February 2, 2015

Secretariat to the Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2, CH-4002 Basel, Switzerland

VIA ELECTRONIC MAIL: fsb@bis.org

Re: "Adequacy of loss-absorbing capacity of global systemically important banks in resolution" (the "**Proposal**")

Dear Sir or Madam:

The Committee on Capital Markets Regulation (the "**Committee**") is grateful for the opportunity to comment on the Consultative Document released by the Financial Stability Board ("**FSB**") on the Adequacy of Loss-Absorbing Capacity of Global Systemically Important Banks in Resolution.[1] The Consultative Document defines international standards for minimum amounts of total loss absorbing capital ("**TLAC**") to be issued by Globally Systemically Important Banks ("**G-SIBs**").

Founded in 2006, the Committee is dedicated to enhancing the competitiveness of U.S. capital markets and ensuring the stability of the U.S. financial system. Our membership includes thirty-seven leaders drawn from the finance, investment, business, law, accounting, and academic communities.[2] The Committee is chaired jointly by R. Glenn Hubbard (Dean, Columbia Business School) and John L. Thornton (Chairman, The Brookings Institution) and directed by Hal S. Scott (Nomura Professor and Director of the Program on International Financial Systems, Harvard Law School). The Committee is an independent and nonpartisan 501(c)(3) research organization, financed by contributions from individuals, foundations, and corporations.

TLAC refers to additional equity and unsecured debt that G-SIBs will be required to issue beyond their existing capital requirements. TLAC is intended to ensure that these banks will have adequate loss-absorbing capacity so that they can be resolved without disrupting their critical operations or resorting to a taxpayer-funded recapitalization. The Proposal does not address whether banks will have adequate access to liquidity during restructuring. The implications of the Proposal for domestic regulation depends on both the organizational structure of domestic G-SIBs and the character of local resolution procedures. In the United States, G-SIBs are structured as parent holding companies with operating subsidiaries, and the Federal Deposit Insurance Corporation ("**FDIC**") has indicated that its preferred resolution strategy is a Single Point of Entry ("**SPOE**") recapitalization under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "**Dodd-Frank Act**").

[1] http://www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf
[2] Professor Benjamin Friedman did not participate in this letter.

The FDIC's SPOE strategy is designed to resolve systemically important financial institutions ("**SIFIs**") in default or in danger of default under the orderly liquidation authority granted by Title II of the Dodd-Frank Act. In a SPOE recapitalization, the FDIC would be appointed as receiver to the top-tier parent of the U.S. holding company, which will be placed into a temporary "bridge" financial company. This "bridge" financial company would be capitalized through a conversion of existing equity and debt into new equity, and it could serve to recapitalize operating subsidiaries while permitting the operating subsidiaries of the failed holding company to continue their operations uninterrupted. For there to be a successful restructuring of the holding company, there must be enough loss-absorbing instruments at the parent level, such as equity and unsecured liabilities that can be bailed in, to capitalize the bridge holding company on a consolidated basis at a sufficiently strong level. Recapitalization of the operating subsidiaries will be accomplished by forgiving loans from the parent to the subsidiary, or by transferring assets from the parent to the subsidiary.

The FSB Proposal establishes an international standard for the minimum quantity of loss-absorbing instruments that the top-tier parent will be required to issue. The Proposal sets forth a "Pillar I" minimum external TLAC requirement that will obligate parent companies of U.S. G-SIBs to issue equity and unsecured debt equal to 16-20% of risk-weighted assets ("**RWA**") in equity and unsecured debt, in addition to G-SIB surcharges and Basel III buffers. Therefore, a G-SIB with no countercyclical buffer, a standard 2.5% capital conservation buffer, and a 2.5% G-SIB surcharge would effectively be required to hold 21-25% of RWA in TLAC Instruments.[3] This has the effect of substantially increasing the nominal minimum requirement. Basel III capital buffers and G-SIB surcharges will not be counted toward a G-SIB's minimum TLAC requirement. The Proposal also limits the ability of G-SIBs to own TLAC instruments issued by other G-SIBs by requiring that such holdings be deducted from the owner's minimum TLAC requirement. "Pillar II" of the Proposal grants local regulators wide discretion to set additional firm-specific TLAC requirements.

Although the Committee is not opposed to the concept of TLAC, we have four major concerns with the Proposal. We are primarily concerned that the Proposal establishes an onerous minimum requirement that will impede economic growth and is not supported by empirical analysis of any kind. The FSB has provided no explanation of the methodology it used to arrive at the Pillar I minimum. The proposed minimum is 3.5 to 4.5 times larger than the aggregate capital diminution observed in the "severely adverse scenario" of the Federal Reserve's 2014 Dodd-Frank Act Stress Test ("**DFAST**").[4] We believe that the minimum TLAC requirement should be based on an actual need demonstrated by empirical data. We believe that the minimum TLAC standard should be reduced by lowering the 16-20% range to a more reasonable level, and by permitting total regulatory capital, G-SIB surcharges, and Basel III buffers to be counted towards the minimum.

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[3] Term sheet item 4

[4] Specifically, the aggregate total risk-based capital ratio declined from 15.6% to 11.0%, a 4.6% decline. http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140320a1.pdf at 23, 27

Second, the Proposal focuses exclusively on the amount of liabilities on the right side of the parent's balance sheet—which will fund assets on the left side of the parent's balance sheet—to ensure a sufficient quantity of assets available to recapitalize the subsidiaries. However, the proposal does not address the nature of those assets, which will determine whether these assets can be used to recapitalize certain subsidiaries. For example, the proposal does not differentiate between assets that the bank subsidiary is prohibited from owning, and those it is permitted to own.

Third, we are concerned that the Proposal effectively bans one G-SIB from owning TLAC instruments issued by another G-SIB. Banks play an important role as market-makers and underwriters in fixed income markets. The cross-holding ban will decrease liquidity in TLAC instruments, thereby increasing their cost and amplifying the Proposal's potential negative effect on economic growth. Moreover, G-SIBs will be required to simultaneously issue large quantities of debt, which creates a risk that other forms of borrowing will be crowded out of the market. As a result, borrowing costs may rise for all firms, not only G-SIBs.

Finally, we are concerned that the Proposal implicitly assumes, but does not address, whether banks in resolution will have adequate access to liquidity. Sufficient liquidity in resolution is widely viewed as an essential pre-requisite for a successful bail-in of the type envisioned in the Proposal.

Summary of the Proposal

Under the Proposal's Pillar I minimum external TLAC requirement, the top-tier parent company of a U.S. G-SIB will be required to issue eligible securities ("**TLAC Instruments**") in an amount at least equal to 16-20% of the consolidated group's RWA and at least 6% of its total assets.[5] This requirement excludes Basel III countercyclical buffers, capital conservation buffers, and G-SIB surcharges.[6] Therefore, a G-SIB with no countercyclical buffer, a standard 2.5% capital conservation buffer, and a 2.5% G-SIB surcharge would effectively be required to hold 21-25% of RWA in TLAC Instruments.[7] The FSB intends to select a single value from the 16-20% range after conducting a Quantitative Impact Study ("**QIS**"). The QIS will evaluate consequences of the TLAC requirement, including bank funding costs and the historical record of bank losses and recapitalization needs. If one G-SIB owns TLAC instruments issued by another G-SIB, those holdings are deducted from the owner's TLAC requirement.[8] In effect, TLAC Instruments issued by one G-SIB cannot be held by another G-SIB.

TLAC Instruments must be unsecured[9], and must have a minimum remaining maturity of at least one year.[10] In addition, TLAC Instruments must be structurally,

[5] Term sheet items 2 and 4
[6] Term sheet item 4
[7] Term sheet item 4
[8] Term sheet item 18
[9] Term sheet item 10

contractually, or statutorily subordinated to a broad class of excluded liabilities, with limited exceptions.[11] In effect, given the current holding company structure of US G-SIBs this means that their senior debt is eligible and shortfalls can be met by issuing senior unsecured debt. Several important excluded liabilities are deposits, structured notes, callable debt, and any liability that is senior to vanilla unsecured debt under bankruptcy law.[12] Securities that qualify as Basel III regulatory capital are eligible TLAC Instruments.[13] However, the Proposal suggests that at least 33% of the TLAC requirement must be satisfied with securities that do not qualify as regulatory capital.[14] For example, if a G-SIB issued sufficient equity to satisfy 100% of its TLAC requirement, it could only count 67% of this capital surplus towards its TLAC requirement. The justification for this requirement is not addressed in the proposal.

Calibration of the Pillar I external TLAC requirement is not Supported by Empirical Analysis and Risks Undermining Economic Growth

The FSB has provided no information about the methodology it employed to identify the 16-20% range. The consultative document sets forth no empirical analysis to suggest that the range bears any relationship to historical or hypothetical stress scenarios. As a primary regulator of large U.S. bank holding companies ("**BHCs**"), the Federal Reserve conducts annual stress tests through Comprehensive Capital Analysis and Review ("CCAR") and DFAST exercises. The 2014 DFAST stress test included a "severely adverse scenario" in which U.S. gross domestic product declined nearly 5%, equity prices declined 50%, and house prices declined 25%.[15] This hypothetical situation also included simultaneous recessions in Europe and Japan, in addition to below-trend growth in emerging economies.[16] Even in this severe global crisis scenario, the estimated capital diminution for the group of large BHCs was 4.6%.[17] That is 3.5 to 4.5 times smaller than the TLAC minimums proposed in the consultation.

Using methodology similar to Moody's (2013)[18], and illustrated in Table 1, we find that the total gap to implementation for the eight U.S. G-SIBs is between $44.6 billion and $197 billion. Half of this range (49%) exceeds the average monthly issuance of corporate debt in the U.S. during 2014, which was the historical maximum.[19] The upper end of this range is more than double the $93 billion average monthly issuance of

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[10] Term sheet item 11
[11] Term sheet item 13
[12] Term sheet item 12
[13] Term sheet item 7
[14] Term sheet item 7
[15] http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140320a1.pdf at 7
[16] http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140320a1.pdf at 7
[17] Specifically, the aggregate total risk-based capital ratio declined from 15.6% to 11.0%, a 4.6% decline. http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20140320a1.pdf at 23, 27
[18] Moody's Investor Services (2013) "Moody's Concludes Review of Systemically Important US Banks—Frequently Asked Questions."
[19] U.S. issuance of investment grade and high-yield debt was $1,462.9 billion during 2014, a monthly average of $121.9 billion. This substantially exceeds the 10 year average issuance of $93.26 billion per month. http://www.sifma.org/WorkArea/DownloadAsset.aspx?id=8589942781

U.S. corporate debt since 2005.[20] Our estimate is extremely conservative, and does not account for excluded liabilities, cross-holdings by other G-SIBs, assumes a 0% countercyclical buffer, and does not account for likely future increases in G-SIB surcharges. The Clearing House has estimated that U.S. G-SIB TLAC shortfalls will range between $104 and $195 billion.[21] Standard & Poor's has estimated that the shortfall ranges between $23.4 and $202.3 billion.[22] Its firm-specific shortfall estimates are also generally consistent with our analysis.[23]

Table 1: Gap to Implementation for U.S. G-SIBs that Have a Shortfall[24]

(As of 9/30/2014 in $billions, except where noted)

Firm	Parent LT Debt	Parent Pref. Stock	Basel III CET1	Basel III RWA	G-SIB Buffer (%)	TLAC	TLAC / RWA	Short-fall % @ 16	Short-fall % @ 20	Short-fall @ 16	Short-fall @ 20
BAC	133.67	17.91	152.44	1271.72	1.5	304.03	0.24	3.91	-0.09	49.68	-1.19
BK	15.85	1.56	19.4	170.25	1	36.81	0.22	2.12	-1.88	3.61	-3.2
C	108.13	8.85	166.42	1282.99	2	283.41	0.22	1.59	-2.41	20.4	-30.92
JPM	127.2	20.06	162.8	1598.79	2.5	310.06	0.19	-1.61	-5.61	-25.69	-89.64
STT	3.84	1.23	13.78	108.08	1	18.85	0.17	-2.06	-6.06	-2.22	-6.54
WFC	66.35	19.5	135.89	1222.87	1	221.74	0.18	-1.37	-5.37	-16.72	-65.64
Total										**-44.6**	**-197.1**

Requiring a G-SIB to issue large quantities of TLAC Instruments will increase the cost of capital for the consolidated entity. This cost maybe passed on to bank customers in the form of higher interest rates on loans. The industry-wide gap to implementation is so large that U.S. banks may be required to issue TLAC Instruments in an amount greater than the average monthly issuance of U.S. corporate debt. As a result, other forms of borrowing could be crowded out of the market, and the cost of capital would increase for *all firms*, not only G-SIBs. Furthermore, banks are an important source of liquidity in fixed income markets. The Proposal's effective ban on cross-holdings of TLAC

[20] See supra note 18

[21] The Clearing House (2014) "Working Paper No. 4: Quantifying the Impact of Macroprudential Regulation on the Largest U.S. Banks."

[22] Standard and Poor's (2014) "U.S. Banking Sector: Same Old Song and Dance" at 19.

[23] When ranked by shortfall according to our estimates, and according to the S&P estimates, no bank differed by more than one position.

[24] Parent long term debt is obtained from FR Y-9LP Schedule PC item 14. Parent preferred stock is obtained from FR Y-9LP Schedule PC item 20(a). Basel III common equity tier 1 is obtained from FFIEC 101 Schedule A item 29. Basel III risk-weighted assets are obtained FFIEC 101 Schedule A item 60. TLAC is determined by adding parent company long-term debt, parent company perpetual preferred stock, and Basel III CET1. This method is likely to include liabilities that are excluded under the Proposal. Percent shortfall is determined by subtracting the 16% or 20% buffer from (unrounded) TLAC/RWA, then subtracting (G-SIB Buffer + 2.5% capital conservation buffer). This differs slightly from the Moody's methodology, which did not anticipate the exclusion of G-SIB and capital conservation buffers. All presented values have been rounded to the second digit, but were unrounded while computing derived values.

Instruments will impair the liquidity of these securities, further increasing their cost. These cumulative effects, which will likely increase borrowing costs for all firms, carry a serious risk of undermining economic growth.

In addition, it should be taken into account that while US bank holding companies can meet these shortfalls by issuing senior debt from their holding companies, UK, Swiss, and Japanese banks will face similar shortfalls and need to issue in a similar timeframe. Given the global nature of capital markets, this simultaneous issuance poses a serious risk of raising borrowing costs for all firms globally.

While these additional costs could be justified, if grounded in empirical analysis and linked to a specific quantifiable risk, no such justification is presented. While we generally support the FSB using risk-weighted assets to determine a G-SIB's TLAC requirement, we note that other measures of risk do not necessarily yield the same results. For example, Table 2 compares U.S. G-SIB TLAC shortfalls to several other measures of risk. SRISK is a measure of systemic risk that was proposed by a group of finance academics, including Robert Engle, a Nobel Laureate.[25] MES, or marginal expected shortfall, is a measure of loss severity used by the same group. Table 2 also includes measures of risk used by market participants, including credit default swap spread, market beta, and leverage. Table 2 reveals that a U.S. G-SIB's gap to implementation is unrelated to these measures of risk. This underscores our concern that regulators should be cautious regarding the minimum TLAC requirement.

Table 2: Gap to Implementation is Unrelated to Risk Measures[26]

Firm	Sh. fall %	5Y CDS	SRISK%	MES	Beta	Leverage
BAC	-0.09	109	17.51	3.32	1.21	11.44
BK	-1.88	---	1.01	2.68	1.06	9.10
C	-2.41	97.5	14.71	3.18	1.26	11.37
JPM	-5.61	90.5	19.15	3.05	1.25	11.28
STT	-6.06	---	1.52	3.35	1.21	9.36
WFC	-5.37	61.5	0.00	2.66	1.06	6.28
	Kendall Tau	**-0.67**	**-0.07**	**.07**	**.07**	**-0.33**
	Spearman Rho	**-0.80**	**-0.03**	**.14**	**.18**	**-0.37**

Table 2: Kendall's tau and Spearman's rho are measures used in computer science to evaluate the quality of a ranking algorithm. Both measures take a value between -1 and +1. A value of 1 means the algorithm is perfect. A value of 0 means that the ranking algorithm is effectively random, and unrelated to the natural ordering. A negative value means the algorithm is worse than random.

[25] http://vlab.stern.nyu.edu/public/static/capital_shortfall-2012.pdf equation two.

[26] SRISK%, MES, beta, and leverage obtained from the NYU Volatility Lab on 1/9/2014 using data from October 31, 2014. http://vlab.stern.nyu.edu/analysis/RISK.USFIN-MR.MES
Five year credit default swap spreads retrieved on 1/9/2014 from http://www.markit.com/cds/most_liquid/markit_liquid.shtml According to the source, these values are current as of September 28, 2013.

Excessive Focus on Right Side of Balance Sheet

While the Proposal focuses on the right hand side of the balance sheet, attention must also be given to the left side of the parent's assets to ensure an appropriate *quality* of assets. Parent-to-subsidiary loans are an example of assets than can be used to provide capital support to a subsidiary through cancelation of loans. However, some assets of the parent may not be eligible to be transferred to different types of subsidiaries.[27] For example, an insured bank subsidiary may not be able to own equity securities in a broker-dealer affiliate engaged in activities that the bank is not permitted to conduct directly.[28] As a result, while the right side of the holding company's balance sheet may be able to absorb the subsidiary's losses, there may be reduced capacity for assets to be transferred to particular subsidiaries. We believe that regulators should adopt a firm-specific supervisory approach to ensure that each G-SIB has assets that can be used to provide capital support to operating subsidiaries.

Cross-Holding Ban will Increase Costs

The Proposal effectively prohibits one G-SIB from owning TLAC instruments issued by another G-SIB. Therefore, the massive issuance of new TLAC issuance will have to be absorbed by other sectors in the economy. More importantly, banks are a critical source of liquidity in fixed income markets. The severe restriction on TLAC Instrument cross-holding will limit a bank's ability to hold sufficient inventory to make markets and will also limit their ability to act as underwriters. As a result, TLAC Instruments will be less liquid and more costly than other instruments. This will increase borrowing costs and may hamper economic growth.

Access to Liquidity

A stated objective of the Proposal is ensuring that G-SIBs "have sufficient loss absorbing and recapitalization capacity available in resolution to implement an orderly resolution that minimizes any impact on financial stability, ensures the continuity of critical functions."[29] It is widely accepted that bailing-in a bank holding company to recapitalize its operating subsidiary can only be successful when the subsidiary has sufficient access to liquidity.[30] Without a source of liquidity, banks are subject to a "contagious panic [that] results in a cascade of mass withdrawals of cash from the financial system… that force financial institutions to sell their illiquid but valuable assets at fire-sale prices."[31] Once a run is triggered, no amount of bail-inable debt at the parent

[29] TLAC Proposal at 1
[29] TLAC Proposal at 1
[29] TLAC Proposal at 1
[30] Huertas, T. (2013) "Safe to Fail" at 97. (Finding that "[M]ost importantly, the bank-in-resolution will need to have adequate access to liquidity if it is able to meet customer obligations…"). Bovenzi, J., Guynn, R.D., and Jackson, T.H. (2013) "Too Big to Fail: The Path to a Solution" at 21. (Finding that "[T]he recapitalized business must have access to a temporary fully secured liquidity facility.")
[31] Bovenzi, Guynn, and Jackson at 5. See supra note 29.

level can protect the operating subsidiary. The Committee believes that a strong lender of last resort authority is the sole method effective in forestalling a contagious run. Therefore, we believe that any proposal that seeks to "ensure continuity of critical functions" must address the secured lending available to operating subsidiaries during resolution. Without such funding, the minimum TLAC requirements impose substantial costs on the financial system but offer minimal benefits during periods of distress.

Overall, the Proposal establishes onerous minimum TLAC requirements that have not been justified by empirical analysis of a realized stress scenario, or even a hypothetical stress scenario. Massive TLAC issuance has the potential to crowd out other forms of borrowing, and therefore carries a risk of hampering economic growth. Moreover, an individual G-SIB's gap to implementation is unrelated to its risk, as measured by several well-accepted metrics. Moving forward, we believe it is critical to carefully consider these adverse consequences and inconsistent outcomes when reviewing the Proposal and conducting the QIS.

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Thank you very much for your consideration of our views. Should you have any questions or concerns, please do not hesitate to contact the Committee's Director, Prof. Hal S. Scott (hscott@law.harvard.edu), at your convenience.

Respectfully submitted,

R. Glenn Hubbard	John L. Thornton	Hal S. Scott
Co-CHAIR	Co-CHAIR	DIRECTOR