Financial Institutions and Consumer Protection Subcommittee
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Hearing on Debt Financing in the Domestic Financial Sector
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STATEMENT ON MEASURING THE FUNDING ADVANTAGES ENJOYED BY LARGE, COMPLEX, AND POLITICALLY POWERFUL BANK HOLDING COMPANIES

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I want to begin by thanking Chairman Brown for inviting me to testify today and to congratulate him and the Subcommittee for continuing to battle against the pernicious and unfair advantages that panic-driven crisis-management policies confer on mega-institutions, not only in this country but in financial-center countries around the world. The claim that the Dodd-Frank Act of 2010 or Basel III can end these advantages is a dangerous pipe dream. There will always be institutions that regulators will-- especially in crisis circumstances-- find macroeconomically, politically, and administratively too difficult to fail and unwind. The existence of a powerful propensity to rescue such too-big-to-fail (TBTF) firms is the central lesson taught both by the S&L mess and by the Great Financial Crisis.

The GAO Has Bungled its Assignment

The GAO goes wrong at the outset. The definition of TBTF offered in the Report's first sentence (lines 9-10) is incomplete. It describes TBTF as an active policy of "intervention" without confronting the more dangerous additional role played by passive capital forbearance.

The title of this hearing focuses on "funding advantages" that TBTF BHCs receive from expectations of unlimited government support. The GAO's estimated 42 statistical models each year seek to explain in a robust manner only how the interest spreads between bonds issued by large BHCs and comparable Treasuries relate to BHC size and credit risk. This conception of TBTF subsidies treats TBTF guarantees as if they were merely a form of *bond insurance* and builds in an additional downward bias by not using volume-based proxies for the extent to which after-issue trading in individual BHC bonds is less liquid than in Treasuries.

But even if they were modeled perfectly, spreads on outstanding bonds capture only part of the impact of TBTF guarantees. TBTF guarantees are different from bond insurance because, as long as regulators forbear from resolving a BHC's insolvency, a truly TBTF firm can extract further guarantees by issuing endless amounts of additional debt.

Funding Cost is More than Debt Costs

A BHC's "funding cost" is the cost of its "funding mix." Being TBTF lowers both the cost of debt *and* the cost of equity. This is because TBTF guarantees lower the risk that flows through to the holders of both kinds of contracts. The lower discount rate on TBTF equity means that, period by period, a TBTF institution's incremental reduction in interest payments on outstanding bonds, deposits, and repos is only part of the subsidy its stockholders enjoy. The other part is the increase in its stock price that comes from having investors discount *all* of the firm's current and future cash flows at an artificially low risk-adjusted cost of equity. This intangible benefit generates capital gains for stockholders and shows up in the ratio of TBTF firms' stock price to book value. Other things equal (including the threat of closure), a TBTF firm's price-to-book ratio increases with firm size. For four quarters in 2012-2013, Figure 1 compares the behavior of this ratio for banks in different size ranges. The comparisons show that on average this ratio increases with size in all four quarters.

I hope that contemplating the following numerical example can drive home the need to account for the equity-funding component of annual and capitalized TBTF subsidies. Let us suppose a TBTF institution is projected to earn \$12 billion a year forever and that \$2 billion of its earnings comes from the reduction in its cost of debt. By hypothesis, market participants recognize that TBTF guarantees shift a range of the deepest possible losses away from creditors and stockholders to taxpayers. If authorities were expected to take over the firm and pay off guaranteed creditors just as it became insolvent, the debt component would be the whole story. But because authorities are expected to leave the stock in play come hell or high water, TBTF policies give comfort to shareholders, too. This comfort lowers the risk class of the stock, so that the warranted return on equity falls.

Let us assume that the opportunity cost of equity would be 12 percent without the TBTF guarantee, but-- *in the presence of the contra-liability provided by the unlimited guarantee*-- this cost falls to 10 percent. Then, the capitalized subsidy built into the stock price would be not \$16.7 billion (\$2billion/.12) or even \$20 billion (=\$2billion/.10), but \$36.3 billion. The capitalized subsidy is the difference between the \$83.3 billion stock-market value of the unguaranteed firm $\left(=\frac{\$10billion}{.12}\right)$ and the \$120 billion $\left(=\frac{\$12billion}{.10}\right)$ in value that develops under TBTF guarantees. The **annual** subsidy that would deserve to be passed through the federal budget would be \$4.4 billion: the \$2 billion in interest saving plus another \$2.4 billion (.02 x \$120billion) subsidy on the firm's equity funding. So, for this hypothetical BHC, the annual subsidy to equity would prove roughly the same size as the subsidy to debt.

The warranted rate of return on the stock of deeply undercapitalized firms like Citi and B of A would have been sky high and their stock would have been declared worthless long ago if market participants were not convinced that authorities are afraid to force them to resolve their weaknesses. Had these BHCs' assets and liabilities been transferred to bridge institutions or put into resolution, losses that contractually deserved to be incurred by uninsured creditors and post-crisis increases in the TBTF stock prices would have accrued to taxpayers.

A simpler way to see what the GAO has missed is to think carefully about the structure of guarantee contracts. An external guarantee allows the guaranteed party to *put* responsibility for covering debts that exceed the value of BHC assets to the guarantor. No guarantor wants to expose itself to unlimited losses on this put. For this reason, *all* guarantee contracts incorporate a *stop-loss provision* that gives the guarantor a call on the guaranteed party's assets. Ordinarily, this right kicks in just the insolvency threshold is breached. In the FDIC Improvement Act of 1991, efforts to exercise this call are termed "prompt corrective action (PCA).

By definition, the government's right to take over the firm's assets will never be exercised in a financial organization is truly TBTF. This means that the government has effectively ceded the value of its loss-stopping rights to TBTF stockholders. The value of this giveaway is what the GAO's measure ignores.

I can clarify this further by examining Figure 2. This figure graphs the behavior of AIG's stock price before, during, and after the 2008 crisis. The only times AIG's stock price approached zero was when a government takeover of the firm was being actively discussed. Each time that this possibility was tabled, trading picked up and the stock price soared as new stockholders tried to share in the value of the unexercised call.

<u>GAO Neglect of Differences in Political Clout</u>

Post-crisis reforms seek to classify particular firms as either systemically important financial institutions (SIFIs) or not. But TBTF status is not a binary condition and does not start at a particular size. A firm's access to Senators and Congresspersons grows steadily with its geographic footprint and with the number of employees that can be persuaded to contribute to re-election campaigns. TBTF BHCs give heavily to candidates in both political parties as Ferguson, Jorgenson, and Chen (2013) have documented. Holding size constant, the more organizationally complex and politically influential an institution becomes, the better the chance that government examiners will find it difficult to observe its exposure to tail risk and to discipline such risk adequately.

Need to Bring in the Behavior of Stock Market Prices

To capture the full extent of TBTF subsidies, it is critical to make use of stock-market data. Figure 3 of my presentation tracks annualized estimates that Armen Hovakimian, Luc Laeven, and I (2012) have made of the average dividend that taxpayers ought to have been paid on their stake in large BHCs. This Figure plots the mean value of the credit support in annualized basis points per dollar of assets supplied to large banking organizations, quarter by quarter between 1974 and 2010. The surge in the third quarter of 2008 is remarkable, as is its steady fallback afterwards.

Regulators and policymakers persistently mis-frame bailout expenditures as either loans or insurance. This false characterization helps TBTF firms and their creditors to steal wealth from taxpayers. An insurance company does not double and redouble its coverage of drivers it knows to be reckless. Similarly, lifelines provided to an underwater firm should not be thought of as low-interest *loans*. Loans are simply not available to openly insolvent firms from conventional sources. The ability to extract implicit guarantees on new debt and the hugely below-market character of bailout programs means that the repayment of funds that were actually advanced does not show that a bailout program is a good deal for taxpayers..

Bailout funding can more accurately be described as unbalanced equity investments whose substantial downside deserves to carry at least a 15% to 20% contractual return. The government's bailout deals compare very unfavorably with the deal Warren Buffet negotiated in rescuing Goldman-Sachs. Buffet’s deal carried a running yield of 10% and included warrants that gave him a substantial claim on Goldman's future profits. Government credit support transferred or "put" to taxpayers the bill for past and interim losses at numerous insolvent or nearly insolvent TBTF firms. Authorities chose this path without weighing the full range of out-of-pocket and implicit costs of their rescue programs against the costs and benefits of alternative programs such as prepackaged bankruptcy or temporary nationalization and without documenting differences in the way each deal would distribute benefits and costs across the populace (see Bair, 2012).

In my opinion, it is shameful for government officials to imply that TBTF bailouts were good deals for taxpayers. On balance, the bailouts transferred wealth and economic opportunity from ordinary taxpayers to much higher-income stakeholders in TBTF firms. Ordinary citizens understand that this is unfair and officials that deny the unfairness undermine confidence in the integrity of economic policymaking going forward.

How to Sanction the Pursuit of TBTF Subsidies

I hope my testimony convinces you that, **in principle**, the risks in backstopping TBTF firms cannot be calculated and priced in the straightforward ways that the risks of a bond or insurance contract can. Taxpayer guarantees to TBTF creditors provide unlimited loss-absorbing equity funding to zombie firms at a time when no sensible private party would even advance them a dime.

I want to convince you further that interpreting bailout support as equity funding implies that managers who adopt risk-management strategies that willfully **conceal** and **abuse** taxpayers' equity stake should be **sanctioned explicitly by corporate and criminal law** rather than **excused by insurance law as inevitable moral hazard.**

I find it disgraceful that corporate law legitimizes managerial efforts to exploit taxpayers' equity position. The norm of maximizing stockholder value is inappropriate for TBTF firms. In TBTF institutions, this norm leaves taxpayers' unbooked equity stake inferior to that of ordinary shareholders in five ways:

1. Taxpayers cannot trade their positions away.
2. Downside liability is not contractually limited, but upside gain is.
3. Taxpayer Positions carry no procedural or disclosure safeguards.
4. Taxpayer positions are not recognized legally as an "equitable interest." (This means TBTF firms may exploit them without fear of lawsuits.)
5. TBTF Managers can and do abuse taxpayers by blocking or delaying recovery and resolution.

<u>The Problem of Regulatory Capture</u>

In and out of crisis, taxpayer interests are poorly represented by regulators because politicians and regulators have kept themselves less than fully accountable for the costs of bailouts and have simultaneously pursued conflicting political and bureaucratic goals. Over the years, the financial industry has infiltrated the bureaucratic system that ought to monitor and regulate aggressive risk-taking and woven huge loopholes into the fabric of capital requirements that --then and now-- are supposed to keep financial instability in check. The industry's capture of the regulatory system is politically very well-defended, because the subsidies are in part shifted forward to creditors and to customers in various industries (e.g., in realty and construction).

Capture can be demonstrated in at least four complementary ways: (1) by enumerating the problems that the Dodd-Frank Act set aside (such as how to define systemic risk operationally or how to resolve the Fannie and Freddie mess); (2) by examining the many loose ends left in the Act's efforts to handle regulation-induced innovation (especially in swaps) and to deal with institutions that have made or are making themselves too large, too complex, and too well-connected politically and bureaucratically to be closed and unwound; (3) by noting that crisis-management policies have helped the largest BHCs to become even larger; and (4) by recognizing that post-crisis reforms continue to feature loophole-ridden measures of accounting capital as the cornerstone of financial-stability policy.

Why Capital Requirements Can't Adequately Protect Taxpayers from BHC Shareholders

Besides setting minimums that are far too low, gaping imperfections exist in weighing risks and measuring capital that open and solidify avoidance opportunities (see

Admati and Hellwig, 2013). Actual and potential zombie institutions can use accounting tricks, organizational complexity, and innovative instruments to hide risk exposures and accumulate losses until their insolvency becomes so immense that they can panic regulators and command life support from them.

The Basel control framework (see Basel Committee on Banking Supervision, 2013) is built on the fiction that **all or most SIFIs** can be persuaded to forgo individually profitable credit business for the greater good. This seems awfully naïve (see Schelling, *Strategy of Conflict).* The naïveté lies in a set of unrealistic assumptions about the regulatory game: (1) that **accounting** ratios are **difficult to misrepresent**; (2) that **supervisors are hard to mislead**; (3) that bankers **dutifully accept** statutory burdens rather than work aggressively to adjust their risk profile to neutralize the net effect of capital restrictions on SIFI profits and market capitalization; and **(4)** that meritorious commitments to protect unsophisticated depositors and to keep systemically important markets and institutions from breaking down in difficult circumstances do not provide convenient **cover** that **tempts officials** to obligate taxpayer funds over-generously and without revealing the full picture of fiscal and incentive effects.

Capital requirements are merely restraints. Improved capital requirements increase the difficulty of extracting TBTF subsidies, but they do not reduce the *legitimacy of adopting strategies that willfully pursue this goal.* To do this, I propose that Congress declare that taxpayers have an equitable interest in any institution that can be shown to extract a subsidy from the safety net. In common law, an "equitable interest" is understood as a balance-sheet position that gives its owner a right to compensation from damages. I believe that we should conceive of this compensation as the dividend taxpayers would be paid on their implicit equity stake in any accounting period if information asymmetries did not exist. The net value of taxpayers' stake in a TBTF firm increases with the extent to which creditors and stockholders are confident that they can *hide* tail risks and, if ruinous losses emerge, *scare* authorities into funding the losses without extracting due compensation.

Genuine reform would compel the DOJ to prosecute megabank holding companies that engaged in easy-to-document securities fraud. Numerous representations and warranties can be shown to be deliberately deceptive and designed to benefit individual firms at the expense of the rest of us. As legal persons and convicted felons, guilty BHCs could be forced to break themselves up. Subsidiaries of felonious companies could lose the right to take insured deposits or act as broker-dealer firms and futures merchants. The beauty of such penalties is that managements and not governments would have to design the breakup plan.

Living wills, enhanced resolution authority, clawbacks of undeserved executive compensation, and an Office of Financial Research are potentially useful tools. But the failure to *prosecute* any TBTF firm or top manager *in open court* for criminal securities fraud tells us how easy it is to collect fines (because they are paid by stockholders) and how hard it can be for regulators to discipline individual managers of influential and interconnected BHCs. For top management, corporate-level fines are a non-deterrent slap on the wrist. Moreover, only a portion of most fines compensate the taxpayer by flowing through to the Treasury. Sad to say, most of these criticisms apply to the reform programs that are unfolding in the European Union as well.

The Problem of Fairness

Fairness is the heart of the Rule of Law. Whether or not enhanced resolution or contracts with bail-in provisions can be enforced in difficult circumstances, Corporate and/or Property Law needs: (1) to recognize that regulators' demonstrated propensity to bail out creditors and shareholders in TBTF firms (e.g., in AIG, Fannie, and Freddie) assigns taxpayers' a **disadvantaged equity position** in each TBTF firm, and (2) to enact **personal and corporate penalties** for willful efforts to pursue risks that abuse taxpayers' equity stake and pervert the pattern of real investment. Corporate penalties could include forced sales of some or all lines of business.

It is useful to think of taxpayers' stake in each TBTF firm as if it were a *trust fund* and conceive of government officials as *fiduciaries* responsible for managing that fund. The purpose of the reforms I propose is to give regulators, along with managers and directors of TBTF firms, an explicit and codified *fiduciary duty* to measure, disclose, and *service* taxpayers' stake-holding fairly. To overcome short-term benefits from ducking their implicit fiduciary responsibilities, regulators, managers, and board members need to face stricter legal liability for neglecting or incompetently performing these fiduciary duties.

Governments must rework bureaucratic and private incentives to focus reporting responsibilities for regulators and institutions on **uncovering the value of safety-net support.** Regulatory-agency and corporate mission statements must explicitly define, embrace, and enforce fiduciary duties of loyalty, competence and care to taxpayers in operational and accountable ways. Otherwise, it is unreasonable to hope that managers will-- or that regulatory staff can-- contain systemic risk during future rounds of boom and bust.

The report the GAO released today (General Accountability Office, 2014) is a small step in this direction. The downside of the report is that TBTF firms are going to trumpet GAO's low-ball and conceptually deficient measurement of the subsidy as if it were gospel.

To support a culture of fiduciary duty, I have long maintained that we need to strengthen training and recruitment procedures for high-ranking regulators. If it were up to me, I would establish the equivalent of a military academy for financial regulators and train cadets from around the world. The curriculum would not just teach cadets how to calculate, aggregate, and monitor the costs of safety-net support in individual institutions and countries. The core of the curriculum would be to drill students in the duties they will owe the citizenry and to instruct them in how to confront and overcome the nasty political pressures that elite institutions exert when and as they become increasingly undercapitalized.

Politically, a financial crisis is a struggle by financial firms whose assets have collapsed in value to offload the bulk of their losses onto creditors, customers, and taxpayers. In the early months of the 2008 crisis, Fed and Treasury officials assisted economically insolvent zombie institutions (such as Bear Stearns and AIG) to book new risks and to transfer their losses onto the government's balance sheet. Authorities did this by mischaracterizing the causes of these institutions' distress as a shortage of market liquidity and helping insolvent firms to expand and roll over their otherwise unattractive debt. Far from assisting zombie institutions to address their insolvency, unwisely targeted and inadequately monitored government credit support encouraged troubled firms not only to hold, but even to redouble the kinds of go-for-broke gambles that pushed them into insolvency in the first place.

Indiscriminately bailing out giant firms was a mistake that has hampered, rather than promoted economic recovery. Similarly, prolonged uncertainty about the future of Fannie and Freddie continues to disrupt housing-finance activity. Blanket bailouts evoke gambles for resurrection among zombie and near-zombie beneficiary firms like AIG, while uncertainty about who will finally bear the extravagant costs of these programs dampens spending plans in every sector. These problems divert and restrain the flows of credit and real investment necessary to trigger and sustain a healthy economic recovery.

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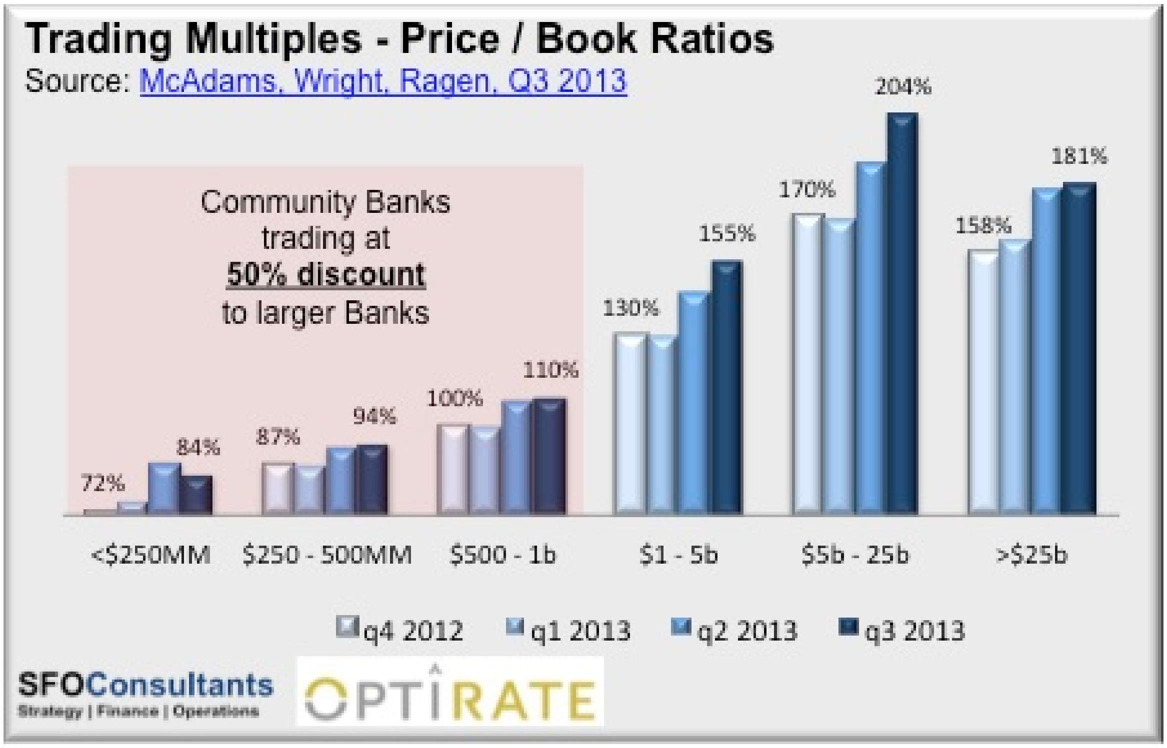
FIGURE 1



Trading Multiples - Price / Book Ratios
Source: McAdams, Wright, Ragen, Q3 2013
Community Banks trading at 50% discount to larger Banks
72%
84%
87%
94%
100%
110%
130%
155%
170%
204%
158%
181%
<$250MM
$250 - 500MM
$500 - 1b
$1 - 5b
$5b - 25b
>$25b
q4 2012
q1 2013
q2 2013
q3 2013
SFOConsultants
Strategy | Finance | Operations
OPTIRATE

FIGURE 2

AIG Stock Never Became Valueless

FIGURE 3

Mean Annualized Value of Safety Net Benefits Per Dollar of Liabilities, 1974-2010

This figure reports quarterly average values of Hovakimian-Kane-Laeven annualized estimates of fair percentage return to taxpayers for safety-net risk, using Merton model and assuming dividend continue to be paid. Averages are computed across a sample of U.S. bank holding companies over the 1974-2010 period and reported per-dollar of debt quarter by quarter in basis points. Financial statement data are from the Compustat database for U.S. banks and daily stock returns are from CRSP.