its investment portfolio, its debt holders would face a greater risk of loss. By way of compensation for that greater risk, they'd demand a higher yield. As a result, in the absence of government guarantees, financial institutions would find it more costly to obtain debt financing for highly risky investments than for less risky ones. This effect, on the margin, would curb a firm's appetite for risk.

But now suppose instead that a financial institution's creditors believe that they are partially insulated from losses. Then, those creditors do not demand a sufficiently high yield when they lend to riskier institutions. Financial institutions take on too much risk, because they are no longer deterred from doing so by the high cost of debt finance.

There are two particular aspects of this definition that are worth noting. First, it is an ex ante definition—I'm not referring to the ex post manifestation of governmental loss absorption in the form of transfers or bailouts. In my formulation, the damage to society through the misallocation of resources has already occurred by the time the government actually makes transfers or undertakes bailouts. To be clear—like many other observers, I do find it troubling when governments use funds from relatively poor taxpayers to protect relatively rich bank bondholders from losses. But I'm not using the term TBTF problem to refer to concerns about this kind of redistribution.

Second, the definition emphasizes the role of creditor beliefs about prospective governmental transfers. The beliefs of other parties are much less relevant. For example, to the management or board of directors of a given financial institution, the TBTF problem simply means that their costs of debt finance are relatively unaffected by the amount of risk in their firm's investment portfolio.

## The Need to Use Metrics

As I've defined it, the TBTF problem involves a misallocation of resources. At the direction of legislators, bank regulators and bank supervisors have taken a variety of steps intended to reduce or end this misallocation. As a result, the public knows that large financial institutions have more and better capital than they did five years ago. As well, the public also knows that these institutions have constructed lengthy plans—so-called living wills—that describe their strategies for rapid and orderly resolution in the event of material financial distress or failure.

What the public does not know is whether the adoption of these steps has been associated with a material change in the size of the TBTF problem. My main theme tonight is that policymakers can only identify and document progress in the reduction of the TBTF problem by using measures of the magnitude of the TBTF problem.

The good news is that it is clear what we want to measure. The heart of the TBTF problem is that some financial institutions are able to borrow too cheaply in light of the risks in their investment portfolios. What we need to measure, then, is the size of that subsidy to debt finance. Of course, as this group well knows, that conceptual formulation of the problem only gets us so far. Actually constructing reliable measures of this subsidy has a number of challenges—and that's why this workshop is important.

Admittedly, at this point in time—and probably for some time to come—every measure has to be seen as imperfect. Some might conclude from these imperfections that it would be inappropriate to track progress with respect to TBTF using any of these measures. I cannot emphasize how wrong I believe this conclusion to be. Rather than using *no* measures, policymakers should be tracking *all* measures that are viewed as being at least somewhat informative about the size of the subsidy.

Here, I find an analogy from the monetary policy part of my job to be helpful. The Federal Open Market Committee is charged by Congress with promoting price stability and maximum employment. There are relatively uncontroversial metrics that we can use to track progress on the former objective. But it is not as obvious how we should track progress with respect to the latter objective. Every possible metric—be it the unemployment rate or the employment-population ratio—has its own flaws.

But the response of the FOMC is hardly to abandon metrics altogether. Instead, monetary policymakers track labor market performance using a large number of measures. For example, in a speech earlier this month, the president of the St. Louis Federal Reserve, James Bullard, depicted recent labor market improvement along a variety of dimensions using an elegant

spider chart.<sup>3</sup> I could well see similar charts as being useful in providing the public with assessments of the size of the TBTF problem for a given financial institution.

## Two Comments

Let me close by offering two comments about TBTF metrics.

The first comment is again aimed more at people outside this room than inside it. Some observers are drawn to using the size of a financial institution as a sufficient statistic for the magnitude of the TBTF problem associated with that institution. After all, it's called the *too-big-to-fail* problem! This kind of approach would suggest that society can best manage the *too-big-to-fail* problem by capping the size of financial institutions.

I do agree with these observers that the size of a financial institution is likely to be a useful source of information about the magnitude of that institution's TBTF problem. At the same time, though, policymakers should guard against relying too much on this single metric. We should always keep in mind that the term *too-big-to-fail* is highly misleading. The TBTF problem is about creditor perceptions of loss protection. Creditors might well see the smaller of two institutions as being more likely to receive that protection, if the smaller institution is engaged in some kind of activity that is seen by government agencies as being especially vital. Thus, if we go back to 2008, government funds were used to facilitate the purchase of Bear Stearns by JP Morgan Chase. No such government funds were made available to facilitate the resolution of Lehman—and Lehman was certainly larger than Bear Stearns.

The second comment is about the need to assess the robustness of TBTF measures to particular kinds of shocks. I defined the TBTF problem in terms of the subsidy to debt finance created by the possibility of governmental loss absorption. Certainly, policymakers can only claim success with respect to the TBTF problem if the current measures of that subsidy are low.

However, they may want to accomplish more. The TBTF subsidy to a financial institution is generated by its creditors' perceptions of government loss absorption. The subsidy will be worth little if creditors believe that the institution's assets have little risk, so that it is highly unlikely that the institution will ever incur losses for the government to absorb. It may be prudent for supervisors and regulators to also check that the subsidy remains small if creditors begin to perceive the institution's asset risk as materially larger. I see such robustness checks as being challenging to implement with existing TBTF metrics.

---

<sup>3</sup> Bullard, James. 2013. "The Tapering Debate: Data and Tools." Presentation at Financial Forum, St. Louis Regional Chamber, St. Louis, Mo., Nov. 1. Slide 13 at <http://research.stlouisfed.org/econ/bullard/pdf/BullardStLRegChamberFinancialForum1November2013Final.pdf>

## Conclusions

Let me wrap up by returning to my main theme: the need to use metrics in the management of the TBTF problem, however imperfect those metrics might be.

Basically, the issue comes down to accountability. Again, I find a monetary policy analogy to be helpful. As monetary policymakers, my colleagues on the FOMC and I are accountable for keeping the economy at maximum employment. We are well aware that we need metrics to demonstrate that we are making progress with respect to that responsibility. No one metric is perfect—and so we refer to a wide variety of somewhat informative measures. And the Federal Reserve System spends a great deal of time trying to develop other—again imperfect—measures to supplement those that we already have.

I see the TBTF problem as highly similar. Supervisors and regulators have been made accountable by Congress for ending the TBTF problem. They need to be able to demonstrate clear progress to the public with respect to that responsibility. They can only do so using the metrics in this workshop and metrics that will be developed in workshops still to come.

Thanks to all of you for listening and for coming to Minneapolis.