

June 28, 2019

VIA ELECTRONIC SUBMISSION

Financial Stability Board
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Re: Financial Stability Board Evaluation of “Too-Big-to-Fail” Reforms

Ladies and Gentlemen:

The American Bankers Association¹ (ABA) appreciates the opportunity to provide initial feedback as the Financial Stability Board (FSB) commences an evaluation of the effects of “Too-Big-To-Fail” (TBTF) reforms.² The FSB’s evaluation will assess whether TBTF reforms adopted since the global financial crisis are achieving their intended objectives of reducing systemic and moral hazard risks associated with systemically important banks (SIBs). Our feedback is focused on reforms affecting those of our U.S.-based member institutions that are designated by the FSB as global systemically important bank holding companies (U.S. GSIBs). Below, we describe how post-crisis regulatory reforms in the United States have addressed TBTF, and we urge the FSB to continue the important work of fostering international coordination in addressing TBTF.

¹ The American Bankers Association is the voice of the \$18 trillion United States banking industry, which is composed of small, regional, and large banks that together employ more than 2 million people, safeguard nearly \$14 trillion in deposits, and extend more than \$10 trillion in loans.

² Press Release, Financial Stability Board, FSB Launches Evaluation of Too-Big-To-Fail Reforms and Invites Feedback From Stakeholders (May 23, 2019), <https://www.fsb.org/wp-content/uploads/R230519.pdf>.

Executive Summary

It is ABA's longstanding position that no private sector financial institution in the United States is or should be "too big to fail." We know of no ABA member institution that differs from that view. All private sector financial firms should be subject to the discipline of potential failure and be able to fail without causing harm to the financial system. Regulatory activities in the United States to address TBTF have been numerous and robust, focusing on increasing the resiliency of banking organizations and enhancing effective resolution management in the event of their possible failure. ABA believes that the prospect of TBTF with regard to banking organizations has been addressed in the United States by these regulatory actions and the banking industry's concomitant efforts. This conclusion is shared by numerous policymakers across the political spectrum³ and reflected in the markets.

An important set of TBTF objectives was initially established at the Pittsburgh Summit in 2009, where G-20 leaders asked the FSB to develop resolution tools and other measures to help mitigate the disruption of financial institution failures and reduce moral hazard.⁴ We support the goals set out in the G-20 Leaders Statement from the Pittsburgh Summit and the efforts that have been made by regulators and financial institutions over the past 10 years to achieve them and believe that with regard to U.S. banking firms those goals have been well met. In fact, the U.S. regulators and ABA members have led the way in adopting and implementing these post-crisis reforms to achieve the G-20 objectives.

We commend the FSB for embracing stakeholder outreach, which is a critical source of information and experience, to inform such an important effort. Market participants have devoted substantial resources to assessing both objectives met by and unintended consequences of the various reforms promoted by the FSB and national authorities over the last decade. Of course, a single, brief chance to provide input on a draft report that will be assembled over 12 months, would not fully take advantage of the information and perspectives that public comment can offer. We suggest that the FSB seek input iteratively as it conducts its evaluation, allowing for multiple comment opportunities both in writing and in person through workshops and group meetings. Such a process would be consistent with the priority given by FSB Chair Randal Quarles to improving the FSB's outreach and transparency,⁵ and, more importantly, it would allow the public to fully share perspectives and experience.

³ See, *infra*, notes 10 and 12.

⁴ G-20, Leader's Statement: The Pittsburgh Summit (2009), https://www.treasury.gov/resource-center/international/g7-g20/Documents/pittsburgh_summit_leaders_statement_250909.pdf.

⁵ Randal K. Quarles, Chair, Financial Stability Board, Ideas of Order: Charting a Course for the Financial Stability Board (Feb. 10, 2019), <https://www.fsb.org/wp-content/uploads/Quarles-Ideas-of-order-Charting-a-course-for-the-Financial-Stability-Board.pdf> ("to maintain the legitimacy of our work, to increase understanding of it, and to enhance its effectiveness, we must improve our outreach and transparency--including to our membership, other global authorities, the public, and key stakeholders.").

We offer the following key observations and recommendations.

TBTF related reforms in the United States have been aggressive and comprehensive in addressing systemic and moral hazard risks associated with U.S. GSIBs. Consistent with the views of many policymakers and prominent economists, available evidence shows that the safety and soundness of the operations of U.S. GSIB's have been materially strengthened while the likely consequences of the failure of a U.S. GSIB have been made significantly more manageable. Improvements in the quantity and quality of bank capital and liquidity now provide a significant safeguard against financial distress. In the United States, a uniquely rigorous stress testing program adds an additional bulwark to reforms that already exceed internationally-agreed standards. Improvements to funding stability have also increased the resiliency of banking organizations.

Regarding the impact of failure, U.S. banking organizations are at the forefront around the world in developing credible resolution planning. Through the United States' thorough resolution planning process, U.S. banking organizations have demonstrated the ability to be resolved in an orderly fashion under the Bankruptcy Code through a single-point-of-entry (SPOE) strategy without taxpayer or government support and without creating contagion. In furtherance of this objective, banking organizations have made significant changes to their organizational structures, reduced the complexity of their assets, entered into contractual arrangements that require their parent companies to support material subsidiaries in resolution, limited default rights in their qualified financial contracts (QFCs), and complied with requirements to issue sufficient loss-absorbing debt and equity and to maintain a clean holding company, among many other changes. The orderly liquidation authority (OLA) under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) continues to serve as a formidable backstop to resolution under the Bankruptcy Code.

Post-crisis market reforms also have substantially reduced systemic risk and improved the functioning and stability of U.S. financial markets. Such reforms include derivative market reforms (including new central clearing, margin, and trade reporting requirements), and repo market reform. At the same time, while markets have become more resilient and transparent, our member institutions have significantly reduced their reliance on short-term wholesale funding.

These reforms reflect transformational structural and legal changes that came about after the G-20 Pittsburgh Summit. The effect of these reforms has been verified by major rating agencies and independent studies of the cost of credit for the U.S. GSIBs.

While TBTF reforms have achieved their objectives, the resulting framework can be further improved for effectiveness and efficiency, reinforcing the underlying goals. Regulators can and should take action to streamline reforms, avoid over calibration that unnecessarily hinders growth, correct inefficiencies from overlapping requirements, and consider and emend

unintended consequences that can undermine achievement of the goals, such as decreased liquidity and the movement of financial intermediation outside of the regulatory perimeter.

We urge the FSB to foster further international coordination to promote efficiency in reform efforts and to help ensure a level playing field. International coordination is critical to preventing the damaging effects of ring fencing by individual jurisdictions. Indeed, much of the legal and regulatory architecture that has been put in place will be most effective if global regulators work collaboratively during good and bad times to ensure that these changes to the financial system achieve their full potential. International coordination also is important to establish a level international playing field for SIBs with cross-border operations. Accordingly, the FSB should use this evaluation to take stock of how different jurisdictions have addressed the objective of eliminating TBTF. For jurisdictions such as the United States that have earnestly addressed that objective, existing reforms are being reviewed to see how they can be further improved for effectiveness and efficiency. For jurisdictions that have more work to do in addressing TBTF, the FSB should encourage those jurisdictions to complete that work.

* * *

I. TBTF reforms in the United States have been effective in addressing systemic and moral hazard risks.

The FSB has requested comment on the extent to which TBTF reforms for SIBs that were agreed to by the G-20 after the global financial crisis are achieving their objectives of reducing systemic and moral hazard risks.⁶ Although the FSB’s Summary Terms of Reference mention only a few of the TBTF reforms—such as new capital buffers, total loss-absorbing capacity (TLAC) requirements, enhanced supervision, and the establishment of effective cross-border resolution regimes and planning—the Summary Terms of Reference also recognize that G-20 member jurisdictions have enacted comprehensive changes to their financial regulatory policies that may also be relevant to its request.⁷ To evaluate whether the goals of TBTF reforms have been reached, the FSB states that it will analyze if reforms have resulted in a perceived reduction in the probability and impact of failure of SIBs and also will consider whether SIBs themselves have internalized these risks as reflected in business model changes and risk profile reductions.⁸

Financial institutions have been said to be TBTF when “policymakers judge that their failure would cause unacceptable disruptions to the overall financial system”⁹—*i.e.*, create systemic risk. This status can result both from an institution’s size and its level of interconnectedness with

⁶ FSB, Evaluation of Too-Big-To-Fail Reforms: Summary Terms of Reference at 1 (2019), <https://www.fsb.org/wp-content/uploads/P230519.pdf>.

⁷ *Id.* at 2.

⁸ *Id.* at 3.

⁹ Marc Labonte, CONG. RESEARCH SERV., *Systemically Important or “Too Big to Fail” Financial Institutions* at i (Sept. 24, 2018), <https://fas.org/sgp/crs/misc/R42150.pdf>.

the financial system as a whole. To the extent that an institution is perceived as TBTF, that perception can present moral hazard risk: there may be reduced incentives to monitor the institution's risk profile. This reduced market discipline may lead to excessive risk-taking, which would be particularly problematic for the largest, most complex institutions considering their impact on the financial system and the economy.

We believe that TBTF reforms in the United States have tackled the intended objectives regarding systemic and moral hazard risks, and have addressed the perception of TBTF revealed by the global financial crisis over a decade ago. In fact, U.S. regulators and U.S. GSIBs have led the way in adopting post-crisis financial reforms and have served as a model for the rest of the world. Numerous policymakers across the political spectrum have reached the same conclusion. For instance, Federal Reserve Board (FRB) Chairman Jerome Powell has stated that he does not believe any U.S. banking organizations are TBTF.¹⁰ In addition, former FSB Chair Mark Carney similarly has stated that “[e]nding too big to fail...has largely been achieved.”¹¹ Other prominent policymakers and economists concur that the reforms put in place following the financial crisis have boosted the resilience of the U.S. financial system.¹²

The United States, through legislative and administrative actions, reacted quickly and comprehensively to address the regulatory shortcomings identified by the crisis. A decade later,

¹⁰ See *Hearing on the Nomination of Jerome H. Powell, to be Chairman of the Board of Governors of the Federal Reserve: Before the Sen. Comm. on Banking, Hous., and Urban Affairs, 115th Cong.* (2017) (Testimony of Jerome H. Powell) (“Generally speaking I think the financial system is quite strong.” Asked if there are any U.S. banks that are still too big to fail in America, he responded, “I would say no to that.”), https://archive.org/details/CSPAN3_20171201_171600_Federal_Reserve_Chair_Confirmation_Hearing.

¹¹ See Mark Carney, former Chair, FSB, *What a Difference a Decade Makes* (April 20, 2017).

¹² Randal K. Quarles, Chair, FSB, *Ideas of Order: Charting a Course for the FSB* (Feb. 10, 2019) (“The body of post-crisis regulation... was a tour de force of orchestration, and it has unquestionably made the financial system safer and more resilient.”); Lael Brainard, Governor, FRB, *Assessing Financial Stability Over the Cycle* (Dec. 7, 2018) (“The regulated financial sector is also more resilient, owing to far-reaching reforms... Large banks have increased both the size and quality of their capital buffers... Financial reform has reduced funding risks associated with banks and money market funds. Large banks subject to liquidity regulation rely less on unstable short-term wholesale funding and have thicker liquidity buffers.”); Janet L. Yellen, Keynote Address at the Griswold Center for Economic Policy Studies Fall Symposium: The Tenth Anniversary of the Financial Crisis (Nov. 19, 2018) (“My assessment is that the reforms put in place significantly boosted the resilience of the U.S. financial system. The risk of runs owing to maturity transformation declined. Efforts to enhance the resolvability of systemic firms promoted market discipline and reduced the problem of too big to fail.”); Interview by Ben White with Daniel Tarullo, former Governor, FRB, *Did We End Too Big to Fail? Are We Safer Now?*, Politico Money (Sep. 26, 2018) (“We are certainly a lot safer now than we were ten or twelve years ago. The largest institutions are substantially better capitalized, they have much more sustainable funding patterns”); Stefan Ingves, Chairman, Basel Committee on Banking Supervision, Keynote Speech at Basel III: Are We Done Now? (Jan. 29, 2018) (“The title of this conference is ‘Basel III: Are We Done Now?’. Let me answer this question at the outset: yes, we are done... These reforms have demonstrably helped to strengthen the global banking system.”); Martin J. Gruenberg, former Chairman, FDIC, *The Impact of Post-Crisis Reforms on the U.S. Financial System and Economy* (June 15, 2016), (“As an objective matter, the banking system is significantly more resilient today as a result of these reforms.”); Jacob J. Lew, former Treasury Secretary, Remarks by U.S. Treasury Secretary Jacob J. Lew at The Brookings Institution (July 8, 2015) (“Wall Street Reform ended ‘too big to fail . . .’”).

reforms in the United States have materially strengthened the safety and soundness of U.S. GSIBs while the likely consequences of the failure of a U.S. GSIB have been made extensively more manageable. In certain cases, U.S. regulators have adopted standards that are super equivalent to global standards, such as the GSIB capital surcharge, stress testing mandates, including the global market shock and largest counterparty default scenarios, the enhanced supplementary leverage ratio (eSLR), certain TLAC requirements, an enhanced liquidity coverage ratio (LCR), and sophisticated and detailed resolution strategies and planning, which we discuss further below. Although the Summary Terms of Reference explicitly mentions only a relatively narrow set of TBTF policies,¹³ as noted above, we believe that the FSB should consider and evaluate the entire range of post-crisis regulations that have addressed the issue of TBTF, several of which we discuss further below.

In this Section, we first present how TBTF reforms in the United States, in the form of enhanced prudential standards and requirements to improve resolvability, as well as actions taken by our largest member institutions, have strengthened safety and soundness of U.S. banks and the prudential supervision of their operations, while also materially reducing the scale of impact to the financial system if a U.S. GSIB were to fail. Next we discuss certain markets reforms in the United States that have also had the effect of addressing systemic risk. Next, we present evidence that the market no longer perceives the U.S. GSIBs as TBTF. Finally, we suggest that refinements can be made to these enhanced standards to improve their effectiveness and efficiency, correct for over calibration and unintended consequences, together reinforcing achievement of the original goals.

a. *Financial reforms in the United States have materially strengthened the resiliency and the safety and soundness of U.S. banks and their prudential supervision.*

Post-crisis financial reforms in the United States have subjected U.S. GSIBs to greatly enhanced prudential standards, including heightened capital requirements, liquidity requirements, and capital and liquidity stress testing. As a result of these reforms and other actions taken to improve resiliency, our member institutions today are more resilient than ever. Specifically, improvements in capital, liquidity, and funding stability have significantly increased the ability of our member institutions to withstand economic downturns and to continue to be a source of credit through the cycle.

i. Capital

Perhaps the clearest measurement of resiliency in the banking system is bank capital. By providing a constant bulwark to absorb losses in the face of financial shocks, capital serves as a concrete and continuous guardrail. U.S. banking organizations, especially U.S. GSIBs, are now subject to a number of risk-based and leverage capital requirements that were developed after the

¹³ See *supra* note 6.

financial crisis.¹⁴ While these requirements reflect the U.S. implementation of Basel III,¹⁵ in certain cases, the standards that have been implemented by U.S. regulators are super equivalent to the standards developed by the Basel Committee on Banking Supervision (Basel Committee). For example, U.S. GSIBs are subject to more stringent leverage ratios and TLAC requirements.¹⁶ Similarly, the U.S. GSIB surcharge includes a super equivalent “Method 2” construct.¹⁷ These facts underscore the importance of considering the range of policies designed to deal with TBTF at the national level in addition to a summary review of international standards.

The United States is also unique in the way the stress testing process is used to set minimum capital levels. During the financial crisis, the FRB turned to stress testing under the Supervisory Capital Assessment Program (SCAP) to “determine potential losses at the largest firms if the prevailing stress severely worsened and to restore confidence in the financial sector.”¹⁸ While the original SCAP program was focused on quickly restoring capital adequacy and market confidence during a time of severe economic stress, the current Comprehensive Capital Analysis and Review (CCAR) stress testing program has become much broader and substantive in scope. CCAR is an annual exercise under which firms are required to submit a capital plan, and the FRB subsequently prescribes, on an *ex-ante* basis, firms’ quarter-to-quarter capital distributions. Similarly, the Dodd-Frank Act also requires supervisory and company-run stress testing, which is incorporated into the CCAR process.¹⁹ Moreover, the results of these analyses would have significant consequences for systemic risk under a proposal outstanding in the United States that would replace the fixed 2.5% capital conservation buffer with a “stress capital buffer” that could be increased above 2.5% based on a firm’s results under CCAR.²⁰ In its current form, CCAR and the stress losses it projects can lead to supervisory-imposed restrictions on capital distributions that are unique to the United States.

¹⁴ See, e.g., 12 CFR pt. 217.

¹⁵ Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule, 78 Fed. Reg. 62017, 62018 (Oct. 11, 2013) (implementing Basel III in the United States).

¹⁶ See, e.g., 12 CFR pt. 252, subpt. G (implementing the TLAC Rule); 12 CFR § 217.10 (implementing the eSLR for bank holding companies).

¹⁷ 12 CFR pt. 217, subpt. H (implementing the GSIB surcharge).

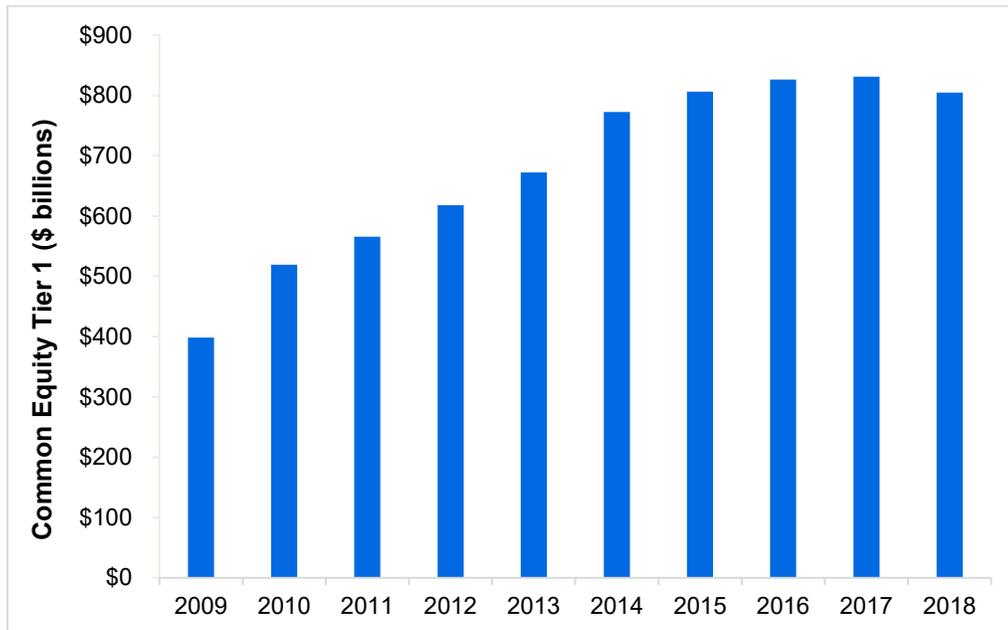
¹⁸ Amendments to the Regulatory Capital, Capital Plan, and Stress Test Rules, 83 Fed. Reg. 18160, 18161 (April 25, 2018).

¹⁹ 12 CFR pt. 252, subpt. F.

²⁰ See Randal K. Quarles, Vice Chairman for Supervision, FRB, A New Chapter in Stress Testing (Nov. 9, 2018) (“For large firms, the [stress capital buffer] would replace the fixed 2.5 percent risk-based buffer with a firm-specific buffer the size of which would be based on the firm’s stress test results. In this way, we are integrating the automatic restrictions on capital distributions in the current capital rule with the output of the most dynamic tool we have for assessing risk—the stress test—to create a more robust and dynamic regulatory capital regime.”).

U.S. GSIBs have increased significantly their levels of capital over the past decade. For example, they now maintain more than \$900 billion in tier 1 capital, an increase of more than 40% since 2009. This significant improvement over the past decade is shown in Figure I.

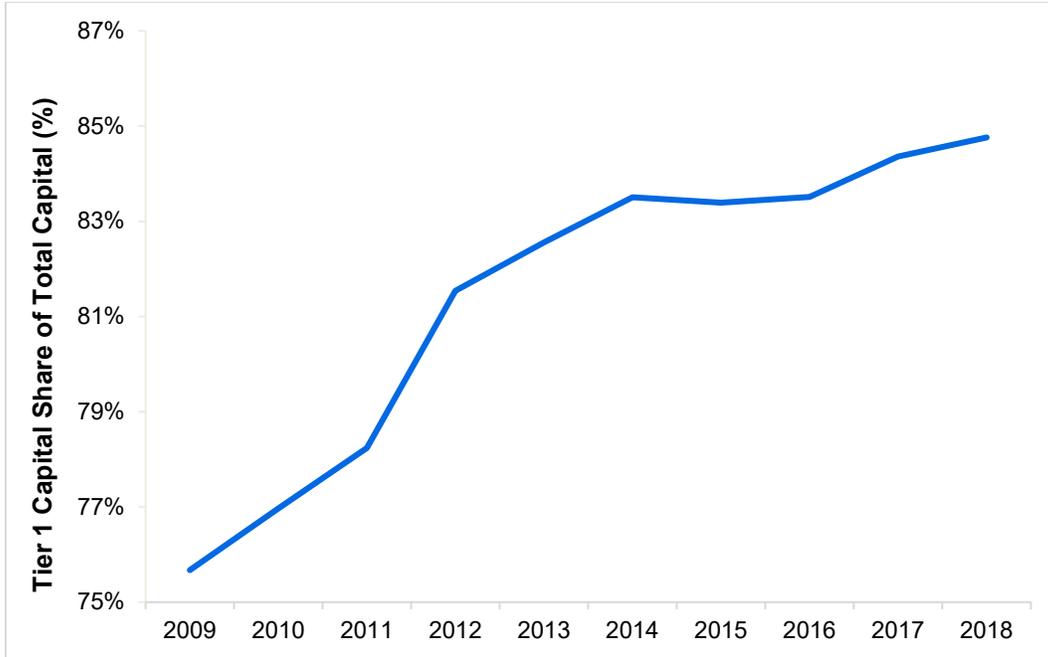
Figure I – U.S. GSIB Common Equity Tier I Capital



Source: Federal Reserve Y9-C

However, increases in the quantity of bank capital understate the improvements in resiliency U.S. GSIBs have achieved since the financial crisis. Importantly, these banking organizations also have increased the quality of their capital. As shown in Figure II below, the fraction of total equity capital accounted for by tier 1 capital at U.S. GSIBs has risen steadily to 85% of total equity capital, up 10% since 2009. By dedicating a higher proportion of capital to subordinated instruments, U.S. GSIBs are now able to absorb losses of increased severity even in poor credit environments and continue to provide credit to the real economy through the cycle.

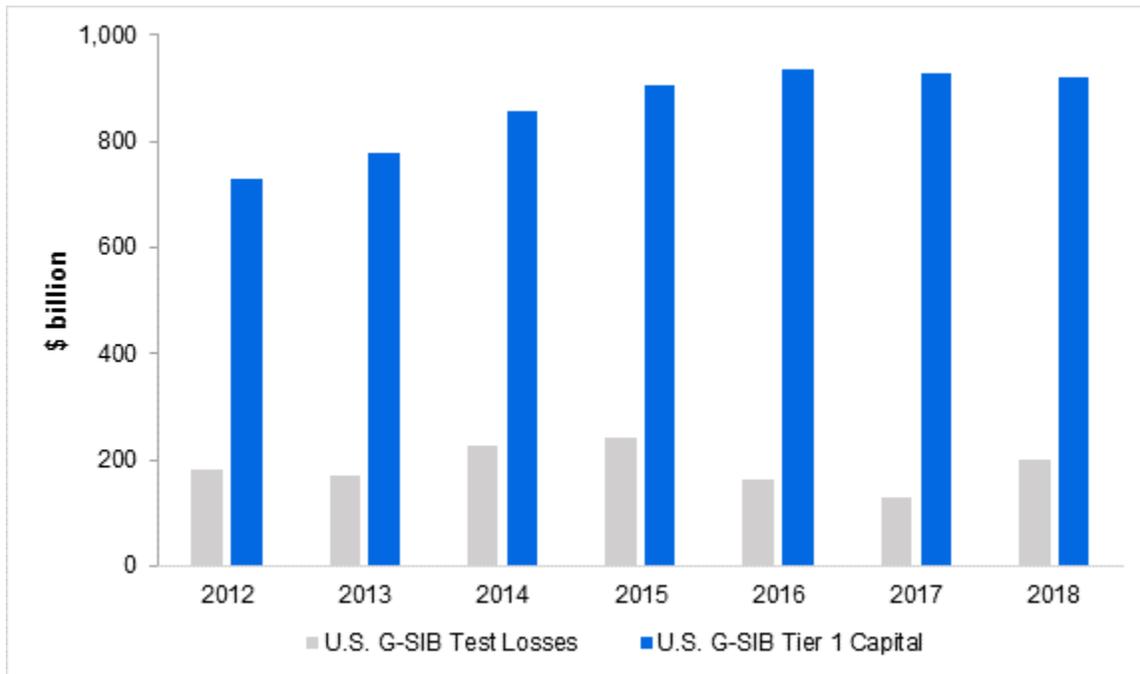
Figure II – U.S. GSIBs Tier 1 Capital Percent of Total Capital



Source: Federal Reserve Y9-C

As a further demonstration of robustness, Figure III shows that U.S. GSIBs’ tier 1 capital is several times larger than the projected losses determined in their stress tests.

Figure III – U.S. GSIBs Stress Test Losses Compared to Tier 1 Capital



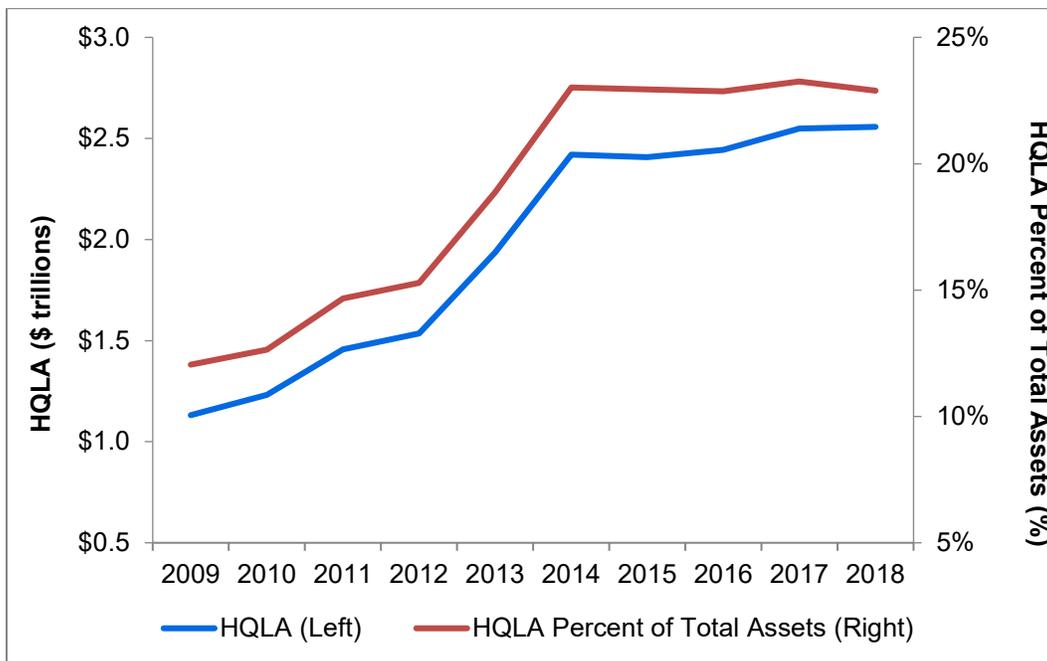
Source: Federal Reserve Y-9C; Federal Reserve DFAST results

ii. *Liquidity.*

Similar to what has occurred with respect to capital, regulators responded to the financial crisis with enhanced liquidity requirements, designed to ensure the presence of resources that can be deployed quickly as needed and transformed into cash at low cost. Our largest member institutions are now required to meet certain quantitative liquidity standards (e.g., the LCR) and are subject to detailed liquidity risk management standards, including liquidity stress testing, annual firm-specific and horizontal assessments of their liquidity program, as well as enhanced internal liquidity requirements (so-called Resolution Liquidity Adequacy and Positioning, or RLAP, and Resolution Liquidity Execution Need, or RLEN) as part of firm specific resolution planning mandates.²¹

To meet quantitative liquidity standards, our largest members have greatly increased their holdings of high-quality liquid assets (HQLA)—such as cash, reserves and U.S. Treasuries—since the financial crisis. As can be seen in Figure IV, HQLA has more than doubled since 2010.

Figure IV – U.S. GSIB HQLA



Source: Federal Reserve Y9-C

²¹ See, e.g., 12 CFR 249.10 (LCR), 12 CFR 252.35 (liquidity stress testing). See also, Final Guidance for the 2019 and Subsequent Resolution Plan Submissions, 84 Fed. Reg. 1438 (Feb. 4, 2019).

In addition, frequent assessments conducted via the FRB’s Large Institution Supervisory Coordinating Committee (LISCC) liquidity program evaluate the adequacy of our largest member institutions’ liquidity positions and liquidity risk management practices. Through the liquidity program, the FRB may require firms to adjust or improve existing liquidity risk management processes or address evolving liquidity risks to further strengthen and promote the resiliency of a firm’s liquidity position.

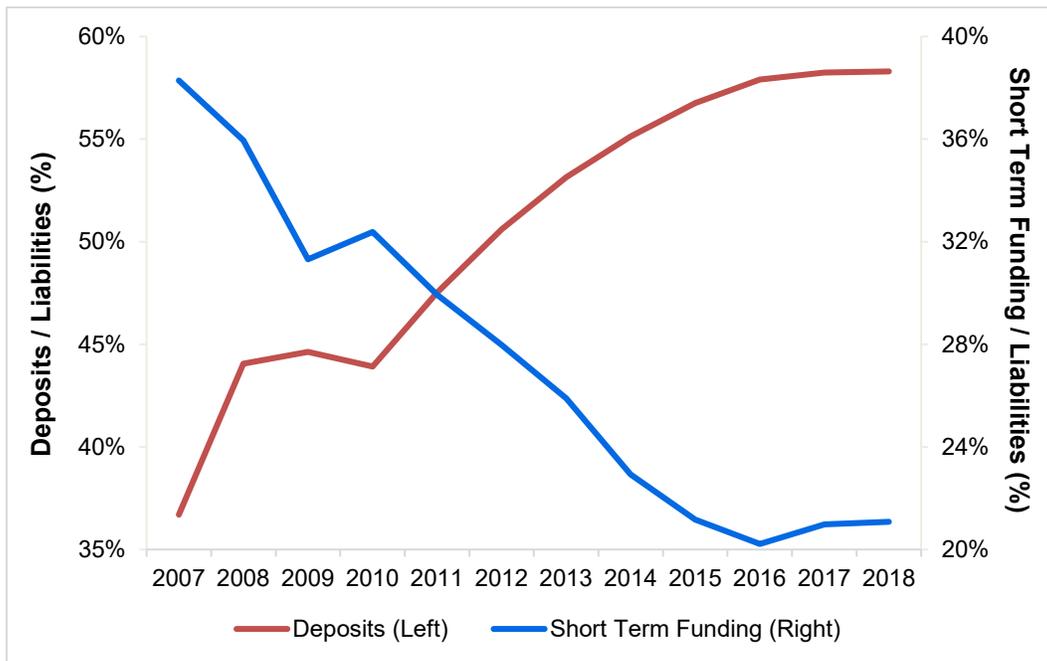
While these improvements in liquidity facilitate overall resiliency, their impact on resolvability also should be considered. Specifically, a large banking organization with a sufficiently high proportion of liquid assets will be able to more effectively deal with counterparties in a manner that could forestall run-type dynamics from undermining a successful resolution. As a result, the significant increase in liquidity that has been achieved should be viewed as supporting the ability to resolve a large, global banking organization.

iii. Funding stability.

In addition to holding more HQLA on their balance sheets, our largest members also have made significant strides in improving the term and stability of their liabilities. Deposit funding has increased and is generally more stable than other liabilities such as commercial paper, which are largely held by sophisticated and nimble institutional investors and do not benefit from any explicit insurance or government support. U.S. GSIBs have improved their funding profiles since the financial crisis to decrease the probability of a run. As illustrated in Figure V, the share of their liabilities composed of short-term funding has decreased by 17%, while deposits have increased 21%. The efficacy of these efforts in reducing systemic risk has been recognized by U.S. regulators.²²

²² *Hearing on the Semi-Annual Testimony of the FRB Supervision and Regulation of the Financial System: Before the H. Comm. on Fin. Services, 115th Cong., 58 (2018) (Statement of Randal K. Quarles),* <https://www.federalreserve.gov/newsevents/testimony/quarles20180417a.htm> (“Overall, the U.S. commercial banking system has strengthened considerably over the past decade . . . the eight U.S. [GSIBs] have developed significantly more stable funding positions as their reliance on short-term debt--including repurchase agreement, or repo, financing--has decreased by more than half since 2007 and now is equal to less than 15 percent of their total assets. The GSIBs now also hold approximately \$2.4 trillion in high-quality liquid assets, representing an increase of more than 60 percent since 2011.”) (hereinafter, “House Testimony”).

Figure V – U.S. GSIBs Breakdown of Liabilities



Source: Federal Reserve Y9-C; Goldman Sachs and Morgan Stanley 10-K

b. U.S. statutory and regulatory reforms have reduced substantially the systemic impact if a U.S. GSIB were to fail.

Statutory and regulatory reforms implemented in the United States also have addressed the systemic impact if a U.S. GSIB were to fail and need to be resolved. Correspondingly, U.S. GSIBs have demonstrated that they can be resolved in an orderly manner without exposing taxpayers to loss, while maintaining continuity of their vital economic functions. We discuss further below some of these reforms, including the requirement to develop and submit for supervisory review comprehensive resolution plans, the TLAC rule, and the rule requiring contractual stays on exercise of default rights in QFCs (the QFC stay rule).

i. Resolution plans.

The Dodd-Frank Act and related implementing regulations established a requirement for the U.S. GSIBs and certain other U.S. banking organizations to submit periodic detailed resolution plans that require them to prepare for a rapid and orderly resolution under the Bankruptcy Code in the event of material financial distress or failure.²³ Furthermore, U.S. GSIBs are subject to heightened supervisory expectations for their resolution plans regarding capital and liquidity,

²³ See 12 CFR pt. 243; Final Guidance for the 2019 and Subsequent Resolution Plan Submissions, 84 Fed. Reg. 1438 (Feb. 4, 2019).

governance, derivatives and trading activity, and relationships with financial market infrastructures, among many other requirements.²⁴

In response, our largest member institutions have developed sophisticated and detailed resolution plans that have been subject to multiple rounds of rigorous review and feedback from the FRB and Federal Deposit Insurance Corporation (FDIC). Through this iterative resolution planning process, our largest member institutions, following agency formulas, have developed robust single point of entry (SPOE) resolution strategies that have been deemed by U.S. regulators to have no “deficiencies,”²⁵ and the institutions have made significant changes to simplify their corporate structures to support resolution. These changes demonstrate that U.S. GSIBs can be resolved without creating systemic risk.

Our largest member institutions have led the way in developing successful SPOE resolution strategies that are designed to eliminate the need for a government bailout and address the risk of contagion caused by a U.S. GSIB’s failure, thereby addressing systemic and moral hazard risk. Under an SPOE resolution strategy, losses would be imposed on shareholders and long-term creditors of the top-tier parent holding company without the need for taxpayer or government support. By imposing losses on long-term creditors that are not able to run and by requiring holding companies to recapitalize and provide liquidity support to material operating subsidiaries that conduct critical operations, the SPOE strategy also helps to address contagion risk to the financial system.²⁶

In addition to developing SPOE strategies, the U.S. GSIBs have taken several steps to increase the efficacy of those resolution strategies. For instance, our largest member institutions have implemented measures to (i) prevent the disruption of intercompany services shared by multiple affiliates and of critical third-party services, (ii) ensure access to financial market infrastructures,

²⁴ Final Guidance for the 2019 and Subsequent Resolution Plan Submissions 84 Fed. Reg. 1438, 1440 (Feb. 4, 2019).

²⁵ Press Release, FRB & FDIC, Agencies Announce Joint Determination for Living Wills (Dec. 19, 2017), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20171219a.htm>.

²⁶ See U.S. Dep’t of the Treasury, Orderly Liquidation Authority and Bankruptcy Reform 10-11 (Feb. 21, 2018) (hereinafter, “OLA Treasury Report”) (“In carrying out a resolution of a financial company under Title II, the FDIC has stated that it expects to use a [SPOE] strategy in which only the U.S. top-tier parent holding company would be placed into receivership. Under the strategy, solvent subsidiaries, such as broker-dealers, insured depository institutions, and overseas subsidiaries, would continue operating as usual (and paying their obligations when due), thereby avoiding multiple competing insolvencies and minimizing further disruptions to the financial system.”). See also Financial Services Forum, Comment Letter to FRB Re: Resolution Planning Guidance for Eight Large, Complex U.S. Banking Organizations (2018) (“SPOE strategy is the most reliable and effective way to resolve a GSIB in an orderly manner.”); Economic Policy Program, Bipartisan Policy Center, Too Big to Fail: The Path to a Solution 24 (2013), (“The SPOE recapitalization strategy is one way to resolve SIFIs, including G-SIFIs, without creating contagious panic or resorting to taxpayer-funded bailouts. As a result, it is a viable solution to the too-big-to-fail problem if properly implemented.”); FDIC & Bank of England, Resolving Globally Active, Systemically Important, Financial Institutions (2012) (“[Under SPOE] [s]ound subsidiaries (domestic and foreign) would be kept open and operating, thereby limiting contagion effects and cross-border complications.”).

and (iii) implement internal governance mechanisms to facilitate timely management and board decision-making. Moreover, U.S. GSIBs have developed strategies to meet margin and collateral requirements that may be required to facilitate continued access to financial market infrastructures and agent banks. The U.S. GSIBs also have developed detailed contingent capital and liquidity plans and identified objects of sale to recover from even deep distress, thereby improving both resiliency and resolvability.

In furtherance of the SPOE strategy, our largest member institutions are also unique in that they have developed secured support agreements that contractually require their parent holding companies to provide support to material operating subsidiaries in resolution. A recent U.S. Treasury Report recognized this development, acknowledging that U.S. GSIBs have “taken important steps intended to ensure that the resources of the parent holding company can reliably be provided to operating entities in the event of bankruptcy.”²⁷ In addition, U.S. GSIBs are required pursuant to heightened resolution planning guidance to anticipate the capital and liquidity needs of their material subsidiaries and pre-position certain amounts of capital and liquidity at those subsidiaries, to cover any necessary resources prior to contractually obligated transfers under the secured support agreements.²⁸ Specifically, they must “model resolution capital and liquidity needs for each material entity”—so-called RCEN and RLEN—and “hold and pre-position sufficient resources to meet those needs”—so-called RCAP and RLAP.²⁹

In addition, “firms have significantly reduced the number of their subsidiaries and taken steps to better align legal entity structures with distinct business lines.”³⁰ This restructuring would assist a distressed parent holding company in supporting its subsidiaries by reducing the number and complexity of transactions necessary for a successful SPOE resolution. One clear indication of this trend is that U.S. GSIB holding companies have reduced their number of unique subsidiaries by 40% since 2009.³¹

Further, as compared to pre-crisis levels, a smaller proportion of U.S. GSIB’s balance sheets are devoted to complicated financial products such as Level 3 assets and trading book assets. This

²⁷ OLA Treasury Report 15. *See also* Bank of America Corp., Resolution Plan Submission: Public Executive Summary 22-23 (2017) (describing contractually obligated transfers under secured support agreements); BNY Mellon Resolution Plan: Public Section at 20-23 (2017) (same); Citigroup Resolution Plan: Public Section at 4-5 (2017) (same); The Goldman Sachs Group, Inc., Resolution Plan: Public Section 28-29 (2017) (same); JPMorgan Chase & Co., Resolution Plan Public Filing at 23 (2017) (same); Morgan Stanley, Resolution Plan: Public Section at 14-16 (2017) (same); State Street, Resolution Plan: Public Section at 15-16 (2017) (same); Wells Fargo, Resolution Plan: Public Section at 14-18 (2017) (same).

²⁸ *See* Final Guidance for the 2019 and Subsequent Resolution Plan Submissions, 84 Fed. Reg. 1438 (Feb. 4, 2019).

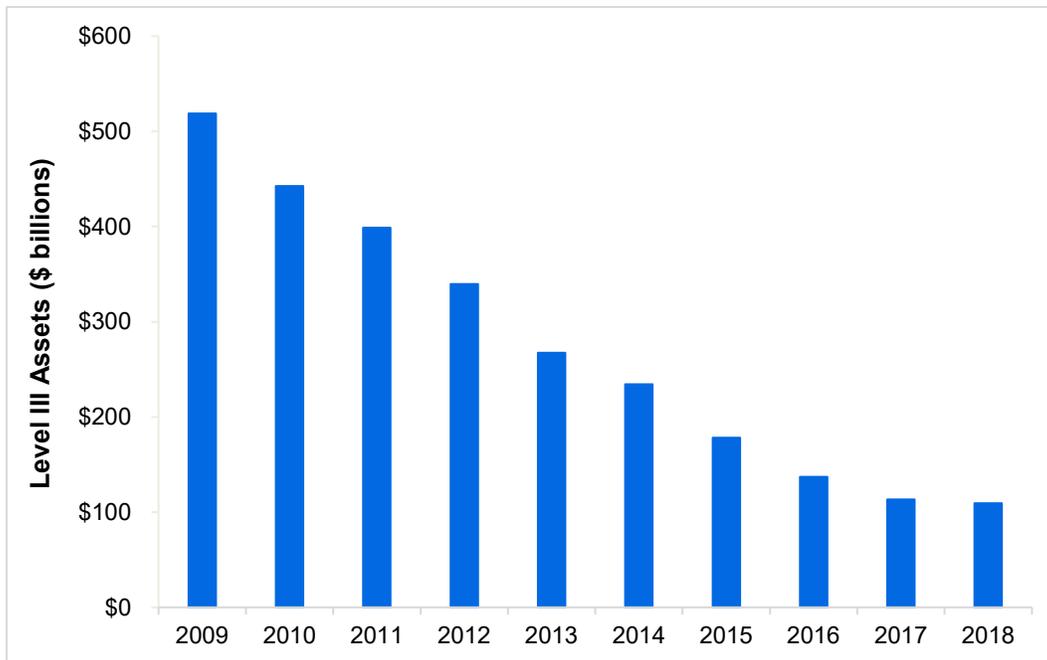
²⁹ Final Guidance for the 2019 and Subsequent Resolution Plan Submissions 84 Fed. Reg. 1438, 1442 (Feb. 4, 2019).

³⁰ OLA Treasury Report 13-14.

³¹ Federal Financial Institutions Examination Council, National Information Center.

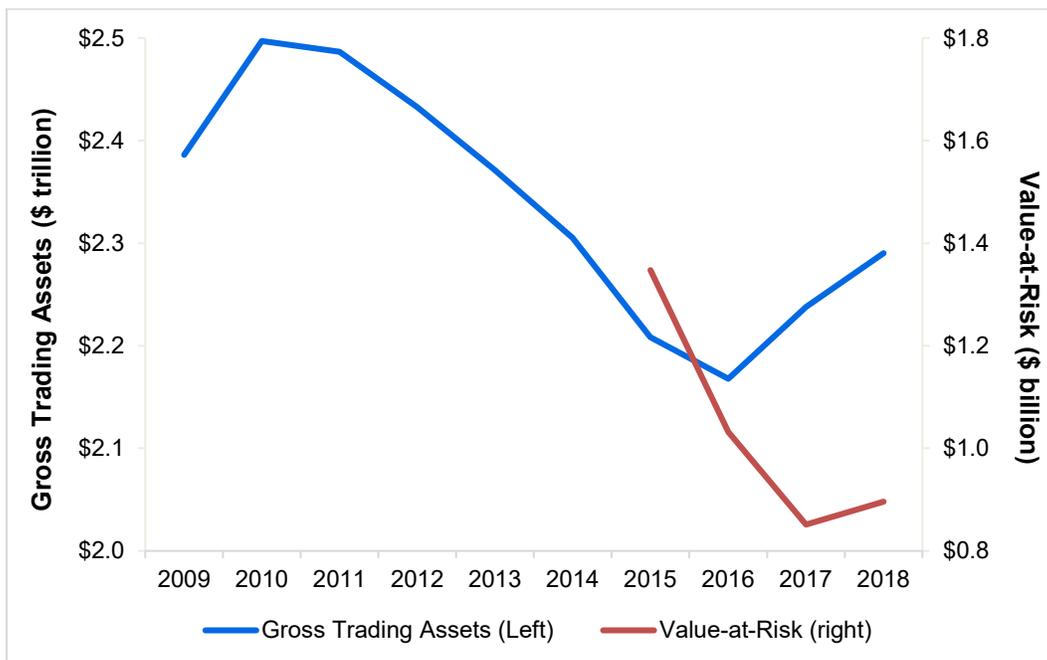
change reduces the difficulty of resolution and therefore further addresses the TBTF problem. Progress in these respects is illustrated by Figures VI and VII below.

Figure VI – U.S. GSIBs Level 3 Assets



Source: Federal Reserve Y9-C

Figure VII – U.S. GSIBs Trading Data



Source: Federal Reserve Y9-C & FFIEC 102

ii. *Regulatory changes to promote resolvability and address interconnectedness.*

In addition to improving resolvability through resolution planning, our largest members are subject to regulations that require them to take other steps to facilitate an effective SPOE resolution. Such regulations include the TLAC rule, QFC stay rule, QFC recordkeeping requirements, and the single counterparty credit limit (SCCL) rule.

U.S. GSIBs are subject to a TLAC rule, which went into effect on January 1, 2019, that requires them to hold a minimum amount of going and gone-concern capital and long-term debt (LTD) and to maintain a clean top-tier holding company designed to facilitate an SPOE resolution.³² In adopting the final rule, the FRB noted that “the objective of the TLAC and LTD requirements in the final rule is to reduce the financial stability impact of a failure by requiring companies to have sufficient TLAC on both a going concern and gone-concern basis.”³³ In addition, the TLAC rule avoids the need for taxpayer or government support, because if a U.S. GSIB were to suffer losses, “the losses would be passed on first to shareholders of the parent company and, if the losses exceed the parent company’s equity, to the holders of the parent company’s debt.”³⁴ Accordingly, the FRB recognizes that “the TLAC and LTD requirements would increase market discipline for [U.S. GSIBs] by making them bear the costs of issuing a minimum amount of LTD instruments that are capable of absorbing losses in a manner that would enhance the resiliency and resolvability of the organization.”³⁵

Further, the TLAC rule’s clean holding company requirements facilitate the SPOE strategy by prohibiting or limiting the ability of the parent holding company to enter into certain financial arrangements that could impede the firm’s orderly resolution. Under the TLAC rule, a U.S. GSIB’s top-tier holding company is prohibited from issuing short-term debt, entering into QFCs with third parties, and entering into certain other arrangements that could undermine resolvability. The rule also caps the amount of other long-term third-party liabilities that are *pari passu* or junior to TLAC debt. In many instances, our member institutions made significant changes to their parent company liabilities and other arrangements to comply with the TLAC rule’s super equivalent clean holding company requirements. The FRB recognizes that “[t]hese prohibitions and limitations will enhance resiliency by reducing complexity and reliance on short-term funding and are intended to support the orderly resolution of a covered BHC.”³⁶

³² Total Loss-Absorbing Capacity, Long-Term Debt, and Clean Holding Company Requirements for Systemically Important U.S. Bank Holding Companies and Intermediate Holding Companies of Systemically Important Foreign Banking Organizations, 82 Fed. Reg. 8266 (Jan. 24, 2017).

³³ *Id.* at 8267.

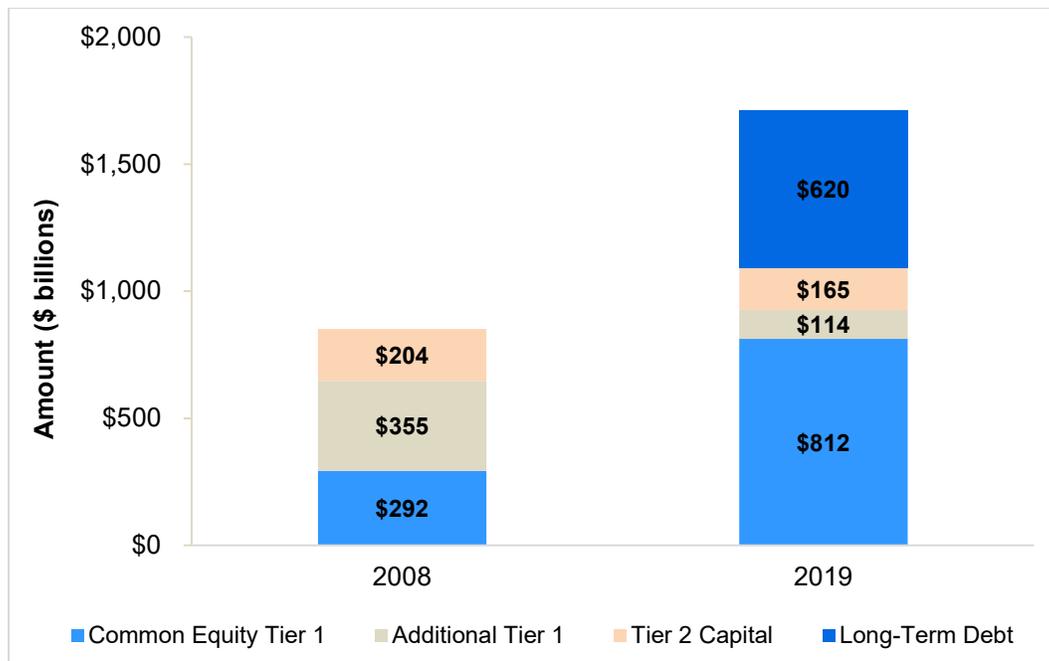
³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.* at 8272.

As of January 2019, U.S. GSIBs were required to have \$620 billion in long-term debt that would provide an additional source of loss-absorbing capacity to facilitate an orderly resolution under the SPOE strategy. As the U.S. Treasury noted in a recent report, “U.S. bank holding companies have greatly enhanced their loss-absorbing capacity in recent years.”³⁷ Further, the FRB has recognized that the TLAC rule “would improve the resolvability of a [U.S. GSIB] under either the U.S. Bankruptcy Code or Title II of the Dodd-Frank Act and improve their resiliency.”³⁸ U.S. GSIBs’ progress in improving loss-absorbing capacity over the past decade is presented in Figure VIII.

Figure VIII – U.S. GSIBs Loss Absorbency Stack



Source: Federal Reserve Y9-C

In addition, U.S. GSIBs are now subject to the QFC stay rule, which substantially mitigates the ability of cross-default rights and transfer restrictions in QFCs to undermine GSIB resolution in the United States.³⁹ In this way, the QFC stay rule “complements the Board’s final rulemaking on [TLAC] and the ongoing work of the Board and the [FDIC] on resolution planning” by “focus[ing] on improving the orderly resolution of a GSIB by limiting disruptions to a failed GSIB through its financial contracts with other companies.”⁴⁰ Specifically, U.S. GSIBs are now

³⁷ OLA Treasury Report 16.

³⁸ Total Loss-Absorbing Capacity, Long-Term Debt, and Clean Holding Company Requirements for Systemically Important U.S. Bank Holding Companies and Intermediate Holding Companies of Systemically Important Foreign Banking Organizations, 82 Fed. Reg. 8266, 8268 (Jan. 24, 2017).

³⁹ 82 Fed. Reg. 42882 (Sept. 12, 2017) (FRB rule); 82 Fed. Reg. 50228 (Oct. 30, 2017) (FDIC rule); 82 Fed. Reg. 56630 (Nov. 29, 2017) (Office of the Comptroller of the Currency (OCC) rule).

⁴⁰ 82 Fed. Reg. at 42883.

required to ensure that default rights and restrictions on transfer in their non-cleared QFCs are limited to the same extent as they would be under Title II of the Dodd-Frank Act and the Federal Deposit Insurance Act. The QFC stay rule further facilitates an SPOE resolution by requiring U.S. GSIBs to restrict the exercise of certain types of defaults and transfer restrictions that would be triggered when an affiliate enters resolution proceedings. Further, the International Swaps and Derivatives Association (ISDA) has developed a protocol that facilitates compliance with the QFC stay rules on an industry-wide basis.⁴¹ As a result, the United States has made significant progress to avoid the negative consequences associated with QFC termination rights otherwise available in resolution.

Further, financial companies and troubled insured depository institutions in the United States, including U.S. GSIBs, are now subject to enhanced recordkeeping requirements for their QFCs, ensuring the availability of relevant information in the event of a resolution.⁴² In general, firms subject to these requirements must collect and maintain digital records on over 100 data points, including data regarding QFC positions, counterparties, legal documentation, and collateral.⁴³ In addition, these records must be capable of being made available for examination within 24 hours of a request by appropriate authorities or, in the case of a troubled insured depository institution, no later than 7 a.m. (Eastern Time) each day.⁴⁴ These extensive requirements would “enable the FDIC to have prompt access to detailed information about the QFC portfolios of [banking organizations] for which the FDIC is appointed receiver.”⁴⁵

Finally, the SCCL rule addresses problems of interconnectedness and contagion by limiting the extent to which large banking organizations are put at risk by the failure of one of their counterparties. By limiting credit exposure to any single counterparty, the rule further addresses the risk of contagion if a U.S. GSIB were to fail.⁴⁶

c. Other post-crisis market reforms have contributed to addressing systemic risk and improved the functioning and stability of U.S. financial markets.

In addition to the TBTF reforms described above, U.S. GSIBs have benefited from numerous market reforms that have contributed to addressing systemic risk and improved the functioning

⁴¹ See ISDA, *ISDA 2018 U.S. Resolution Stay Protocol*, <https://www.isda.org/protocol/isda-2018-us-resolution-stay-protocol/>.

⁴² See 31 CFR pt. 148; 12 CFR pt. 371.

⁴³ See 31 CFR 148.4; 31 CFR pt. 148, app. A. See also 12 CFR 371.4; 12 CFR 371, app. B.

⁴⁴ 31 CFR 148.3(a)(3); 12 CFR 371.3(c).

⁴⁵ 82 Fed. Reg. 35584, 35584 (Jul. 31, 2017); see also Qualified Financial Contracts Recordkeeping Related to Orderly Liquidation Authority, 81 Fed. Reg. 75624 (Oct. 31, 2016).

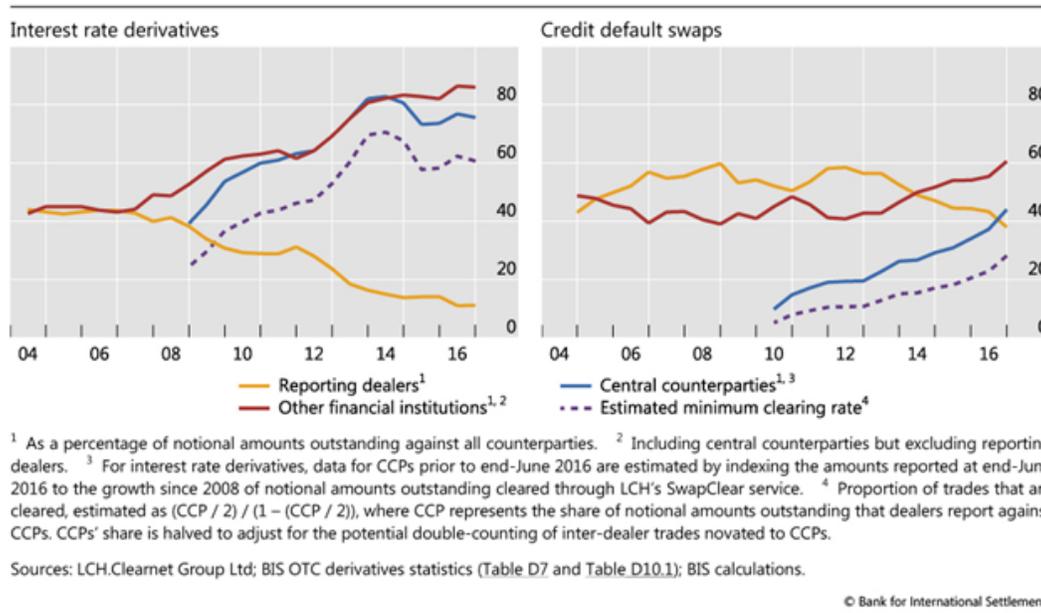
⁴⁶ See 12 CFR pt. 252, subpt. H; Single-Counterparty Credit Limits for Bank Holding Companies and Foreign Banking Organizations, 83 Fed. Reg. 38460 (Aug. 6, 2018) (The final rule...reduce[s] the risks arising from [a large bank's] failure.”).

and stability of financial markets. Such reforms include derivative market reforms, and repo market reform.

i. Derivatives reform

The structure and regulation of the global derivatives market has been transformed in the past decade. Two key developments are (i) the substantial increase in central clearing of over-the-counter (OTC) derivatives, illustrated in Figure IX,⁴⁷ and (ii) the mandated exchange of initial and variation margin on all OTC derivatives that are not centrally cleared. Central clearing is an important reform, because clearing brings transparency and strict risk-management standards to derivative trading. Financial reforms required 85% of interest rate derivatives by notional value to be centrally cleared by 2017; as of the end of 2019's first quarter 88.9% of interest rate derivatives met this standard, along with 81% of credit derivatives.⁴⁸ This is supported by central counterparties (CCPs) that collect margin (initial and variation margin) and maintain well-established and agreed-upon procedures for closing out defaulted members.

Figure IX: Growth of Central Clearing (Notional Amts Outstanding by Counterparty, %)



Source: see Woolridge *supra* note 47

⁴⁷ See, e.g., Philip Wooldridge, *Central Clearing Makes Further Inroads*, in BIS Quarterly Review at 8, https://www.bis.org/publ/qtrpdf/r_qt1706.pdf (June 2017) (showing that central clearing of credit and interest rate derivatives has increased substantially over the past decade, and that as of the end of 2017 55% of credit default swaps were centrally cleared and 75% of interest rate derivatives were).

⁴⁸ ISDA, *Actual Cleared Volumes vs. Mandated Cleared Volumes: Analyzing the US Derivatives Market at 3* (July 2018) (showing the 85% clearing mandate), <https://www.isda.org/a/6yYEE/Actual-Cleared-Volumes-vs-Mandated-Cleared-Volumes.pdf>; ISDA, *Swaps Info First Quarter of 2019 Review at 2-3* (April 2019) (stating that, as of the end of 2019's first quarter, 88.9% of interest rate derivatives were centrally cleared and 81% of credit derivatives were, both by notional value), <https://www.isda.org/a/RNUME/SwapsInfo-Q1-2019-Review.pdf>.

In addition, U.S. regulators (including most recently the U.S. Securities and Exchange Commission, or SEC), have implemented G-20 commitments made at the Pittsburgh Summit and through the Basel Committee and International Organization of Securities Commissions by imposing mandatory initial and variation margin requirements for swaps and security-based swaps. As such, our member institution affiliates that are swap dealers are now required to collect and post variation margin in the form of cash and/or highly-liquid securities to fully cover swap and security-based swap exposures with all financial counterparties.⁴⁹

Further, our member institutions are subject to requirements to both collect and post segregated initial margin when transacting with other major financial institutions and will be subject to these requirements with respect to all financial counterparties with “material swaps exposure” beginning September 1, 2020.⁵⁰ These requirements are intended (and have been calibrated) pursuant to Title VII of the Dodd-Frank Act to offset greater risk to swap entities from uncleared derivatives relative to cleared derivatives.⁵¹ They also complement mandatory capital requirements by imposing a “defaulter pay” model on uncleared swaps and by acting as an additional liquidity constraint on swap entities (in particular through the mandatory requirement to post initial margin into segregation).

According to the 2017 ISDA margin survey, the top 20 global derivative dealers have collected \$130 billion in initial margin to support uncleared derivatives, and CCPs clearing interest rate and credit derivatives have collected \$190 billion in initial margin on these transactions.⁵² The ISDA report also indicates that both uncleared and cleared initial margin have risen by 22% over the past year.

In addition to these global, market-wide reforms it should be noted that the United States has taken further measures with respect to derivative markets that are intended to directly support and facilitate the resolution of a U.S. GSIB. Specifically, under the Dodd-Frank Act, U.S. GSIBs are subject to swap reporting requirements.⁵³ Moreover, U.S. GSIBs are required to maintain an ongoing inventory of contact information for each counterparty with which it maintains a swap transaction that can be transferred to regulators in a resolution. Both of these

⁴⁹ Legal entities within our member institutions that are not swap dealers are indirectly subject to these same requirements when transacting with swap dealers.

⁵⁰ “Material swaps exposure” exists when an entity and its affiliates have an average daily aggregate notional amount of non-cleared swaps, security-based swaps, foreign exchange forwards and foreign exchange swaps with all counterparties over a specified three month testing period greater than \$8 billion.

⁵¹ Initial margin requirements are generally calibrated to cover a 10-day margin period of risk at a one-tailed 99% confidence level. Cleared derivatives are generally required to be risk managed at a 95% confidence level over a 5-day margin period of risk.

⁵² ISDA, Margin Survey Full Year 2017, at 3 (2018), <http://assets.isda.org/media/85260f13-60/6a228cda-pdf/>.

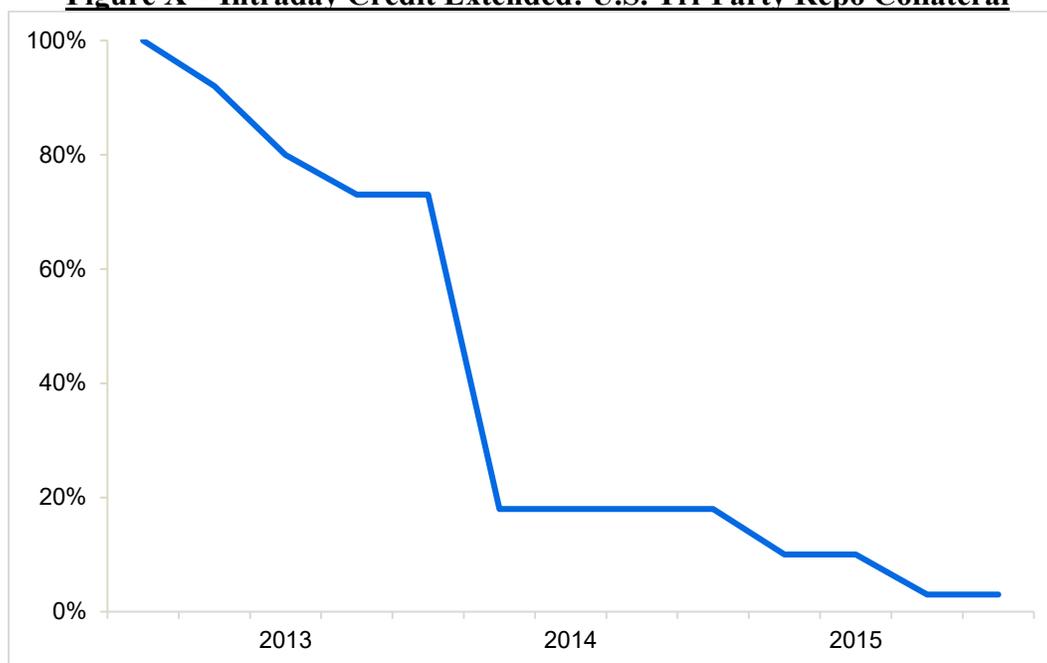
⁵³ To illustrate the newfound ubiquity of swap reporting, consider that only 15% of credit default swap trades included complete counterparty information in 2014, whereas 95% met this standard in 2018. See Commodity Futures Trading Commission, *Swaps Regulation Version 2.0: An Assessment of the Current Implementation of Reform and Proposals for Next Steps*, at 25 (April 26, 2018), https://www.cftc.gov/sites/default/files/2018-04/oce_chairman_swapregversion2whitepaper_042618.pdf.

U.S. requirements are intended to directly support the efficient wind-down of a U.S. GSIB’s derivative portfolio in a resolution event.

ii. Repo market reform.

Leading up to the financial crisis, repo markets were a key source of short-term funding for banking organizations. Reliance on short-term repo funding created a greater potential for run behavior that could produce or worsen a period of financial distress and could complicate the resolution of large banking organizations. Therefore, in an industry-led effort that was organized and supported by the Federal Reserve Bank of New York, banking organizations made several improvements to the tri-party repo market that have largely reduced the provision of uncollateralized, intraday credit, as shown below in Figure X. As a result, credit risk presented by repo markets has decreased materially, which has led to an improvement in the safety and stability of the banking system.

Figure X – Intraday Credit Extended: U.S. Tri-Party Repo Collateral



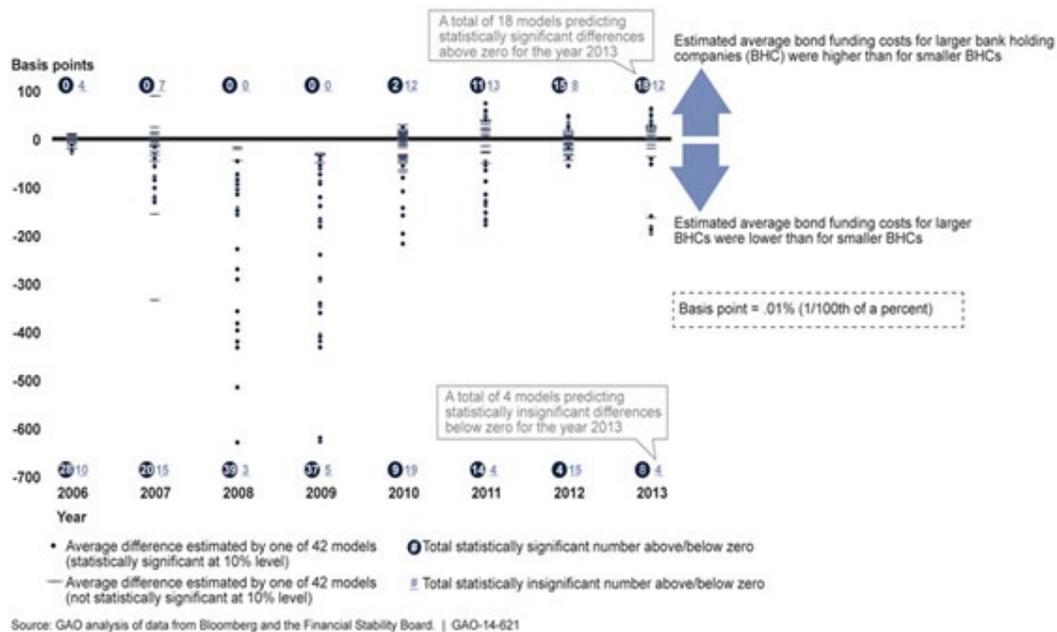
Source: BNY Mellon “The Future of Wholesale Funding Markets”

d. Studies show that the market no longer perceives U.S. GSIBs as TBTF.

As noted above, our largest member institutions have taken important steps to facilitate their resolvability and reduce financial stability and moral hazard risks. Moreover, evidence suggests that the market no longer perceives them as TBTF. For example, all three major rating agencies “have effectively removed their expectations of government support for U.S. GSIBs’ holding

company creditors over the past several years.”⁵⁴ Further, the Government Accountability Office conducted a study on the size of funding subsidies based on TBTF status, finding that they had “declined or reversed” since the pre-crisis era.⁵⁵ Figure XI below, reproduced from that study, shows that bond funding costs for banking organizations with \$1 trillion in assets and those with \$10 billion converged between 2006 and 2013.

Figure XI – Estimates from 42 Models of Average Bond Funding Cost Differences Between Bank Holding Companies with \$1 Trillion and \$10 Billion in Assets, 2006-2013



Source: see *infra* note 55 at 50

More recent evidence is consistent with this finding. A 2018 research paper by economists at the Federal Reserve Bank of New York shows that funding costs for large banking organizations rose in response to resolution planning requirements. The researchers found that such requirements resulted in an increase in GSIB funding costs of roughly 0.4%, or \$38 billion, per year. The authors interpret this increase in funding costs as clear evidence that the absence of

⁵⁴ OLA Treasury Report at 19. See also Moody’s Investors Service, Rating Action: Moody’s Concludes Review of Eight Large US Banks (Nov. 14, 2013), https://www.moody.com/research/Moodysconcludes-review-of-eight-large-US-banks--PR_286790; Fitch Ratings, Fitch: TLAC Supports the Upgrades of Eight U.S. GSIB Operating Companies, (May 19, 2015), <https://www.fitchratings.com/site/pr/984992>; S&P Global, U.S. Global Systemically Important Bank Holding Companies Downgraded Based On Uncertain Likelihood Of Government Support (Dec. 3, 2015), https://www.capitaliq.com/CIQDotNet/CreditResearch/RenderArticle.aspx?articleId=1490452&SctArtId=357868&from=CM&nsl_code=LIME&sourceObjectId=9438258&sourceRevId=1&fee_ind=N&exp_date=20251202-14:59:54.

⁵⁵ U.S. Gov’t Accountability Office, Report to Congressional Requesters: Large Bank Holding Companies: Expectations of Government Support, at 46 (2014), <https://www.gao.gov/assets/670/665162.pdf>.

funding advantages continues.⁵⁶ Figure XII shows the study’s findings regarding increases in cost of funding as a result of resolution planning requirements for each U.S. GSIB.

Figure XII – Post-Living Will Increases in Funding Costs

Forum Member	Annual Funding Cost Increase	
	Basis Points (1/100 %)	\$USD (millions)
Bank of America	43	9,205
Bank of New York Mellon	1	45
Citigroup	76	14,227
Goldman Sachs	51	4,747
JPMorgan Chase	27	6,104
Morgan Stanley	32	2,402
State Street	3	76
Wells Fargo	9	1,151
Total	39	37,957

** Total is the total asset-weighted average cost of funding

Source: Federal Reserve Bank of New York “Resolving Too Big to Fail”

A 2019 research paper by Darrell Duffie of Stanford University draws a similar conclusion based on the funding spreads of large bank holding companies. In particular, it shows that one measure of the credit spread paid by large banking organizations has increased from a handful of basis points before the crisis to between 50 and 100 basis points in the post-crisis period.⁵⁷ Professor Duffie concludes that the increase in large banking organization funding costs clearly demonstrates that funding advantages have dissipated: “[w]hether or not bail-in [orderly resolution] works reasonably well in practice, what matters for big banking organization borrowing costs is that creditors believe that it would be tried. It appears that they do now believe this. As shown...the cost of wholesale unsecured credit for the largest banking organizations has increased dramatically, despite the significant improvements in capital and liquidity achieved under the post-crisis regulations.”⁵⁸ In particular, Professor Duffie observes that, in light of the significant post-crisis increases in capital and liquidity, one would naturally expect large banking organization borrowing costs to go down. The fact that they have actually gone up strongly signals that creditors of banking organizations understand and require compensation for the fact that the government is unlikely to provide support in times of stress. Figure XIII shows the changes in one measure of the cost of wholesale unsecured credit for the

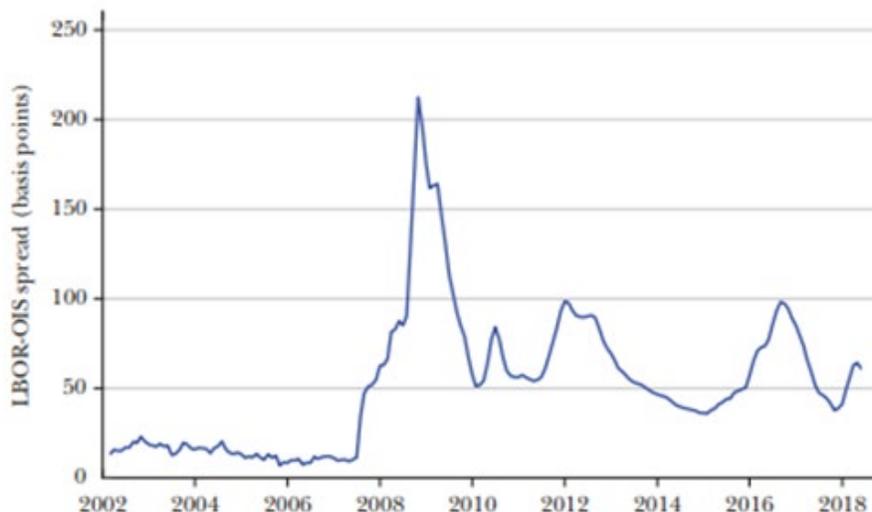
⁵⁶ Nicholas Cetorelli & James Traina, *Resolving “Too Big to Fail”* (Federal Reserve Bank of New York, Staff Report No. 859, 2018), https://www.newyorkfed.org/research/staff_reports/sr859 (Specifically, the authors state that “[w]e interpret our findings as a reduction in ‘too big to fail’ subsidies.”).

⁵⁷ Darrell Duffie, *Prone to Fail: The Pre-Crisis Financial System*, 33 J. Econ. Persp. 81, 98 fig.5 (2019), <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.33.1.81>.

⁵⁸ *Id.* at 100.

largest banking organizations over time, illustrating the significant and sustained increase following the financial crisis.

Figure XIII – Average One-Year Credit Spread of Large Banking Organization Borrowing US Dollars: LIBOR versus the OIS Swap Rate



Source: Author using data from Bloomberg.

Note: The figure shows the difference between the one-year US Dollar London Interbank Offered Rate (LIBOR) and the one-year overnight index swap (OIS) rate based on the Fed Funds rate.

Source: see *supra* note 57 at 98

Finally, a 2019 research paper by economists at UCLA, the Federal Reserve Bank of Minneapolis, and the Stockholm School of Economics uses a quantitative macroeconomic model to measure the implicit value of government guarantees that is imputed into the market value of bank equity relative to its book value.⁵⁹ Using data on U.S. bank holding companies, the authors conclude that over the 2011-2017 period their model “predicts that banks currently do not derive much of their market value from government guarantees.”⁶⁰ Moreover, the authors’ results show that the estimated value of government guarantees over the 2011 to 2017 period is only 10% of the estimated value over the pre-crisis (1996-2007) period. Accordingly, these results provide further evidence that the size of any market funding advantage that may have existed in the pre-crisis era has substantially dwindled.

⁵⁹ Andrew G. Atkeson et al., *Government Guarantees and the Valuation of American Banks*, in 33 *NBER Macroeconomics Annual 2018* (Martin Eichenbaum & Jonathan A. Parker eds., forthcoming 2019), <http://www.adriendavernas.com/papers/valuationofbanks.pdf>.

⁶⁰ *Id.* at 43.

e. ***Further effectiveness and efficiency can be achieved, and the underlying goals reinforced.***

The FSB in its Summary Terms of Reference also asks about the broader effects of TBTF reforms on the financial system and markets and about any material unintended consequences of the reforms. In particular, the FSB seeks comment on any changes in the financial system's resilience and structure, the functioning of financial markets, global financial integration, or the cost and availability of financing.⁶¹ The FSB's evaluation highlights that this is an appropriate time for regulators to refine TBTF reforms to improve their effectiveness and efficiency, correct for over calibration and unintended consequences, together reinforcing achievement of the original goals expressed at the 2009 Pittsburgh Summit.

For example, some TBTF reforms have had unintended consequences in the form of negative effects on the structure and resilience of the financial system and financial markets. Several studies have shown that the post-crisis period has seen an unintended reduction in financial market liquidity,⁶² which might have been caused at least in part by the combination and interaction of post-crisis reforms.⁶³ This deterioration in market liquidity has important implications for economic growth, risk management, retail and business funding, pension funds, and other entities that use financial markets to fund innovation, expand employment, and provide for the future.⁶⁴ The costs of reduced market liquidity—throughout the economic cycle—should be quantitatively assessed in the FSB evaluation of TBTF reforms.

⁶¹ FSB, Evaluation of Too-Big-To-Fail Reforms: Summary Terms of Reference at 1 (May 23, 2019), <https://www.fsb.org/wp-content/uploads/P230519.pdf>.

⁶² See, e.g., Hendrik Bessembinder et al., *Capital Commitment and Illiquidity in Corporate Bonds*, 73 J. Fin. 1615 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2752610 (showing that large dealer banks are less willing to commit capital to bond inventory that would allow customers to complete trades, thereby reducing the liquidity they provide to their customers); Mike Anderson & René M. Stulz, *Is Post-Crisis Bond Liquidity Lower?* (NBER Working Paper No. 23317), <https://www.nber.org/papers/w23317> (finding that liquidity is worse post-crisis when market volatility is high); Jaewon Choi & Yesol Huh, *Customer Liquidity Provision: Implications for Corporate Bond Transaction Costs* (FRB, Finance and Economics Discussion Series Working Paper 2017-116), <https://www.federalreserve.gov/econres/feds/files/2017116pap.pdf> (finding evidence of deteriorating market liquidity); Paul Schultz, *Inventory Management by Corporate Bond Dealers*, (unpublished manuscript) (same), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2966919.

⁶³ See Jack Bao, Maureen O'Hara & Alex Zhou, *The Volcker Rule and Market-Making in Times of Stress* (FRB, Finance and Economics Discussion Series Working Paper 2016-102), <https://www.federalreserve.gov/econresdata/feds/2016/files/2016102pap.pdf> (arguing that bond liquidity during periods of stress has worsened post-crisis as a result of the Volcker Rule); Lotfi Karoui et al., *The Great Liquidity Debate: Where We Stand 10 Years Later*, Goldman Sachs Credit Strategy Research (June 12, 2019) (arguing that post-crisis regulatory changes have resulted in deteriorating liquidity conditions for corporate bonds). See also *supra* note 62.

⁶⁴ See U.S. Dep't of the Treasury, *A Financial System That Creates Economic Opportunities*, Capital Markets 8 (Oct. 2017). Also, for example, the industry has recently expressed concern that the proposed U.S. rule on TLAC cross holdings may constrain market making in loss-absorbing debit instruments. See Securities Industry and Financial Markets Association, *Comment Letter to Office of the Comptroller of the Currency, FDIC & FRB Re: Regulatory Capital Treatment for Investments in Certain Unsecured Debt Instruments of*

Another unintended consequence of TBTF reforms has been the movement of a significant amount of activity outside of the regulated banking sector. A recent research report written by the FSB shows that the nonbank sector has increased from \$28 trillion to \$51.6 trillion over the 2010-2017 period.⁶⁵ The same report also shows that the banking sector has declined globally from holding roughly 45% of all financial sector assets to 40% of financial sector assets over the same period.⁶⁶ The shift of activities driven by regulatory action rather than market incentives is a factor the FSB should consider as it evaluates TBTF reforms and how to make them more effective and efficient.

In addition, TBTF reforms have had a measurable impact on the cost and availability of credit. The Basel Committee's own analysis of the cost of financial reforms clearly recognizes that increases in the cost of funding for banks increases lending rates and depresses economic growth. Any evaluation of TBTF reforms should consider the overall impact of such reforms on macroeconomic growth and should be transparently rationalized with those costs in mind.

As FSB Chair Quarles has explained, that after adopting such comprehensive reforms, “now is an eminently natural and expected time to step back and assess those efforts” and find ways to achieve efficiency, simplicity, and transparency of regulation, including by assessing costs against benefits, using fewer tools to achieve an objective, and addressing unintended adverse consequences.⁶⁷ Former FRB Governor Tarullo similarly stated that “the novelty of many of the forms of regulations adopted by financial regulators, either in implementing the Dodd-Frank Act or under existing authorities, almost assures that some recalibration and reconsiderations will be warranted on the basis of experience.”⁶⁸

We agree with these statements of FSB Chair Quarles and former FRB Governor Tarullo — now is the right time, whether as has been under way in the United States as well as for moving forward with a global review via the FSB, to consider ways to streamline the existing reforms to improve efficiency and enhance the ability of the strengthened banking industry to serve as a piloting source of support for the U.S. and global economy. A good overture would be to consider ways to streamline regulation to address instances where several policies may be working to address the same issue, with duplicative and inefficient regulations and

Global Systemically Important U.S. Bank Holding Companies, Certain Intermediate Holding Companies, and Global Systemically Important Foreign Banking Organizations (2019).

⁶⁵ FSB, Global Monitoring Report on Non-Bank Financial Intermediation 2018, at 44 (exhibit 4-4) (2018), <https://www.fsb.org/wp-content/uploads/P040219.pdf>.

⁶⁶ *Id.* at 14 (exhibit 2-2).

⁶⁷ Randal K. Quarles, Vice Chairman for Supervision, FRB, Speech at the Institute for International Monetary Affairs 26th International Financial Symposium, The U.S. Economy after the Global Financial Crisis (Feb. 22, 2018), <https://www.federalreserve.gov/newsevents/speech/quarles20180222a.htm>.

⁶⁸ Daniel K. Tarullo, Speech at the Woodrow Wilson School, Departing Thoughts (Apr. 4, 2017), <https://www.federalreserve.gov/newsevents/speech/tarullo20170404a.htm>.

overlapping—and conflicting—effects. Such a case is the GSIB surcharge,⁶⁹ which does not reflect the enhancements to resiliency, liquidity, and resolvability that have been achieved since the surcharge was first calibrated and adopted.

Similarly, the net stable funding ratio (NSFR), a quantitative liquidity standard developed by the Basel Committee in 2014⁷⁰ and the subject of proposed implementing regulations,⁷¹ addresses many of the same risks as existing liquidity requirements that have already become effective for U.S. banking organizations. Since the Basel Committee finalized its NSFR standard, U.S. firms have implemented several liquidity regulatory requirements, such as enhanced prudential standards that include liquidity risk management, stress testing, and buffer requirements. Further, in addition to the LCR, U.S. GSIBs are subject to liquidity requirements for resolution planning (see discussion above of RLAP and RLEN). We believe it is worth evaluating whether the NSFR offers valuable prudential supervision that is not already effectively obtained, a standard that today may offer at most minor incremental benefits that do not outweigh the additive costs to be imposed on the U.S. economy by its implementation. That evaluation should be conducted in light of the adoption in the United States of many reforms that are even more stringent than the Basel Committee’s post-crisis Basel III regime.

II. We urge the FSB to foster further international coordination to support the successful and cost-effective resolution of a large, international banking organization, avoid inefficiency in reform efforts, and to help ensure a level playing field.

The FSB can further undergird the effectiveness of TBTF reforms by promoting international regulatory coordination. Unfortunately, and unintentionally, the current regulatory framework has enabled and to some degree promoted *ex-ante* ring fencing of resources in host jurisdictions, which creates fragmentation in the financial system, traps the movement of resources that could be used to respond to financial strains, and overall threatens the effectiveness of cross-border resolution.⁷² The FSB should support the international coordination necessary to avoid this adverse result. In this regard, we commend the FSB for acknowledging this problem and

⁶⁹ For a further discussion of overlapping and duplicative requirements, see American Bankers Association, Comment Letter on Amendments to the Regulatory Capital, Capital Plan, and Stress Test Rules (June 25, 2018), <https://www.aba.com/Advocacy/commentletters/Documents/cl-RegulatoryCapital20180625.pdf>.

⁷⁰ Basel Committee on Banking Supervision, *Basel III: The Net Stable Funding Ratio* (Oct. 2014), <https://www.bis.org/bcbs/publ/d295.pdf>.

⁷¹ Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements, 81 Fed. Reg. 35123 (June 1, 2016).

⁷² See Katia D’Hulster & Inci Otker-Robe, *Ring-Fencing Cross-Border Banks: An Effective Supervisory Response?*, 5 J. Fin. Persp. 1, at 13 (2018) (“The existence of ‘trapped pools of resources’ (liquidity and capital) in different jurisdictions makes the financial system, as a whole, less resilient and more fragmented. Ring fencing reduces the ability of global banking groups to mobilize resources to respond quickly to problems in particular locations. There is broad consensus that group-wide mobility of resources can help to dampen the impact of financial stability shocks and act as a stabilizer, a shock absorber or a source of systemic stability.”).

beginning the process to correct it through its report on market fragmentation.⁷³ Similarly, we support the FSB’s work to facilitate cross-border data aggregation for derivatives trades, including through the collection and use of legal entity identifiers.⁷⁴ We would be happy to engage with the FSB in its further work on these topics.

We recommend that the FSB work to foster greater international coordination to avoid collective action impairments that are harmful to both financial stability and economic growth, including coordination to facilitate cross-border resolution. The FSB could start by encouraging that the calibration of *internal* TLAC be at the low end of the range in the TLAC term sheet or by revisiting the standard set in that term sheet, among other TLAC standards as discussed above, recognizing how international cooperation can mitigate the redundancy of internal TLAC. This is just one illustration of how international coordination would be clearly beneficial and where further evaluation by the FSB is appropriate.

International coordination is also important to establishing a level playing field for SIBs with cross-border operations. Accordingly, the FSB should use this evaluation to take stock of how different jurisdictions have addressed the objective of eliminating TBTF. For jurisdictions such as the United States that have robustly addressed that objective, the FSB and national authorities should focus on opportunities to refine and improve the existing reforms. For jurisdictions that have further work to do in addressing TBTF, the FSB should encourage those jurisdictions to complete that work. In sum, the FSB should actively support a collaborative international regulatory framework to improve efficiency and avoid a “tit for tat” dynamic where jurisdictions create onerous requirements that undermine the efficacy of TBTF reforms and the functioning of global financial markets. Such collaboration should include support for engagement among regulatory authorities within the Crisis Management Groups that have been established for SIBs.

III. Conclusion

The FSB should recognize the significant progress that U.S. regulators and U.S. GSIBs have made in giving life to the objectives of the Pittsburgh Summit, dramatically strengthening the safety and soundness and prudential supervision of U.S. GSIBs, while enhancing the resolvability of any failing banking institution, avoiding systemic consequences. With the establishment in the U.S. of a broad and detailed reform program to address the TBTF problem, we believe that regulators have an opportunity to review and refine these efforts to make them

⁷³ FSB, Report on Market Fragmentation 11 (June 4, 2019), <https://www.fsb.org/wp-content/uploads/P040619-2.pdf> (“High levels of pre-positioning in host jurisdictions that are not commensurate with actual risks could potentially result in an insufficiency of resources that remain readily available to be deployed flexibly where needed within a group in times of stress. This problem is particularly acute if there is a lack of cooperation or trust between home and host authorities and in the absence of legally enforceable mechanisms that allow for resources held elsewhere in the group to be deployed where they are needed in stress.”)

⁷⁴ See, e.g., FSB, OTC Derivatives Market Reforms: Thirteenth Progress Report on Implementation (Nov. 19, 2018), <https://www.fsb.org/wp-content/uploads/P191118-5.pdf>.

more effective, more efficient in ways that will foster growth and financial vitality, reinforcing the progress that has been made. The FSB should build upon its work, fostering international coordination to promote effective, efficient, and relatively even regulation of cross-border SIBs.

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Thank you for considering these comments. Please feel free to contact the undersigned (ccalaby@aba.com) with any questions.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Cecelia', with a long, sweeping horizontal line extending to the right.

Cecelia A. Calaby
Senior Vice President
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