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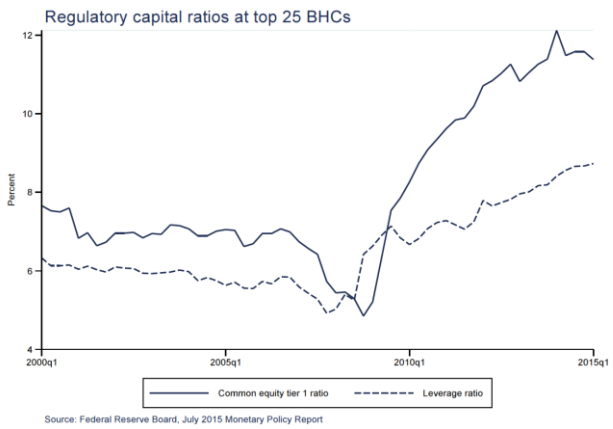
"Too Big to Fail" -- Myth vs. Reality

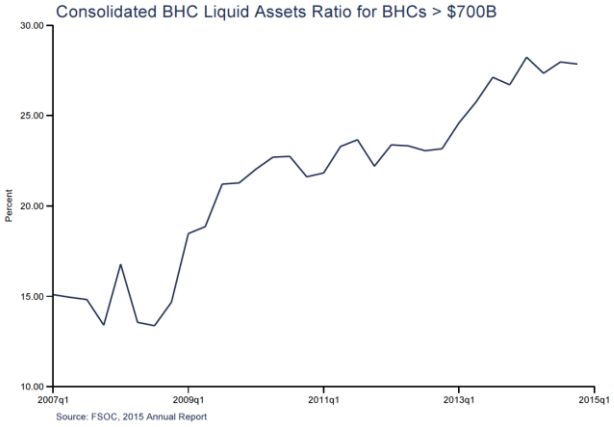
No bank should be "too big to fail," and the financial crisis in 2008 demonstrated that financial reforms were necessary to prevent taxpayers from ever again having to step in to prevent a systemic failure. In response, the chances of a large banking organization failing have been greatly reduced by higher levels of and better quality of capital and liquidity, central clearing and other efforts to reduce risk; if a banking organization should fail, a new legal regime imposes losses from failed institutions on shareholders and creditors without government "bailouts." However, as evidenced at the Minneapolis Federal Reserve's Ending Too Big to Fail Policy symposium, some scholars have chosen to ignore the reality of these seismic changes. They continue to propagate myths that are inconsistent with reality.

Myth: *Little or no progress has been made to reduce the likelihood of large bank failures.*
Reality: *Banks are highly capitalized and liquid.*

As noted in the July 2015 Monetary Policy Report of the Fed, "The financial sector now is likely more resilient to possible adverse events largely because of the increased capital held by the largest banking firms, which reduces the potential spillovers to the macroeconomy from losses in the banking sector." As can be seen in the left panel below, large banks' common equity as a percent of risk weighted assets has doubled and their leverage ratio has nearly doubled relative to pre-crisis levels. Banks are currently required by the Federal Reserve's CCAR stress test to hold enough capital to shrug off a recession worse than the one following the financial crisis, a point noted in a column authored by The Clearing House (TCH) Association President Greg Baer and in a TCH research note. The stress test is so severe that to pass it does not just require large banks to survive a depression and market crash of unprecedented severity, but rather to be so well capitalized that their businesses are largely unaffected by such a depression and market crash.

Moreover, as cited in the FSOC's 2015 Annual Report and shown in the right panel below, more than 25 percent of the assets of the largest banks are highly liquid, up from about 15 percent before the crisis (and considerably less at the large brokerage firms that failed disastrously in the crisis). Larger stockpiles of liquid assets will allow banks to weather most episodes of idiosyncratic or market illiquidity without government support or, if necessary, allow supervisors time to work out an orderly resolution without a bailout.





Myth: *If a large bank failed, it would be bailed out again.*
Reality: *Even if a large bank were to fail, it would not need to be bailed out.*

Significant legal and balance sheet changes since the crisis have established both a mechanism and the necessary resources to "bail in" bank creditors rather than taxpayers in the event of failure, and allow the system to continue to operate in the face of failure. A new single-point-of-entry approach to resolving large banks means that losses will be borne by holding company shareholders and long-term debt holders. And a recent Federal Reserve proposal will require the eight largest U.S. banks collectively to hold over $1.6 trillion in equity and debt for this purpose.

This approach not only means that taxpayers will not have to absorb loss but it also significantly reduces the systemic risk of failure (and thus another potential reason for government support). Because resolution will occur at the holding company level, bank and broker-dealer subsidiaries will remain open and operating, reducing systemic impact and also avoiding most of the cross-border legal issues that plagued the Lehman resolution. Furthermore, a new ISDA protocol prevents a bank's derivatives counterparties from closing out (running) based on a bail-in at its parent holding company – again, a major source of systemic concern in the crisis. While complications may still arise in the event of the failure of an international banking organization, the necessary arrangements are being worked out by the Financial Stability Board and bilaterally between the financial agencies of the largest countries. And lastly, Dodd-Frank has made it legally impossible for the government to bail-out an institution, removing the ability of the Federal Reserve to lend to an individual, troubled bank holding company, and requiring that the FDIC only resolve an institution after first zeroing out its existing equity owners.

Myth: *Large banks borrow for less because they are perceived as too big to fail.*
Reality: *A recent GAO study found that large banks do not borrow at lower rates than smaller banks.*

The GAO study found what those who trade or issue bank debt have known for some time: the notion that large banks are successful because they receive a discount in their debt issuance is a canard. Under a majority of the methodologies examined by the GAO, large banks received no

discount or even paid a premium relative to smaller banks; under no methodology did they enjoy a significant advantage. Confirming this, the three largest credit rating agencies have eliminated any "uplift" of their ratings of bank holding companies because of the post Dodd-Frank resolution authorities.

Of course, even debating the debt spreads elides a more important fact. Smaller banks do not fund themselves in debt markets; instead they rely significantly more on federally insured deposits as a percentage of their funding than large banks. And the cost of a federally insured deposit will always be significantly lower than market debt.

Bank critics recently have changed their argument to account for the GAO findings. They now argue that while large banks are not currently receiving a subsidy, they will if another crisis arises, pointing to GAO evidence that the relative premium large banks pay in debt markets for risk decreases with the level of risk. But if large banks are not currently receiving a subsidy, then by definition they are not receiving a competitive advantage. Moreover, the GAO itself cautions against over interpreting this finding, which is not even present in three-quarters of their specifications, calling it "even more uncertain" (p.54) than the other results presented in the report.

Myth: *The financial system is safer and better when large banks are broken up*
Reality: *Strong large banks support financial stability; banks of all sizes received government support in the crisis.*

Very little study has gone into the consequences for economic growth and market stability in the event that large banks are broken up – either directly, by asset caps or indirectly through punitive capital requirements.

For decades, all have acknowledged that the United States benefits from having the deepest and most liquid capital markets in the world, and those capital markets fund the majority of U.S. economic growth. (Indeed, Europe, which is more reliant on bank lending, is trying to develop U.S.-like capital markets). U.S capital markets would be devastated by a large-bank breakup. Banks' capital market activities are extremely dependent on technology, and thus benefit greatly from economies of scale; furthermore, they are balance-sheet intensive. (They also involve holding large amounts of riskless (e.g. cash) or low-risk assets (e.g. Treasuries), and thus are particularly vulnerable to an elevated leverage ratio requirement, which conclusively and counterfactually presumes all assets have the same risk.) In a break-up, these businesses would either have to be eliminated, or conducted in a monoline, like Bear Stearns or Lehman Brothers (assuming regulators would allow such a thing). Nonfinancial businesses would either only be able to acquire funding in the capital markets at much higher interest rates or would be unable to issue debt at all, as buyers would have no assurance they could resell any debt they acquired. The impact on systemic stability would be no less, as principal-at-risk market making would be eliminated or dramatically reduced.

Similar consequences would occur for commercial banking. Large U.S. companies seeking large, overnight loans would see a significant increase in cost, or would turn to foreign banks (creating another set of unintended effects). Large U.S. companies with international business or even business that stretched across the U.S. would no longer be able to conduct their business with a single bank, again contributing to a shift toward non-U.S. banks.

Finally, there is no reason to believe that there would have been less need for government support in the crisis if the banking system had been broken up. During the crisis, the government took steps to prevent or cushion the failures of banking institutions that were much smaller than the 2 percent of GDP ($350 billion) limit suggested at the Minneapolis Fed's symposium. For example, when Indymac failed in 2008, a thrift with assets, at $32 billion, about one tenth the size of the 2 percent cutoff, the FDIC partially compensated uninsured creditors. Moreover, the government provided TARP capital injections, FDIC guarantees, and emergency loans to financial institutions of all sizes, including very small financial institutions.

The consequences of a bank failure are more importantly determined by the state of the financial system and the economy than by the size of the institution. For example, in late 2008 CIT, a $81 billion business finance company that came under pressure, was converted to a bank holding company and provided a TARP capital injection to prevent it from failing. But in late 2009, with the financial system stronger, CIT was allowed to fail. Ironically, the supposed lack of government intervention to cushion the failure of CIT was the only evidence presented at the Minneapolis conference that breaking banks up into smaller units (units more than four times the size of CIT!) would have enabled the government to stand back and allow unchecked disorderly failures during the crisis.

Myth: *The banking industry does not benefit from economies of scale and thus the large size of some banks must be attributable to a subsidy or some other nefarious reason. There would be no negative consequences of supporting the U.S. financial system with only small banks.*
Reality: *Academic literature finds larger banks can provide products and services at lower cost than smaller banks.*

There is a very large academic literature that finds larger banks can provide products and services at lower cost than smaller banks and this effect is stronger for the largest banks. One estimate that takes into account only operating costs suggests that limiting bank size to be no larger than 2 percent of GDP would increase noninterest expense up to 7 percent, or $22 billion per year for the banks subject to the size cap. In addition, technological advantages, such as diversification and the dissemination of information costs also do not increase proportionally with bank size which increases further the cost of breaking-up big banks. Furthermore, imposing lofty leverage requirements on bank holding companies will make broker-dealer activities prohibitively expensive, resulting either in undiversified broker-dealers such as Bear Stearns and Lehman Brothers, a withering of U.S. capital markets, or a shift of capital-markets activity to foreign banks. Finally, restrictions on bank size put domestic banks at a competitive disadvantage more broadly vis-a-vis foreign banks that are not similarly constrained. Thus, breaking up large banks has considerable economic costs that have to be taken into account in this debate

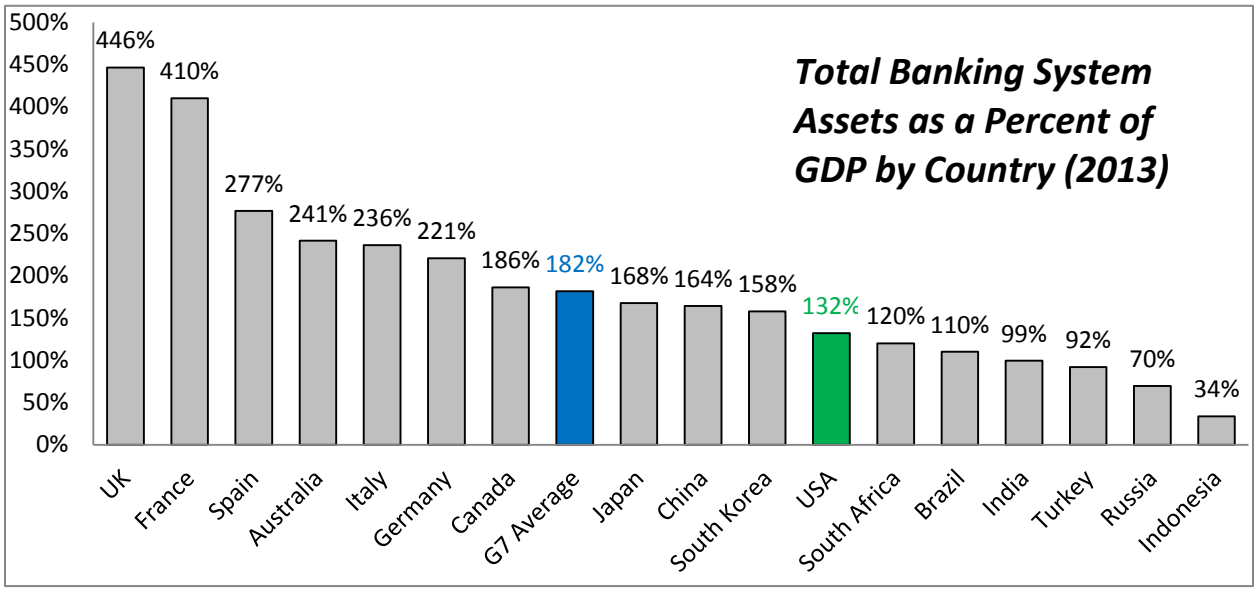
Myth: *There is no cost to requiring banks to hold excessive capital.*
Reality: R*equiring banks to hold ever more capital results in more expensive credit for households and businesses.*

A long line of economic research has established that raising capital requirements reduces credit availability and economic growth. A recent survey of this empirical literature suggests that for each percentage point increase in capital requirements banks cut their lending to businesses and households in a range that varies between 1¼ percent to 4½ percentage points. In addition, in a seminal paper, Joe Peek and Eric Rosengren (now President of the Boston Fed) (1993) establish that the imposition of Basel 1 reduced the supply of credit from New England Banks, and led to a "regulatory –induced credit crunch." They find that the reduction in credit was especially severe for bank dependent borrowers, such as small to medium-sized businesses, and suggest that their findings help explain the long period of subpar growth in the early 1990s. More recently, the new banking regulations that have been introduced in the aftermath of the financial crisis have made credit more expensive and less available which has affected small firms disproportionally because they lack alternative sources of financing (Goldman Sachs, 2015 "The two-speed economy").

Myth: *Large banks are becoming more concentrated and larger relative to the size of the U.S. economy.*
Reality: *The concentration of the banking industry has not changed meaningfully since the crisis, and the largest banks have shrunk relative to the size of the U.S. economy since 2009.*

In 2010, 39.5 percent of depository institution assets were at the 5 largest holding companies. In 2015, that number was 40 percent. And that meager increase can be accounted for by regulations requiring large banks (and only large banks) to significantly increase their holdings of cash and cash-like assets, to be sufficiently liquid to withstand a run. Excluding cash, and focusing on risk assets at banks, concentration has been unchanged.

Moreover, banks are a much smaller source of intermediation in the United States than in other developed countries. For example, banking system assets are about equal to GDP in the United States, but are three times GDP in much of continental Europe and Japan, and five times GDP in the U.K.

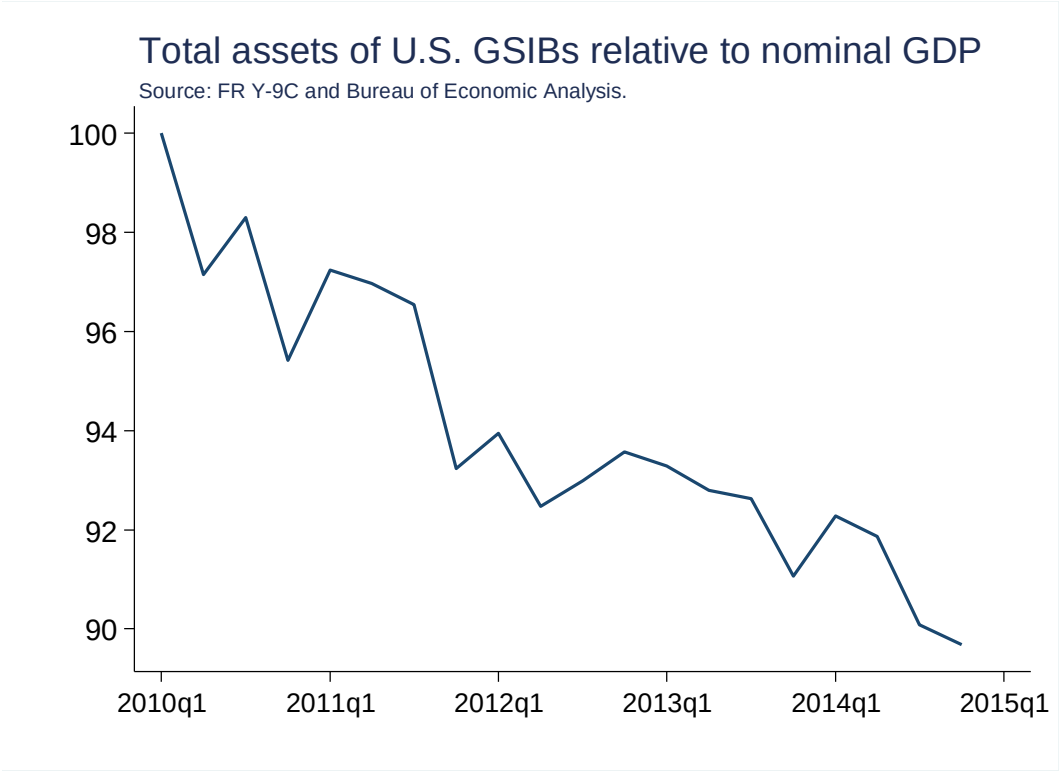


Source: SNL Financial, FDIC

Note: Total bank asset data is as of December 31, 2013. U.S. banks are adjusted to be represented on an IFRS basis. All other banks are presented on individual country accounting standards.

The U.S. banking industry is also the least concentrated in the Western world. Indeed, one might reasonably ask why the U.S. banking industry is not significantly more concentrated than it is. The answer appears largely attributable to government policy: the legacy effects of interstate and even intrastate banking restrictions, the presence of deposit insurance, and numerous surcharges borne only by larger banks.

Some of the presenters at the Minneapolis conference have focused on potentially misleading measures of bank size. For example, we're told that JP Morgan Chase's size is $3.7 trillion at the end of 2014, measured as "total exposure." JPM's total exposure has fallen considerably since then, to $3.1 trillion at the end of 2015. Moreover, "total exposure" includes adjustments for off-balance sheet items; JPM's total on-balance sheet assets are $2.4 trillion. But more importantly, "total exposure" treats riskless assets, such as deposits at the Federal Reserve or holdings of U.S. Treasury securities, the same as risky assets such as unsecured loans. Of JPM's total assets, 22 percent are cash, U.S. Treasuries, and agency MBS. JPM's risk-weighted assets, a regulatory measure that assigns weights to assets that depend on their risk (from one for most loans to zero for a deposit at the Federal Reserve), was $1.5 trillion.



While some at the Minneapolis conference will show charts showing that the most important banks in the U.S. have grown since the crisis, that growth is more than accounted for by inflation and the expansion of the real economy. Relative to nominal GDP, U.S. global systemically important banks (GSIBs) have *shrunk* 10% over the five year period 2010-2014.

Myth: *The financial crisis focused on the banking industry and pushing risk out of the banking industry will prevent a future crisis.*
Reality: *The financial crisis was concentrated in financial entities outside the banking industry.*

Although the financial crisis can reasonably be thought of as a severe bank run, it was a run on the *shadow* banking system, not the *traditional* banking system. Like banks, the shadow banking system financed loans with deposits, but it did so through a chain of intermediation rather than within a bank. On the one side, "deposits" were provided by investors in money funds, eager to have a safe and liquid asset and accept a low return in exchange, but also eager to have a slightly higher return even if it meant the funds invested in commercial paper were backed ultimately by sub-prime mortgages. To tap this cheap source of financing, mortgage lenders and securitizers continued to find innovative ways to divide up claims on risky mortgages into pieces that rating agencies labelled safe and liquid. In 2007 and 2008, as those underlying mortgages went bad at rates well above what was considered likely, the entire arrangement unraveled, investors lost faith in collateralized lending, and money fund investors headed to the exits. Of course banks,

too, came under pressure as the financial system teetered on collapse, but it was a casualty, not a cause of the crisis.

While robust capital and liquidity requirements for banks make the banking system, and the entire financial system, more stable, excessive requirements to cover ever more remote possibilities make intermediation between investors and borrowers ever more expensive. Not only will that reduce the availability of credit to borrowers, especially bank-dependent borrowers such as small business and middle-class households, it will also increase the incentive for intermediation to again take place primarily out of the regulated financial system

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