

Embargoed until delivery (at 2pm in Minneapolis on April 4, 2016)

A Size Cap for the Largest U.S. Banks

By Simon Johnson¹

Proposal

The size of the largest banks in the United States should be capped at 2 percent of Gross Domestic Product (GDP). Any bank with assets above that scale would face significantly higher capital requirements as an explicit incentive for boards of directors and management to reorganize – and break up – these firms.

This size cap and associated additional capital requirements would be administered by the Board of Governors of the Federal Reserve System, using authority granted under existing legislation and consistent with all current international agreements.²

Explanation

The measure of scale to be used is consolidated “total exposure” of bank holding companies, including on-balance sheet assets, derivatives, and off-balance sheet items for all subsidiaries, as reported to and published by the Federal Reserve System.³ GDP is calculated by the Bureau of Economic Analysis; at the end of the fourth quarter of 2014, this was \$17.7 trillion. Applied to the latest available size data, from the end of 2014, the size cap would therefore apply to any bank with total exposure over \$350 billion.

The proposed size cap would impact the following ten banks, listed here with their total exposure at the end of 2014: JP Morgan Chase (\$3.7 trillion); Bank of America (\$2.8 trillion); Citigroup (\$2.8 trillion); Wells Fargo (\$2.2 trillion); Goldman Sachs (\$1.5 trillion); Morgan Stanley (\$1.3 trillion); US Bancorp (\$539 billion); PNC (\$460 billion); Bank of New York Mellon (\$418 billion); and HSBC North America (\$417 billion).⁴

Rationale

In September 2008, the bankruptcy of Lehman Brothers caused shock waves throughout financial markets and around the world. At the time that it failed, Lehman had total assets of \$639 billion.

Earlier in 2008, Bear Stearns was on the brink of failure – and was prevented from defaulting on its debts only through dramatic intervention by the Federal Reserve. At the time, Bear Stearns had “reported total consolidated assets of nearly \$400 billion.”⁵

Smaller financial firms fail with some regularity in the United States and this is not necessarily a traumatic event.⁶ For example, CIT Group had trouble meeting its obligations in fall 2009 with around \$80 billion in assets (and perhaps \$120 billion in terms of total exposures). There was no

bailout for CIT – and its debts were restructured without causing damage to the broader financial system.⁷

Since 2008, measures have been taken to make the US and international financial system stronger, including increasing capital requirements, improving resolution frameworks, and limiting risk-taking activities.

Measured in terms of the leverage ratio (shareholder equity divided by total assets) the increase in capital at large US banks has been modest. Prior to 2008, the largest banks were funded with 3-4 percent equity (i.e., 96-97 percent debt). Now their funding structure is closer to 5 percent equity and 95 percent debt.⁸

The framework for resolution of large complex financial firms in the U.S. is now clearer than it was before the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010. Officials at the Federal Deposit Insurance Corporation have worked long and hard to create greater certainty regarding who would face losses if a major bank were to fail. Unfortunately, there are substantial residual risks that cannot be removed through this kind of theoretical planning – including how exactly global losses would be allocated and more generally which creditors would receive what kind of protection.

The Volcker Rule and other measures adopted as part of Dodd-Frank have limited the ability of the largest banks to take certain kinds of risks. However, the durability and effectiveness of these rules over the credit cycle remains to be proved.

A size cap would therefore serve as a form of failsafe – if other dimensions of regulation prove insufficient, at least we can limit the maximum damage from the failure of a large financial firm.⁹

Total size is not the only indicator that matters for potential systemic risks. But size can be and is measured – by the Federal Reserve – in a straightforward and robust fashion. And capital requirements are already linked to bank size, including through the Basel III framework.¹⁰ In the Financial Stability Board’s latest ranking of Global-Systemically Important Banks (G-SIBs): JP Morgan Chase is in bucket 4 (deemed to pose the most potential systemic risk); Citigroup is in bucket 3; Bank of America, Goldman Sachs, and Morgan Stanley are in bucket 2; and Bank of New York Mellon, State Street, and Wells Fargo are in bucket 1.¹¹

This size cap proposal applies the existing logic of financial regulation in a way that is consistent with both the letter and the spirit of our international agreements.

Legislative Authority

Under Title I of Dodd-Frank, the Board of Governors of the Federal Reserve System – along with the board of the FDIC – must determine if large banks have a sufficiently convincing plan for failure through bankruptcy, i.e., without using any resolution powers or other support from

the government.¹² In order to be credible, any such plan must demonstrate that there would be no negative significant systemic consequences arising from bankruptcy.

If this plan is not plausible, the Board of Governors of the Federal Reserve and the board of the FDIC can impose additional appropriate requirements – including higher capital.¹³ It would be entirely reasonable for the Federal Reserve and the FDIC to impose higher capital requirements up to the point where firms’ managers and directors choose to break up these entities – making the subsequent pieces small enough to fail (and to comply with Title I of Dodd-Frank).

Frequently Asked Questions

1. Would this disincentive to scale for the largest banks have the unintended consequence of limiting economic growth in the United States?

No. Economic growth in the U.S. has never been based on big banks. Until the mid-1990s, the largest banks in the U.S. were quite small – the combined balance sheets of the largest six banks were around 15 percent of GDP. Collectively, these banks became four times larger in the following 20 years. But there is no evidence that this growth in size of the largest banks translated into any material benefits for the broader economy. However, the ability and willingness of large financial institutions to take on bigger risks did contribute to the severity of the crisis in 2008. This is discussed further in Simon Johnson and James Kwak, [13 Bankers](#), Pantheon, 2010.

2. Would any kind of size cap put us at a disadvantage relative to our international competitors, such as in Europe or China?

The largest US banks are currently significantly larger than their European competitors. The best comparable cross-country data on bank size are available from [estimates produced by Thomas Hoenig](#).¹⁴ On an apples-to-apples basis, JP Morgan Chase is more than \$1 trillion larger than any European bank and \$500 billion larger than the largest non-US bank (Industrial and Commercial Bank of China). Bank of America is also larger than any European competitor.

At the time of Dodd-Frank, some senators expressed their respect for the European banking system – and its largest banks. Six years later, the European banks remained mired in problems largely of their own making. All the major banks have damaged their brands with repeated demonstrations that they cannot control behavior inside their organizations, including with regard to risk-taking and anti-money laundering compliance. Increasingly, “too big to manage” appears to be an appropriate description of these firms.

Major Chinese banks have their own issues. Regarding their size or structure as a model for US banking is not compelling.

3. Would such a size cap prevent all sorts of financial crisis?

The world is an uncertain and volatile place. There are no panaceas and any claim to eliminate all financial crises would be misleading. The point of this proposal is to offer a failsafe that would support existing regulation – intended to lower the probability and reduce the severity of financial crises. Specifically, this proposal is designed to reduce the severity of incentive problems associated with some financial firms being perceived as “too big to fail”.

If creditors think they are likely to be protected by the government in the event of failure, they will be willing to lend more and at lower cost. Creditors receiving this kind of implicit downside insurance are also less likely to demand transparency and disclosure on the part of borrowers – and this helps explain why the largest banks remain so relatively opaque in terms of their operations.

4. Could a size cap actually increase the probability or severity of crisis?

The argument is sometimes made that a financial system with a larger number of smaller firms would actually be less stable than the structure we have now. This is a strange claim – particularly as today’s financial system looks a lot like what we had (and what almost collapsed) in 2008.

There is no evidence that large firms are easier to regulate than small firms. In fact, large firms usually have greater ability to push back on or work around particular rules.

Nothing in the size cap proposal implies that regulation should be abandoned for smaller financial firms. However, smaller banks are already subject to substantial regulation, including through capital requirements. Such banks fail fairly frequently without causing negative systemic consequences.

Sometimes it is argued that pushing big banks to break up would result in a larger and more sinister “shadow banking system” but this is actually a non sequitur. Many “shadow” activities pre-2008 were actually conducted by large banks as a way to get around capital requirements. And all non-bank financial intermediation should be subject to appropriate levels of regulation, including through capital requirements and other measures.

5. Would it be disruptive to impose this kind of size cap?

This proposal would be implemented in the same way as existing capital regulation is determined and implemented for U.S. G-SIBs by the Federal Reserve. That rule-making process has a strong legal foundation and has not resulted in disruption to financial markets.

6. Do big banks have some advantage, in terms of efficiency or ability to offer products, which would be lost with this size cap?

Again, if the biggest banks have some special inherent advantage with social value, where have we seen the impact of this on the broader economy? These banks do run less transparent business models than their smaller competitors, but it is hard to see how this is an advantage for the broader economy.

Has the financial system become more efficient or more stable over the 20 years – i.e., during the period of time when US banks became much larger? No, the evidence suggests strongly to the contrary – the increase in bank size was associated with a build-up of systemic risk. Again, see Johnson and Kwak, *13 Bankers*, for more history and discussion.

7. Why stop at 2 percent of GDP – why not make the size cap even smaller?

This is a fair question, but we know that sufficiently small financial firms can fail – or restructure their debts – without systemic consequences even if they are engaged in complex and relatively opaque lines of business.

For example, Long Term Capital Management (LTCM) was a hedge fund which in 1998 was able to borrow over \$125 billion. Its impending failure was a cause for some official concern, but creditors were not bailed out. By contrast, Bear Stearns with \$400 billion in assets did receive official support – the purchase by JP Morgan would not have happened without a substantial backstop provided by the Federal Reserve.

8. Is there really moral hazard in banking?

There is potential moral hazard in all human endeavors. Your insurance company does not think that you will necessarily want to burn down your house or crash your car if they insure you fully. But the long history of insurance strongly suggests that people are more careful when they face a co-payment or a deductible or some other form of shared financial responsibility. Giving anyone complete or substantial downside protection – let alone a guaranteed bonus, irrespective of the outcome – is not a good practice in private business and cannot be recommended as the basis for public policy.

9. Were the biggest banks a source of danger or stability in the recent global financial crisis?

Citigroup, the largest bank in the United States in 2008, was at the heart of what went wrong in the U.S. and around the world. Bank of America, then the second largest bank, also encountered severe problems – in part due to its purchase of Countrywide.

Goldman Sachs and Morgan Stanley were in serious difficulty in September 2008 – and they were saved by being allowed to convert to be bank holding companies.¹⁵ Saving those financial firms from failure was part of how the government and the Federal Reserve turned “too big to fail” into a widely recognized term. Smaller financial firms and of course households did not receive any such support when they ran into financial difficulties.

Too Big To Fail is not a new problem in the American economy – the term was first coined in the 1980s and a definitive book on the topic, by Gary Stern and Ron Feldman, was published in 2004.¹⁶ However, the bailouts of 2008-09 greatly exacerbated the issue.

10. Have we had a size cap on banks previously in American history?

Under the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, no bank was allowed to have more than 10 percent of all retail deposits.¹⁷ Most of the growth in banking that took place subsequent to that date was due to increases in wholesale funding, which was not subject to this cap. In addition, the Riegle-Neal cap was waived by the Federal Reserve on at least one occasion. And what matters for systemic impact from any bank failure is more size relative to GDP than size relative to retail deposits or even share of wholesale funding.

11. How radical or new is this size cap idea?

Section 622 of Dodd-Frank set a “concentration limit” on large financial firms – disallowing mergers “if the consolidated liabilities of the acquiring financial company upon consummation of the transaction would exceed 10 percent of the aggregated consolidated liabilities of all financial companies at the end of the calendar year preceding the transaction.”¹⁸

In October 2012, Dan Tarullo, the Federal Reserve Governor with de facto responsibility for regulation and supervision, suggested it may be appropriate to limit the “non-deposit liabilities of financial firms to a specified percentage of U.S. gross domestic product, as calculated on a lagged, average basis.”¹⁹

The size cap proposal presented here is very much consistent with Mr. Tarullo’s suggestion. The main difference is the position here that the size cap could emerge as part of the living wills process; Mr. Tarullo expressed a preference for new legislation on this point.

12. Are you sure that higher capital requirements would cause the big banks to break up?

Among market analysts, there is already discussion of the advantages breaking up of big banks, if that will reduce capital requirements.²⁰ If the additional capital requirements are steep enough, boards of directors will choose to break these firms into smaller independent components. The value to shareholders would almost certainly increase.

¹ MIT Sloan School of Management and Peterson Institute for International Economics. This note was prepared for the Federal Reserve Bank of Minneapolis Symposium on Ending Too Big To Fail, April 6, 2016. All views expressed here are personal. This draft version was last revised on March 28, 2016.

² Additional legislation could be helpful, for example in the form of the Brown-Kaufman amendment (proposed to Dodd-Frank, see <http://www.brown.senate.gov/newsroom/press/release/brown-kaufman-file-amendment-on-too-big-to-fail-legislation>) or the Brown-Vitter Terminating Bailouts for Taxpayer Fairness (TBTF) Act (<http://www.brown.senate.gov/newsroom/press/release/brown-vitter-unveil-legislation-that-would-end-too-big-to-fail-policies>). For more background and discussion, see <http://dealbook.nytimes.com/2013/05/01/in-brown-vitter-bill-a-banking-overhaul-with-possible-teeth/>. Instead of increasing capital requirements, a steeply progressive tax on leverage could be imposed – but this would require legislation. The proposal presented in this note could be implemented without further legislation.

³ This is in the Banking Organization Systemic Risk Report (FR Y-15), available by bank; see <https://www.ffiec.gov/nicpubweb/nicweb/HCSGreaterThan10B.aspx> and then follow the available links. The latest available data are for the end of 2014. “Total exposures” are given on line 4 of “Schedule A – Size Indicator”; it is the sum of “on-balance sheet items” (line 1), “derivatives and off-balance-sheet items” (line 2), and “regulatory adjustments” (line 3).

⁴ At the end of 2014, Capital One had total exposures of \$353.6 billion, which was almost exactly two percent of GDP.

⁵ This is from “Bear Stearns, JP Morgan Chase, and Maiden Lane LLC,” part of the Federal Reserve’s official narrative, http://www.federalreserve.gov/newsevents/reform_bearstearns.htm.

⁶ The largest hedge funds in early 2009 had assets in the range of \$20-40 billion; see <http://www.hedgefundintelligence.com/images/590/55595/Billion%20Dollar%20Hedge%20Fund%20Club%20-%20March%202009%20Survey.pdf>. There was no discussion of bailing of these funds out.

⁷ There had previously been some discussion about extending government guarantees to CIT, but this did not happen. See, for example, David Weidner, “The System at Risk in a CIT Failure,” Wall Street Journal, July 17, 2009, <http://www.wsj.com/articles/SB124774724987851145>.

⁸ On a risk-weighted basis, the capital ratios are higher, i.e., it appears there is more loss-absorbing capital. But assuming that risk weights will be correct, on a forward-looking basis, is unwise – these weights prove wrong in every major crisis, including recently for mortgage-backed securities in the U.S. and sovereign debt in the euro area. Wells Fargo has a leverage ratio over 8 percent (equity divided by assets) but this is an outlier.

⁹ The costs in terms of lost economic output from the financial meltdown in 2008 were enormous – at least one year’s GDP; see The Cost of the Crisis: \$20 Trillion and Counting, Better Markets, Inc., July 2015, <https://www.bettermarkets.com/sites/default/files/Better%20Markets%20-%20Cost%20of%20the%20Crisis.pdf>. In any system where the risks are so high – such as financial systems or nuclear power plants – it makes sense to rely on multiple safeguards.

¹⁰ For more background, see these two publications by the Basel Committee on Banking Supervision, “Basel III: A global regulatory framework for more resilient banks and banking systems,” June 2011 (revised), <http://www.bis.org/publ/bcbs189.pdf>, and “Globally systemically important banks: Assessment methodology and the additional loss absorbency requirement,” July 2011, <http://www.bis.org/publ/bcbs201.pdf>. See also “A Comparison of US and International Global Systemically Important Banks,” as assessment by Paul Glasserman and Bert Loudis at the Office of Financial Research, https://financialresearch.gov/briefs/files/OFRbr-2015-07_A-Comparison-of-US-and-International-Global-Systemically-Important-Banks.pdf.

¹¹ See the Financial Stability Board’s list of G-SIBs, updated in November 2015 based on end-2014 data, (<http://www.fsb.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf>).

¹² Title II of Dodd-Frank created new resolution powers, but these are intended only to be used as a back-up, i.e., if the completely credible plans under Title I turn out – unexpectedly – not to work.

¹³ “If a nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a) fails to timely resubmit the resolution plan as required under paragraph (4), with such revisions as are required under subparagraph (B), the Board of Governors and the Corporation may jointly impose more stringent capital, leverage, or liquidity requirements, or restrictions on the growth, activities, or operations of the company, or any subsidiary thereof, until such time as the company resubmits a plan that remedies the deficiencies.” (Dodd-Frank Act, Section 165, (d)5(A))

¹⁴ Specifically, to make this comparison Mr. Hoenig converts US accounts under GAAP into International Financial Reporting Standards equivalent. His conversion produces size estimates for the largest US banks that are quite similar to those available through the Federal Reserve’s Systemic Risk Reports. The numbers discussed here are for the end of 2014.

¹⁵ To be clear, Goldman Sachs and Morgan Stanley were not “banks” in a legal and regulatory sense prior to September 2008 – they were investment banks, also referred to more precisely but perhaps less descriptively as broker-dealers (with the Securities and Exchange Commission as primary regulator). Following the crisis and as codified by Dodd-Frank, all the largest banks and bank-like firms – highly leveraged financial intermediaries – are now bank holding companies regulated by the Federal Reserve.

¹⁶ Gary H. Stern and Ron J. Feldman, *Too Big To Fail: The Hazards of Bank Bailouts*, Brookings Institution, 2004.

¹⁷ See Bill Medley, “Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994,” September 1994, <http://www.federalreservehistory.org/Events/DetailView/50>.

¹⁸ Federal Reserve Governor Dan Tarullo is right to regard this as “based on a somewhat awkward and potentially shifting metric of the aggregated consolidated liabilities of all ‘financial companies’”; see Daniel K. Tarullo, at the Distinguished Jurist Lecture, University of Pennsylvania Law School, Philadelphia, Pennsylvania, October 10, 2012, <https://www.federalreserve.gov/newsevents/speech/tarullo20121010a.htm>.

¹⁹ To be clear, Mr. Tarullo did not propose a specific number for the size cap, saying instead “this is a debate well worth having”. See the speech cited in the preceding note.

²⁰ In early 2015, Goldman Sachs published an assessment of on JP Morgan that makes this point. More recently, analysts at KBW made a similar argument for Citigroup and an RBC report took the same general line for Citigroup and Bank of America. See “Breaking up Bank of America and Citigroup isn’t as Crazy as it Sounds,” John Maxfield, Motley Fool, March 23, 2016.