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September 30, 2020

Prof. Dr. Claudia Buch
Vice-President, Deutsche Bundesbank
Chair, FSB Too-Big-to-Fail Evaluation Working Group

Mr. Dietrich Domanski
Secretary General, Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Re: Evaluation of too-big-to-fail reforms – Response to FSB Consultation Report

Dear Dr. Buch and Mr. Domanski:

The Institute of International Finance (IIF) and its members welcome the opportunity to contribute to the work of the Financial Stability Board (FSB) on the evaluation of the effects of the too-big-to-fail (TBTF) reforms for systemically important banks (SIBs).

In this comment letter, we have focused on providing high-level responses to the questions raised in the FSB's Consultation Report ("FSB Report" or the "Report").[1] We have also formulated some specific suggestions for your consideration on the approach and messaging for the final FSB evaluation report that is expected to be published in early 2021. We think these suggestions would make the final report more comprehensive and improve the level of transparency of the analysis.

The TBTF reforms were designed as a core element of the coordinated post-crisis reform effort to tackle fundamental weaknesses exposed in the 2007-08 global financial crisis. Both the public and private sectors have worked hard to design and implement the reforms. This have involved major statutory reforms, substantial reorganization of banking groups and the accumulation of substantial amounts of additional capital, liquidity and Total Loss Absorbing Capacity (TLAC) resources. As documented in the Report, there is considerable evidence that the TBTF reforms are achieving the objectives of reducing systemic and moral hazard risks associated with SIBs.[2]

[1] FSB 2020. *"Evaluation of the effects of too-big-to-fail reforms: consultation report"* (June). Hereafter referred to in footnotes as "FSB Report".

[2] We also note that private sector reform implementation can only provide a workable and credible option for the resolution authorities to use if they choose to in the appropriate circumstances. As the Report notes, certain jurisdictions have refrained from using resolution tools in some recent situations. This dimension was much discussed in the FSB's public workshop on September 4, 2020 and could potentially weaken the credibility of reforms in some jurisdictions, even where banks have fully implemented a credible and well-resourced recovery and resolution plan.

However, IIF members believe that the Report has been unduly cautious in recognizing the tremendous progress that has occurred, especially in the G-SIB sector.

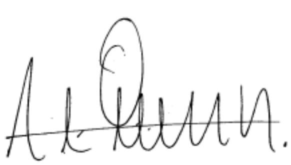
We also agree with many of the points made in the Report about the direction of further work, including continuing to maintain and increase the resilience, recovery and resolvability of central counterparties (CCPs), and monitoring the risks arising from a shift in credit intermediation to non-bank financial intermediaries (NBFIs). However, we take issue with certain conclusions which we ask the FSB to reconsider when formulating conclusions in the final report. Specifically:

- We disagree with the strength of the conclusions regarding market fragmentation and ring-fencing, and recommend that the final report encourages continued dedicated monitoring and analysis of market fragmentation as a priority at the FSB and global standard setter level.
- We suggest that the FSB considers including a discussion of the G-SIB buffer framework that takes account of the progress on developing resolution tools and the reduction in systemic risk in the banking system.
- We suggest the FSB's conclusions should be revised to recognize the major reductions in the "practical complexity" of G-SIBs – i.e. complexity that could impede resolution or recovery actions.
- We support more specific commentary around where further action is needed by public sector authorities to unlock the full benefits of the TBTF reforms.
- We think that the FSB's social cost-benefit analysis of the TBTF reforms ought to take a more comprehensive view of the social costs.

The key points of our response are summarized on pages 3-6. The response then follows according to a thematic structure, in the order of the key points. We have indicated in bold text throughout where particular comments relate to the consultation questions in the FSB Report. In response to the FSB's specific request in consultation question 5, we have provided some preliminary observations about financial stability during the ongoing COVID-19 crisis that are relevant to the TBTF evaluation (see Box 1 on pages 25-27).

The IIF appreciates the FSB's openness to engage with stakeholders throughout the process. We remain committed to active participation in the evaluation and look forward to engaging further with you on this topic. If you have any questions, please contact me (aportilla@iif.com) or Katie Rismanchi (krismanchi@iif.com).

Sincerely,



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Summary of Key Points

Overall, IIF members welcome many of the Report's messages and findings, particularly in terms of the benefits of the TBTF reforms.

– The TBTF reforms are a considerable achievement and a core element of the coordinated post-crisis drive to tackle fundamental weaknesses exposed in the 2007-08 global financial crisis. We believe the overall framework was innovative and valuable. Both the public and private sectors have worked hard and effectively to implement the reforms.
– As documented in the FSB Report, there is considerable evidence that TBTF reforms are achieving the objectives of reducing the systemic and moral hazard risks associated with SIBs, particularly in jurisdictions that are home to G-SIBs. We support the FSB's finding that "*progress [on resolution reforms] is most evident for G-SIB home and material host jurisdictions",* [3] based in part on our members' understanding of the significant restructurings that have occurred within their banks, and the large resources that have been deployed to assure credibility.

The Industry agrees with the FSB on the importance of transparency around progress on the TBTF reforms and the evaluation of progress. The FSB Report could itself be more transparent in the presentation of certain country-level results, which is important if the FSB's evaluation is to encourage well-targeted follow up work.

– In particular, the Report should be more specific in the presentation of certain country-level results, acknowledging and discussing the structural differences between jurisdictions such as whether they are home supervisor to one or more G-SIBs. Enhancing transparency in this way could further incentivize progress on resolution where more work is still needed.

We think the Terms of Reference should have included an evaluation of the BCBS methodology regarding the systemic importance of G-SIBs as that framework is an intrinsic part of the TBTF reforms.[4] A review and update of the methodology and framework is necessary, given the reduction in systemic risk and progress on resolvability over the last decade.

– It may be appropriate to update the systemic capital buffers to account for the reduction in the systemic risk posed by G-SIBs and improved resolvability.
– We would encourage the BCBS and the FSB to consider the impact of the suite of post-crisis reforms and the credibility and progress of resolution planning in future reviews of the G-SIB framework. This could also be considered as part of a broader, holistic review of the Basel III buffer framework in light of experience during the COVID-19 crisis.

As the IIF has long advocated, the full benefits of reform will only be unlocked if the authorities implement them in a cooperative manner, with as much transparency as possible. It would be helpful for the final report to lead to recommendations and enhanced monitoring in this area.

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[3] FSB Report. Page 104.
[4] However, this was not scoped into the FSB 2019. *"Evaluation of too-big-to-fail reforms - Summary Terms of Reference"* (May). Hereafter referred to as "Terms of Reference".

- In the final report as well as in future work, we would encourage the FSB to evaluate progress on going-concern cross-border coordination and cooperation, as well the practical preparedness for any future resolution scenarios.
- For example, further work should evaluate cross-border aspects in resolution planning including information-sharing in supervisory colleges and Crisis Management Groups (CMGs). It should also address the distribution of internal TLAC and other critical resources like capital and liquidity and examine how restrictions on resource mobility between entities could impact group resilience.
- The FSB should evaluate regulators' preparedness and ability to use their new powers and mechanisms in a cross-border resolution situation, and make recommendations for further progress.
- Other aspects of cross-border cooperation between authorities that could be improved include:
  - mutual recognition between jurisdictions of their respective resolution actions and powers;
  - further international harmonization, clarity and commitment from public sector authorities regarding access to temporary liquidity support during resolution; and
  - greater transparency by resolution authorities regarding their policies to the broader public and, as appropriate, to individual banks as a helpful mechanism to encourage progress.

The Report's discussion of complexity relies largely on the number of subsidiaries owned by a G-SIB, which is a crude measure that ignores important features of the resolution framework. We believe the FSB's conclusions should be revised to recognize the major reductions in the "practical complexity" of G-SIBs – i.e. complexity that could impede resolution or recovery actions.

- Bank complexity was a significant problem in the global financial crisis and adversely affected the resolution of several failing banks. The Recovery and Resolution Planning (RRP) process has provided a powerful spur to address these concerns with a focus on resolution groups, recovery planning, entity management, clean holding companies, and the ISDA stay protocol. These changes have increased subsidiary counts in some areas (e.g. via clean holding companies or intermediate holding companies) but, overall, they have dramatically reduced *practical* complexity. These changes have provided supervisors with practical alternatives to the frustrating choices they faced in the global financial crisis.

The Report's Executive Summary takes a relatively strong position on market fragmentation, but there is little evidence advanced in support of this position beyond an outline of the key concepts. The discussion focusses narrowly on internal TLAC (and separately on cross-border credit) and does not explore other elements of fragmentation. We believe this is inconsistent with the broader FSB and IOSCO efforts to better understand and address fragmentation.

- The FSB evaluation team did not see evidence of the effects of internal TLAC, but it is intrinsically difficult to garner sufficient external data on internal structure issues (absent extreme events like the premature failure of a G-SIB). Many of our members, who have deep knowledge of how these issues are affecting their firms, believe that internal structural constraints pose significant issues. The FSB and IOSCO acknowledged some of the issues in their separate 2019 reports.[5]

– The industry considers that there is a need to develop an improved global consensus among regulators and with the FSB on resource allocation between home and host authorities in relation to internal TLAC, capital and liquidity to achieve a better balance between host certainty and home flexibility. Given this, we would strongly recommend that the Report refrain from premature conclusions and, instead, encourage continued dedicated monitoring and analysis of market fragmentation as a priority at the FSB and global standard setter level.

We suggest that the final Report takes a broader view of the cost-benefit analysis to account for the full social costs of the TBTF reforms which, combined with other related post-crisis reforms, have been material.

– The FSB analysis measures the benefits of the additional capital required on account of the TBTF reforms as a less than 10% increase in the average CET1 ratio from 7% to 7.59%, where the 7% starting point is the Pillar 1 CET1 capital requirement for a non-G-SIB. However, Basel monitoring data show that the largest internationally active banks globally now have nearly twice as much CET1 capital resource as in 2011, partly driven by changes in capital requirements and much tougher risk-weighted asset (RWA) measurement. To accurately measure the marginal benefit of the additional capital raised by SIBs due to the TBTF reforms, it would be necessary to measure the marginal increase in capital from a much higher level of CET1 on a consistent basis. The analysis of the net social benefits of the TBTF reforms is strongly influenced by the CET1 starting point, and therefore should use a baseline that is more consistent with actual capital levels today.

– The cost-benefit analysis does not account for shifts in the regulatory perimeter; it does not directly account for potentially higher risks from NBFIs as an indirect consequence of the TBTF reforms on banks, although it does account for increased lending by NBFIs to discount the social costs of the reforms. This asymmetry in the analysis should in our view be corrected.

– The FSB analysis of social costs focuses largely on credit provision, but banks provide several other economic services. For example, large banks play a key role in capital formation and market making; the social cost of disruptions to this area can be important, as manifested in the March/April 2020 market disruptions following the COVID-19 shock. Market liquidity is not discussed at all in the FSB's Report, even though the topic has received considerable attention in the literature and by regulatory authorities over recent years.

– The Report excludes the possibility that low profitability for major firms in the banking industry can generate social costs if it impairs sustainable capital generation or lowers the franchise value to absorb shocks. Structural low profitability can also result in withdrawal from certain activities that are particularly hit by reforms.

[5] FSB 2019. *"FSB Report on Market Fragmentation"* (June). Hereafter referred to in footnotes as "FSB 2019 (June)". IOSCO 2019. *"Market Fragmentation & Cross-border Regulation"* (June). Hereafter referred to in footnotes as "IOSCO 2019 (June)".

– Taking a broader view in the cost-benefit analysis – looking at all the evidence and indicators – the social costs of the TBTF reforms (combined with other related post-crisis reforms) have been material.

We request that the FSB consider the points outlined in this response when finalizing the overall conclusions of the evaluation, and when drawing up the forward agenda of the FSB and global standard setting bodies. We think priorities for the forward agenda should include the following topics, many of which are either already underway or planned by the FSB or otherwise indicated as important in the FSB's Report and other recent publications.

<u>As indicated in the Report or planned by the FSB</u>:

– Ongoing implementation and evaluation to make progress on going-concern cross-border coordination and cooperation and practical preparedness for any future resolution scenarios.
– Work by authorities on operational continuity and access to financial market infrastructures (FMIs) in resolution.
– Continuing review of the financial stability implications of a shift in credit intermediation to NBFIs and work on a mapping exercise to understand the critical connections between the banking and non-bank sectors.
– A holistic review of the market turmoil after the COVID-19 shock, which is expected to be presented to G20 leaders by November 2020.[6]

<u>Already underway at FSB:</u>

– Work to complete CCP resilience, recovery and resolution policy.
– Continued investigation into the causes of, and ways to address, market fragmentation including that which relates to internal TLAC, capital and liquidity.

<u>Additional suggestions for the forward agenda:</u>

– A holistic review of the design and calibration of the G-SIB buffer framework, for example as part of the Basel Committee's recently announced evaluation of its post-crisis reforms.[7]
– An investigation into the impact of the suite of post-crisis and TBTF reforms on market liquidity.

Finally, in response to the specific request in the FSB Report, we also provide some preliminary observations about financial stability during the ongoing COVID-19 crisis which are relevant to the TBTF evaluation – refer to Box 1 (pages 25-27).

[6] As remarked by Secretary General Domanski during a virtual FSB workshop on the TBTF reforms (September 4, 2020). Also see FSB 2020. *"FSB sets out action to maintain financial stability during COVID"* (July): "*By the G20 Summit this November, the FSB will carry out a holistic review of the market turmoil in March.*"

[7] BCBS 2020. "*Basel Committee approves annual G-SIBs assessment, updates workplan to evaluate post-crisis reforms.*" Press release (September 25).

***The following section relates to Questions 1, 2, 3, 8, 9 and 10 in the Report.**[8]

Overall, IIF members welcome many of the Report's messages and findings, particularly in terms of the benefits of the TBTF reforms.

The TBTF reforms are a considerable achievement and a core element of the coordinated post-crisis drive to tackle fundamental weaknesses exposed in the 2007-08 global financial crisis. These reforms were innovative and valuable; both the public and private sectors have worked hard and effectively to implement the reforms. Overall, SIBs have responded to the reforms as intended, and are much more resilient and less interconnected with each other than during the global financial crisis.

Global SIBs (G-SIBs) and domestic SIBs (D-SIBs) have overhauled their balance sheets, changed their legal structures, updated their risk management, governance and remuneration approaches and, in some cases, changed their entire business models since the crisis. SIBs have built much larger bases of high-quality capital; increased resilience to short-term and long-term funding risks; issued TLAC debt instruments that can be bailed-in to provide loss absorbency in a resolution; significantly increased the amount of central clearing of derivatives and agreed to a new ISDA Protocol to prevent disruptive derivative unwinds; and prepared credible recovery and resolution plans with their regulatory authorities, which have been refined over time.

In 2019 H1, Common Equity Tier 1 (CET1) capital at the largest internationally active banks globally was nearly double the level it was in 2011 H1,[9] representing a EUR 1.9 trillion increase in CET1 resources.[10] Similarly, liquidity as measured by the liquidity coverage ratio (LCR) has increased from 122% in 2012 H1 to 137% in 2019 H1 driven by significant increases in high-quality liquid assets, which were 25% higher in 2019 H1 than in 2012 for the largest banks globally and even higher compared to before the global financial crisis.[11] In aggregate, SIBs have generally taken steps to meet capital and liquidity standards ahead of official timelines and are on track to do the same with TLAC. As the Report states *"G-SIBs in advanced economies already meet the 2019 transitional TLAC requirements and are well on the way to meeting final requirements in force from 2022."*[12]

As documented in the FSB Report, there is considerable evidence that TBTF reforms are achieving the objectives of reducing systemic and moral hazard risks traditionally associated with SIBs. This is particularly the case in jurisdictions that are home to G-SIBs: the FSB finds a statistically significant negative relationship between a country's resolution reform index ("RRI") value and the measured TBTF premium, and also comments that "*progress [on resolution reforms] is most evident for G-SIB home and material host jurisdictions"*.[13] Systemic risks from

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[8] FSB Report. Pages 2-3.
[9] 97.8% higher.
[10] BCBS 2020. *"Basel III Monitoring Report"* (April). Page 133 Table C.25.
[11] Ibid. Page 176 Table C.89 and page 179 Table C.92. Longer dated series are not consistently available in all jurisdictions however, to give an example from one major market, U.S. Federal Reserve data shows that the share of liquid assets in total assets has more than doubled for U.S. banks relative to levels before the global financial crisis (see Figure 2 in here).
[12] FSB Report. Page 5.
[13] Ibid. Page 104.

the banking sector have significantly declined, as the FSB's analysis demonstrates[14] (e.g. looking at indicators in the G/D-SIB frameworks, market-based measures and the wider literature[15]). There is evidence that implicit funding subsidies for SIBs have fallen significantly and may have gone away (see Annex for further discussion about TBTF funding subsidies).

Transparency in the presentation of the FSB's findings

The Industry agrees with the FSB on the importance of transparency around progress on the TBTF reforms and the evaluation of progress. The Report could itself be more transparent in the presentation of certain country-level results. Greater transparency in the Report on these aspects is important if the FSB's evaluation is to encourage well-targeted follow up work.

When discussing progress towards ending TBTF, it is important to differentiate between progress on implementation in different countries. We observe the bi-modal distribution of the FSB's RRI: it demonstrates that jurisdictions that are home to the world's G-SIBs are almost entirely achieving a high RRI already (see Figure 1). The Report does find a statistically significant negative relationship between a country's RRI value and the TBTF premium, indicating that *"material progress in resolution reforms can lower the subsidies".*[16] (The RRI is helpful and interesting in this regard, although it is a simple measure that misses aspects that would ultimately affect the credibility of resolution across countries.[17]) However, the Report does not disclose country names when presenting country-level analysis about the post-crisis change in the TBTF premium.[18]

Notwithstanding that much of the numerical analysis is done on a cross-country basis for statistical purposes, the Report should be more specific in the presentation of certain country-level results, acknowledging and discussing the structural differences between jurisdictions such as whether they are the home supervisor to one or more G-SIBs. This would allow readers to draw clearer observations on the degree of progress for the most systemically important institutions and their home supervisory/resolution authorities.[19] Enhancing transparency in this way could further incentivize progress on resolution where more work is still needed.

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[14] FSB Report, Technical Appendix (Hereafter referred to in footnotes as "Technical Appendix"). Page 241: *"Our findings suggest that the reforms implemented in the years after 2011 have changed the structural relation between idiosyncratic banking shocks and the dynamics of the real economy. Prior to the reforms the economy was vulnerable to these banking shocks: they explained a non-negligible share of the variation of the real economy. Since the reforms, the macro economy seems to be shielded from idiosyncratic banking shocks."* And Technical Appendix. Page 266: *"The findings suggest that the TBTF reforms have been associated with a reduction in G-SIBs' systemic risks."*

[15] Any individual source or metric has its own limitations, hence the importance of examining a range of evidence.

[16] Technical Appendix. Page 135.

[17] Such as differences in available banking system capital and TLAC resources, differences in transparency around firm specific TLAC requirements and resources, actual preparedness of firms in the jurisdiction.

[18] Technical Appendix. Section 3.7.3 and Figure 3.7.2.

[19] A related specific observation is that the Report does not consider data from the U.S. bond market, which is generally considered the largest in the world. The US market has been subject to considerable research in recent years. For example, see U.S. Government Accountability Office 2014. *"Large Bank Holding Companies"* (July) and a more recent review by Duffie et al. 2018. *"The Decline of Too Big to Fail"*

Figure 1

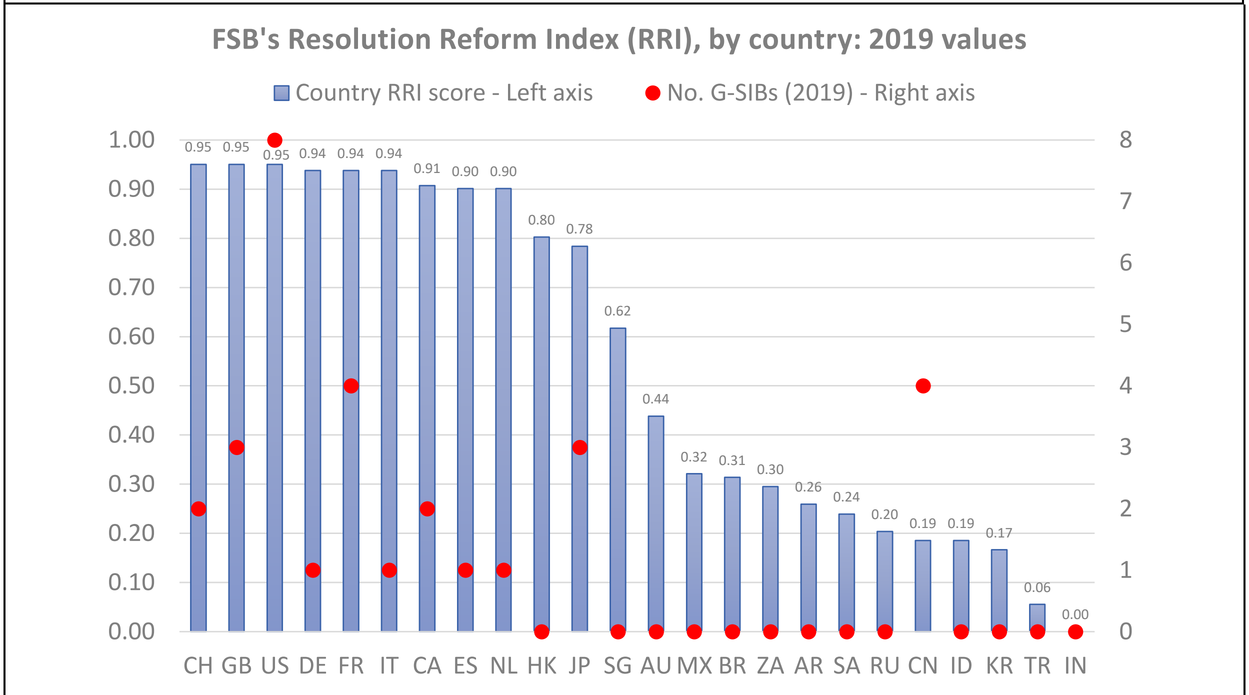

Figure notes:
Country abbreviations: AR=Argentina, AU=Australia, BR=Brazil; CA=Canada; CH=Switzerland; CN=China; DE=Germany; ES=Spain; EU=European Union; FR=France; HK=Hong Kong; IN=India; ID=Indonesia; IT=Italy; JP=Japan; KR=Korea; MX=Mexico; NL=Netherlands; RU=Russia; SA=Saudi Arabia; SG=Singapore; TR=Turkey; GB=United Kingdom; US=United States; ZA=South Africa.
Source: FSB Report "Resolution Reform Index" (RRI). RRI values can range from 0 (no implementation) to 1 (full implementation). The RRI is produced between 2010 and 2019 for 24 FSB jurisdictions – Figure 1 shows the 2019 cross-sectional values (left axis) and the number of banks designated as G-SIBs per country in 2019 (right axis).

***The following section relates to Questions 10 and 11 in the Report.**

Scope of the TBTF evaluation

In terms of scope, we think this evaluation should have included the BCBS methodology and framework for assessing systemic importance of G-SIBs as these were an intrinsic part of the TBTF reforms. However, these were not scoped into the FSB's Terms of Reference. A future review and update of the methodology and framework is necessary, taking account of the reductions in systemic risk and progress on resolvability over the last decade.

The industry considers these to be important design features of the TBTF framework and our members consider there to be some issues with the G-SIB methodology that diminish how useful it is as a dynamic systemic risk measurement tool, as set out in our 2017 response to the BCBS consultative document.[20] The COVID-19 crisis has revealed new challenges related to the G-SIB

(December). These analyses provided more robust conclusions about the U.S. market than the FSB Report. Moreover, the US benchmarks could also be useful in terms of read-across analysis to other jurisdictions, in terms of credit spread differentials and relationships to other markets.

[20] IIF 2017. *"Comments on Basel Committee's Consultative Document on Global Systemically Important Banks – Revised Assessment Framework"* (June).

methodology and framework. For example, significant quantitative easing and other measures taken by the authorities to support the economy can lead to an increase in central bank reserves and, thereby, pressure on banks due to the leverage exposure constraint. All else equal, this would increase G-SIB scores for those banks that play an active supporting role through the crisis, even though they are contributing to a reduction in financial stability risks. For further discussion of issues posed by the G-SIB buffer framework during the COVID-19 crisis see 'COVID-19 Box 1'.

Further, it may be appropriate to update the systemic capital buffers to account for the reduction in the systemic risk posed by G-SIBs and improved resolvability. From the BCBS 2017 consultative document on the review of the G-SIB methodology: "*The G-SIB assessment methodology measures the impact that the distress or failure of an individual firm could have on the global financial system and real economy, rather than the risk that an individual bank could experience distress or fail. This assessment can be thought of as a global, system-wide, loss-given-default (LGD) measure for banks. The G-SIB capital surcharge is then used to reduce the ex ante risk of failure.* … [Footnoted] *Although it can be argued that resolution schemes can reduce ex ante the system-wide LGD by reducing moral hazard, measures that improve resolvability were not considered in the review of the G-SIB framework since resolutions schemes are a matter of jurisdictional discretion and cannot be influenced by the banks' management.*"[21] The FSB has itself published analysis showing that TLAC requirements reduce the probability of default and macroeconomic cost of a crisis in the case of G-SIB failure, and accounted for these benefits in the cost-benefit analysis for introducing TLAC requirements.[22]

The FSB Report shows that systemic and moral hazard risks from G-SIBs have been significantly reduced, meaning that the externalities posed by G-SIBs are now significantly lower than before the implementation of the TBTF reforms. Given that the original rationale for introducing G-SIB buffers was to address *"the negative externalities associated with institutions that are perceived as not being allowed to fail due to their size, interconnectedness, complexity, lack of substitutability or global scope"*[23], it is important to re-evaluate the G-SIB buffer framework and calibration given the evident progress in reducing TBTF over the past decade. While not in scope of the 2017 BCBS review of the G-SIB methodology, some significant central bank studies[24] in recent years have sought to measure the appropriate level of capital for major banks accounting for interlinkages between going-concern capital, liquidity requirements,[25] TLAC and recovery and resolution planning.

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[21] BCBS 2017. *"Global Systemically Important Banks – Revised Assessment Framework"* (March). Principle 1 and footnote 6.

[22] BIS 2015. *"Assessing the economic costs and benefits of TLAC implementation"* (November).

[23] BCBS 2011. *"Global systemically important banks: assessment methodology and the additional loss absorbency requirement: Rules text."* (November). Page 1.

[24] Brooke et al. 2015. *"Measuring the Macroeconomic Costs and Benefits of Higher UK Bank Capital Requirements"* (December). Bank of England Financial Stability Paper No. 35; Fender and Lewrick 2016. *"Adding It All Up: The Macroeconomic Impact of Basel III and Outstanding Reform Issues"* (November). BIS Working Paper No. 591; and Firestone et al. 2017. *"An Empirical Assessment of the Costs and Benefits of Bank Capital in The U.S."* (March). FRB Finance and Economics Discussion Series 2017-034.

[25] For an analysis of the impact of LCR requirements on G-SIB scores using data for U.S. banks, see Covas and Lindgren 2018. *"Estimating How Basel III Liquidity Requirements Should Affect a GSIB Surcharge"* (June).

We would encourage the BCBS and the FSB to consider the impact of the suite of post-crisis reforms, including the credibility and progress of resolution planning, in future reviews of the G-SIB framework. In general, such frameworks ought to be reviewed and revised over time in light of key developments, structural changes and experience.[26] This could also be considered as part of a broader, holistic review of the Basel III buffer framework in light of experience during the COVID-19 crisis.

***The following section relates to Questions 1, 2, 7 and 11 in the Report.**

Cross-border coordination and cooperation between authorities

IIF members believe that the full benefits of the reforms will only be unlocked if the authorities implement them in a cooperative manner, with as much transparency as possible. It would be helpful for the FSB's evaluation to lead to recommendations or enhanced monitoring in this area. Further work should evaluate progress on going-concern cross-border coordination and cooperation as well as practical preparedness for any future resolution scenarios, with an emphasis on cross-border aspects in resolution planning.

As the IIF has long advocated, there is still more work to be done to strengthen cooperation, information sharing and trust between authorities.[27] This is currently discussed briefly in the Report. Nevertheless, the FSB does acknowledge the importance of this and remarks that one of the remaining obstacles to resolvability is "cross-border coordination".[28] The following outstanding challenges are noted in the Report: with respect to supervisory colleges – *"legal constraints on information-sharing, supervisory resource constraints and expectation gaps between home and host supervisors"*[29]; with respect to resolution planning – *"Crisis Management Groups are established for all G-SIBs, but institution-specific cross-border cooperation agreements are still not in place for a quarter of G-SIBs"*[30]*;* and with respect to internal TLAC, which is a matter of resource allocation between home and host authorities, *"implementation of internal TLAC is less advanced and approaches to its distribution and calibration differ across jurisdictions".*[31]

Resolution frameworks are still relatively new; it is understandable that cross-border aspects would take more time to develop than legislative and practical aspects within a single jurisdiction. However, given the excellent progress on many aspects of resolution reforms in jurisdictions that are home to G-SIBs – as indicated by the FSB's RRI – we would urge greater focus on cross-border coordination going forward. The CMGs, which are now in place for all G-SIBs, could be further leveraged to enhance coordination. CMGs and supervisory colleges should also address

[26] Equally, some national authorities may want to revisit the design and calibration of their D-SIB buffer frameworks.
[27] For example, see IIF 2019. *"IIF Report on Market Fragmentation and Need for Regulatory Cooperation"* (January); IIF 2019. *"Letter to G20, FSB and IOSCO regarding Market Fragmentation*" (July); IIF 2019 *"The Value of Cross-Border Banking and the Cost of Fragmentation"* (November). Hereafter referred to in footnotes as "IIF 2019 (November)"; and IIF 2020. *"Supervisory Coordination During the COVID-19 Pandemic: Observations From The Global Banking Industry"* (June).
[28] FSB Report. Page 8.
[29] FSB Report. Page 20.
[30] Ibid.
[31] Ibid.

the distribution of critical resources like capital, liquidity and internal TLAC, and examine how supervisory restrictions on resource mobility between entities could impact group resilience.

It is important that the FSB evaluates regulators' preparedness and abilities to use their new powers and mechanisms in a cross-border resolution situation, and could make recommendations to support further progress. For example, this could be assessed through surveys with regulatory authorities or more practical exercises such as a wide-ranging FSB-coordinated "hypothetical cross-border crisis exercise" involving authorities in different countries. Such exercises and other exchanges could be useful for bringing into focus issues such as: legal constraints on data sharing; home/host coordination issues around identifying the point of non-viability; and different approaches to the valuation of losses in resolution and views on post-resolution recapitalization needs and timelines. As the FSB Report shows, the causes leading to a resolution incident are likely to be somewhat different every time: the more *ex ante* preparedness among regulators through playbooks, simulations and discussion, the better prepared regulators will be to respond to a range of cases.

Other aspects of cross-border cooperation between authorities that could be improved include mutual recognition between jurisdictions of their respective resolution actions and powers. Another important area that requires further international harmonization, clarity and commitment from public sector authorities is access to temporary liquidity support during resolution including, for example, FX swap lines between central banks and temporary backstop funding mechanisms provided by the public sector.[32] Access to temporary liquidity during a resolution could, in some instances, be critical to enabling a smooth resolution according to the resolution plan. More transparency on the existence and modalities of the liquidity support and, ideally, agreeing the most relevant terms and conditions in advance, could increase confidence among authorities and investors.[33] It is imperative to provide as much predictability as possible in advance of a resolution event to maximize orderliness in the resolution, accounting for and anticipating potential market reactions. We note that clarity on liquidity procedures in resolution is not counted in the FSB's RRI as *"there is no consistent or accurate data to assess progress"*.[34]

Greater transparency by resolution authorities regarding their policies to the broader public and, on some topics as appropriate, to individual G-SIBs could be a helpful mechanism to encourage progress in some areas, including strengthening understanding and trust between home and host authorities. The FSB may be able to further leverage existing processes, such as the Resolvability Assessment Process, in this regard. Information on national authorities' progress efforts and timelines to achieve milestones should be more widely available.

As remarked in the FSB's Report, more transparent and accessible disclosures by authorities to promote a greater understanding of the resolution framework and resolution authorities' strategies across countries could itself improve the resolvability of institutions. This will be valuable to G-SIB counterparties, including FMIs and critical shared parties, as part of bank resolution planning. For example, authorities could provide simple public materials, such as presentations and decision trees, explaining their resolution framework and strategy. It would also be beneficial if all

[32] Discussed in FSB 2018. *"Funding Strategy Elements of an Implementable Resolution Plan"* (June).
[33] The transparency and commitment on this topic by the Bank of England is a positive example. For example, see Box 2 in the Bank of England 2017. *"The Bank of England's approach to resolution"* (October).
[34] Technical Appendix. Page 9.

resolution authorities make key materials available in English (or multiple languages) for greater use in cross-border contexts. An example of a good general resolution disclosure is the Bank of England's approach to resolution (the so-called "Purple Book"), which was first published in 2014 and has been subsequently updated, notably in October 2017.[35] That document lays out the framework available to the Bank of England to resolve failing banks[36], as well as arrangements for central counterparties. Using the Purple Book, the Bank of England outlines to the market how it envisages the resolution to unfold, timelines and key activities, how resolvability is assessed, and how MREL is linked and set differently in relation to the choice of the resolution strategy for an institution. Each resolution authority should be encouraged to provide maximum public disclosure of their general resolution approach, which would be advantageous from the perspective of home/host understanding and coordination as well as facilitating increased awareness by the broader public.[37]

***The following section relates to Questions 1, 3, 6 and 9 in the Report.**

Bank complexity analysis in the Report

The Report states that *"Global systemically important banks remain complex. The average G-SIB still has over a thousand subsidiaries in over 40 jurisdictions. A complex group may be hard to manage, supervise, and resolve."*[38] **However, the Report's discussion of complexity focuses on the number of subsidiaries owned by a G-SIB, which ignores important features of the resolution framework and which the authors acknowledge to be a crude measure of one aspect of complexity**: "*the number of subsidiaries is only one and isolated factor that may influence corporate complexity. Organisational and corporate complexity comprise a wide range of dimensions"*.[39] However, "practical complexity" – i.e. complexity that could impede resolution or recovery actions – is generally much lower now than the pre-2008 situation. Banks have devoted enormous resources to reorganizing into resolution groups, assuring continuity of critical services, creating clean holding companies, etc. The advent of the ISDA stay protocol also removes a significant impediment to resolution (one which likely imposed the largest financial loss on the Lehman estate, for example). The improved credibility of RRP plans is perhaps the best indicator that the complexity of the old group structures has been much reduced.

As discussed in the literature on bank complexity, *"regulations that cover bank liquidity, bank capital and bank resolution are likely to influence the optimal degree"*[40] of bank complexity. Systemically important banks have streamlined their organizational structures since the global financial crisis where possible, and distinguish between material legal entities and other legal entities for recovery and resolution planning purposes. However, there are many drivers of

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[35] Bank of England 2017. *"The Bank of England's approach to resolution"* (October)

[36] And building societies and some investment firms.

[37] These suggestions were also raised in the IIF 2019. *"IIF/GFMA response – Public Disclosures on Resolution Planning and Resolvability"* (August). That discussion paper and the industry comments reflect the complexity and trade-offs associated with the optimal degree of disclosure, particularly around firm-specific information given commercial and market sensitivities.

[38] FSB Report. Page 6.

[39] FSB Report. Footnote 40.

[40] Correa and Goldberg 2020. *"Bank Complexity, Governance, and Risk"* (June). Hereafter referred to in footnotes as "Correa and Goldberg 2020 (June)".

organizational complexity including legal, regulatory, and tax requirements which limits organizational rationalization in some cases.[41] For example, booking model management relies on legal entities being managed as standalone units. In some cases, regulation drives the creation of legal entities to enhance local supervisory oversight and resolvability.[42] The IMF has discussed that, despite negative implications for business model efficiency, some host authorities *prefer* more decentralized banking models – i.e. those that place a greater reliance on subsidiarization than branches – because subsidiaries are easier to monitor and risk assess than branches.[43] Some countries, for example in Asia, even impose legal requirements that require a bank to subsidiarize (rather than use a branch) to access their local market. This point is recognized in the FSB's Technical Appendix but not explored due to a lack of data on branches.[44]

It is more important than simply reducing the number of legal entities that firms have effective governance structures, control and risk management in the going-concern, and clear recovery and resolution plans with respect to their material legal entities – which are significantly fewer than the total number of legal entities in large banks. In the context of Single Point of Entry (SPE) and Multiple Point of Entry (MPE) resolution planning, the number of operational subsidiaries is an even less relevant measure of complexity. For SIBs with SPE strategies, any resolution proceedings would take place at the top of the group (e.g. at holding company level). For SIBs with MPE strategies, they have organized their businesses such that there is separability between the different entities to which resolution powers could be applied. In either case, the bank's recovery and resolution plan is designed to ensure resolvability regardless of the number of operating entities. One of the main focus areas of supervisors when assessing resolution plans over recent years has been whether organizational structure impedes resolvability. Therefore, it could be more appropriate for the FSB to account for the credibility of SIBs' recovery and resolution plans – as assessed by resolution authorities in CMGs – to measure the progress made in reducing any financial stability implications of SIBs' organizational complexity since the global financial crisis. Supervisors and resolution authorities have the power to challenge an individual firm's organizational design and complexity if they are concerned that it poses a risk to effective management, supervision or resolution, and their assessment has shown that meaningful progress has been made by banks globally to address material impediments to resolvability.[45]

Additionally, as discussed in Annex E of the FSB's Report, the literature commonly delineates between business, organizational and geographic complexity. In terms of business complexity, the G-SIB assessment methodology,[46] contains some summary measures: (i) notional amount of over-the-counter derivatives; (ii) level 3 assets; and, (iii) trading and available-for-sale securities.

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[41] Some of the drivers are discussed in Section B of IIF 2019 (November).

[42] For example, U.S., Regulation YY requires Large Foreign Banking Organizations to form a U.S. intermediate holding company. The EU Capital Requirements Directive V requires institutions of a third-party group to have a single intermediate EU parent undertaking when it has more than two institutions inside the Union.

[43] IMF 2018. *"Global Financial Stability Report"* (October). *Special Feature: International Banking Groups—Centralized versus Decentralized Business Models.*

[44] Technical Appendix. Page 206: *"Additionally, requirements in certain jurisdictions to operate via subsidiaries rather than branches could in principle lead to a shift from branches to subsidiaries, which however should not be necessarily and per se interpreted as increasing the corporate complexity of G-SIBs."*

[45] For example, see US Agency Feedback Letters for 2019 here and EBA 2020. *"Resolution Colleges Annual Report 2019"* (September).

[46] See Basel SCO 40 here.

As the FSB discusses on page 59 of the Report, these indicators have shown a clear declining pattern since implementation of the framework.[47]

It is important that the FSB's conclusions do not ignore the large reductions in practical complexity of G-SIBs; nor should the conclusions ignore the realizable benefits from certain types of complexity to firm resilience, financial stability and the wider economy. The academic literature has shown positive effects of complexity including income diversification, business synergies and liquidity risk reduction.[48] As a practical example, after the first few months of the COVID-19 crisis, we have seen that many large banks with diversified sources of income have benefited from net gains on their fixed-income portfolio and investment banking activities, which have somewhat offset the significant increase in provisioning on loan books due to the pandemic-related downturn and measures such as the provision of payment moratoria to borrowers.[49]

The relationship between complexity and risk is a complex one that depends on firm-specific factors such as governance. The FSB analysis does not attempt to determine 'optimal' bank complexity, taking account of the different types of complexity and benefits vs. costs. Therefore, we would respectfully suggest that the FSB presents these nuances more clearly in the report's conclusions.

***The following section relates to Questions 2, 3, 6, 10 and 11 in the Report.**

Coverage of market fragmentation in the Report

The Report's Executive Summary takes a relatively strong position on market fragmentation, but there is little evidence advanced in support of this position beyond an outline of the key concepts. The discussion focusses narrowly on internal TLAC (and separately on cross-border credit) and does not explore other elements of fragmentation. We believe this is inconsistent with the broader FSB and IOSCO efforts to better understand and address fragmentation.

The issue of market fragmentation is treated in two themes in the Report: cross-border credit provision and ring-fencing of internal TLAC. We focus here on the latter topic.

The Report presents a theoretical discussion of the topic of internal resource allocation and constraints, but advances no evidence to confirm or deny the existence of a significant challenge. For bank internal structure, this is unfortunately an intrinsically difficult task given the lack of public data, absent extreme events like premature failure of a G-SIB.[50] However, widespread input from our membership suggests that these constraints pose a significant practical challenge today.[51] For example, as the FSB states in the Report, the industry agrees that *"(o)ne of the drivers of*

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[47] See G-SIB Framework: Denominators which can be accessed from here.
[48] For example, see Correa and Goldberg 2020 (June). Also see IIF 2019 (November).
[49] As seen in mid-2020 earnings publications. See FT article 2020. *"Four trends from the bank earnings season."* (August 5).
[50] Public data would arise in the event of the premature failure of a modern G-SIB and a subsequent post-mortem, but we hope such an even will not provide data for many years; otherwise confidential supervisory information would be necessary.
[51] This point was raised by industry participants during the FSB's public workshop on September 4, 2020.

such market fragmentation could be the ring-fencing of liquidity and capital resources within local markets".[52]

The issue of fragmentation has been acknowledged by the FSB and IOSCO in their separate 2019 reports addressing market fragmentation, which examined areas such as *"trading and clearing of OTC derivatives across borders; banks' cross-border management of capital and liquidity; and the sharing of data and other information internationally"*.[53] The premature conclusions in the TBTF Consultation Report – which focuses narrowly on internal TLAC as a source of market fragmentation, and does not explore other ways in which the TBTF reforms may have contributed to market fragmentation[54] – are at odds with the ongoing FSB/IOSCO investigations into this important topic.

We would respectfully suggest that the final report reconsiders the conclusion that *"the evaluation does not support [the] claim"*[55] that internal TLAC requirements could drive fragmentation. This is preemptive and not supported by evidence presented in the Consultation Report. The Report states that: *"Committing these resources [loss absorbing and recapitalisation capacity] can, however, reduce the amount of resources that can be freely distributed within a group to respond to business or regulatory needs. As a result, some market participants have expressed concerns that internal TLAC requirements can lead to market fragmentation. Evidence on the effects of internal TLAC is not yet available."*[56] The Report therefore is only able to consider *"the potential benefits and costs"*[57] of internal TLAC in a qualitative way.

In the qualitative discussion of benefits and costs, the Report discusses the benefits of internal TLAC to achieve a cooperative arrangement.[58] However, we would argue that the current situation in terms of internal TLAC calibration by different authorities does not represent a fully cooperative outcome. As some jurisdictions have defaulted to the most stringent calibration in the TLAC term sheet range (i.e. 90%, or even higher as is the case in the European Union[59]), this has lowered the flexibility of the parent to allocate resources around the group – increasing misallocation risk and therefore the risk of bank failure.[60] Excessive pre-positioning of resources

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[52] FSB Report. Page 64.
[53] FSB 2019 (June). IOSCO 2019 (June).
[54] The approach taken in the consultation report is narrower than may have been anticipated from reading the Terms of Reference, where one of the objectives of the evaluation was stated as [emphasis has been added]: *"Examine broader effects (positive or negative) of the reforms on the financial system. This involves analysis of the extent to which reform-induced changes in SIBs' structures and activities have impacted overall financial system resilience and structure, the functioning of financial markets,* ***global financial integration (including issues related to market fragmentation)****, or the cost and availability of financing."*
[55] FSB Report. Page 8.
[56] Ibid. Page 65.
[57] Ibid.
[58] Ibid. Page 66.
[59] FSB 2019. *"Review of the Technical Implementation of the Total Loss-Absorbing Capacity (TLAC) Standard"* (July). Pages 24-25. Hereafter referred to in footnotes as "FSB 2019 (July)".
[60] The FSB Report dismisses industry analysis of this additional risk as "unrealistic" because it assumes no host preplacement. However, the industry report cited (Ervin 2017. *"The Risky Business of Ring-Fencing"* (December)) actually discussed and quantified a wide range of structures that employ some degree of host preplacement requirements, in an attempt to start a grounded conversation on these trade-offs.

also reduces the ability of financial institutions to let capital flow freely to its most productive use.[61] Further, the calibration of internal TLAC requirements for material sub-groups affects the *de facto* calibration of TLAC at the group level. It is likely that the sum of the individual internal TLAC requirements of subsidiaries will be greater than the 100% TLAC requirement for the consolidated balance sheet of some parent companies.[62] The Report even recognizes this issue as one continuing obstacle to resolvability, noting that: *"The FSB's 2019 review of the technical implementation of the TLAC standard concluded that important challenges remained for home and host jurisdictions to ensure the appropriate distribution of internal TLAC, and to ensure balance between TLAC resources that are prepositioned at material subsidiaries or subgroups as internal TLAC, and non-prepositioned resources that would be readily available to be deployed flexibly where needed in times of stress."*[63]

For a bank's critical resources more generally – capital, liquidity and TLAC – certain trends, especially geographical ring-fencing of capital and liquidity, can increase the difficulty of coordinated action and undermine confidence in the newly developed global resolution framework. Examples include:

- Geographic ring-fencing requirements (U.S. FBO, EU IPU).
- Local super-equivalence to global standards via stress testing and Pillar 2 requirements, and the broader application of TLAC in the EU through MREL requirements.
- Moves to set internal TLAC requirements at the upper end of the 75%-90% range in the TLAC term sheet (and effectively beyond that range as well) despite recognition by several authorities that there are benefits in being at the lower end of the range; and,
- Pre-positioning requirements of Resolution Liquidity Adequacy and Positioning and Resolution Liquidity Execution Need with which U.S. G-SIBs must comply, which require firms to assume severe local and cross-jurisdictional ring-fencing assumptions.

Signs of issues due to fragmentation can be seen in case studies. For example, reduced competition, liquidity and resilience contributed to the September 2019 repo market turmoil in the U.S.[64], and lower market liquidity had wider repercussions across markets in the March 2020 market stress (see 'COVID-19 Box 1'). During the COVID-19 crisis, some regulatory interventions further inhibited the flow of capital and liquidity between group entities. For example, through constraints on internal dividend payments within a group,[65] which are used as a means of

[61] As observed by Randal K. Quarles in *"Government of Union: Achieving Certainty in Cross-Border Finance"* (September 26, 2019). Remarks at FSB Workshop on Pre-Positioning, Ring-Fencing, and Market Fragmentation.

[62] This can occur if the subsidiaries have varying constraints and business models, for example if some are constrained by leverage, others by RWA, and others by stress test requirements. This shows that the interaction of internal TLAC requirements can result in effective TLAC requirements that far exceed FSB recommendations. Estimates from Credit Suisse show that the implicit requirements for TLAC for U.S. Intermediate Holding Companies exceed 130% on average (based on FR Y-9C data).

[63] FSB Report. Page 29. See also FSB 2019 (July).

[64] Ip 2019. *"Reforms Have Made Banks Safer but Markets More Brittle"* Wall Street Journal article (September 25); and Covas and Nelson 2019. *"Bank Regulations and Turmoil in Repo Markets"* (September).

[65] In July, the FSB advised authorities to consider market fragmentation as they implement capital policies in response to COVID-19: *"While capital released in a home jurisdiction can have positive externalities*

allocating capital between group entities as needed. In terms of the related post-crisis reform agenda, there is also observed fragmentation in OTC derivatives requirements and poor CCP recognition and deference processes between authorities.[66] Research has shown that fragmenting clearing across multiple CCPs is costly due to reduced netting opportunities and can introduce price distortions.[67]

Given that it is intrinsically difficult to observe evidence of the effects of internal TLAC from external data, we would recommend that the report refrain from any definitive conclusions on internal TLAC and market fragmentation more broadly. It would be more appropriate and aligned with the broader FSB work programme if the final TBTF evaluation report were to recommend that the calibration of internal TLAC, as well as other key resources like liquidity and capital, are further analyzed. We believe, based on our knowledge of the internal constraints that our members must each meet, that these issues are meaningful and warrant continued attention.

The industry considers that there is a need to develop an improved global consensus among regulators and with the FSB on resource allocation between home and host authorities in relation to internal TLAC, capital and liquidity – one that moderates the current demand for "host certainty" with a better balanced degree of "home flexibility".[68] As well as trust building, the regulatory community can explore other ways to achieve a better balance of home flexibility and host certainty. For example, it could be productive to clarify home and host roles and resource distribution playbooks should a bank enters a zone of high stress. In the case of TLAC, the FSB and national authorities could explore the use of contractual mechanisms like collateralized guarantees provided by a parent on borrowing by its subsidiaries, such as Secured Support Arrangements which are already used in the U.S. These would allow for the contractual "positioning" of dedicated assets without *ex ante* pre-positioning of resources and the related costly market fragmentation.[69] In terms of liquidity, more work could be done to establish international guidance on the pre-positioning of liquidity within a group.

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across all jurisdictions, excessive capital retention at the level of an individual subsidiary level could reduce financial institutions' resilience and efficient allocation of funds. As the timing and severity of the pandemic vary across countries and regions, approaches taken in each jurisdiction and the recovery also vary. This timing difference could cause fragmentation across jurisdictions." FSB 2020. *"COVID-19 Pandemic: Financial Stability Implications and Policy Measures Taken: Report submitted to the G20 Finance Ministers and Governors"* (July). Hereafter referred to in footnotes as "FSB 2020 (July)".

For a summary of the measures taken by the global standard setting bodies, G20 members and other leading financial jurisdictions see *"IIF COVID-19"* and navigate to the 'COVID-19 Regulatory Measures' file, which is updated on a daily basis.

[66] IIF 2019 (November).

[67] Benos et al. 2019. *"The Cost of Clearing Fragmentation"* (December). BIS Working Papers No 826.

[68] The balance between host certainty and home flexibility were discussed by U.S. FRB Vice-Chairman and FSB Chairman Randal Quarles in a 2018 speech, "*Trust Everyone—But Brand Your Cattle: Finding the Right Balance in Cross-Border Resolution*" (May 16).

[69] Also discussed in IIF 2019 (November).

***The following section relates to Questions 3, 6, 10 and 11 in the Report.**

Overarching comments on the cost-benefit analysis in the Report

From a methodological perspective, although rigorous, the FSB has taken a narrow and technical approach to the cost-benefit analysis. This leads to the dismissal of some channels for social costs and of certain evidence.

A **social cost-benefit analysis of this scale** is extremely challenging for numerous reasons, including the:

- Wide range of measures, many of which have been recently introduced and implemented at different times and in different ways across countries.
- Number of other reforms which have occurred at the same time, which have also had significant effects although the FSB did not scope these into this evaluation (such as the Basel III reforms and G-SIB buffer framework and methodology).
- Range of firms across which the FSB is examining impacts (G-SIBs and D-SIBs with different business models from 24 diverse economies); and the
- Number of ways in which regulation can generate social costs. Although the FSB has focused on the lending channel, banks provide several important economic services that are affected by regulation. Other key economic services include deposit taking, payments, clearing, custody and settlement, wholesale funding markets activities, capital markets/investment activities.[70]

For these reasons – as also recognized by many policymakers[71] – **it is often not possible to attribute causal effects to policies. Given this practical challenge, we would urge the FSB and other standard setting bodies to give more weight to preliminary evidence, particularly where 'hard' causal evidence is, as yet, unavailable.** We believe that it is important to take a forward-looking approach to identifying and responding to evidence to avoid significant unintended consequences in the medium term.

Specific comments on the cost-benefit analysis

Taking a broader view in the cost-benefit analysis – looking at all the evidence and indicators – the social costs of the TBTF reforms (combined with other related post-crisis reforms) have been material. We would suggest that the final Report takes a broader view

[70] FSB 2013. *"Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Identification of Critical Functions and Critical Shared Services"* (July). These functions, in addition to lending and loan servicing, amount to the five broad categories the FSB has defined as critical functions for the purposes of recovery and resolution planning.
[71] For example, Buch 2019. *"Evidence-based policy: Progress and Next Steps[1]"* (September). *"We need to understand the drivers of inflation, productivity and growth, the role of policy, the effects of post-crisis financial sector reforms, and, more generally, the effectiveness of policies that internalize externalities – be it in the financial sector or with regard to environmental spillovers. Not all of these questions can be answered with hard, causal evidence. But learning how the economy is functioning, and understanding the mechanisms and incentives through which policy instruments affect the way people and firms behave is crucial."*

of the cost-benefit analysis and accounts for some specific points when finalizing conclusions from the evaluation. We would point to the following specific issues.

Measuring the social benefits of the TBTF reforms. The cost-benefit analysis follows a standard assumption in the literature that bank capital provides social benefits by reducing the likelihood of a financial crisis, but that the marginal benefit of additional capital diminishes as the level of banking system capital increases. The FSB analysis measures the benefits of the additional capital required on account of the TBTF reforms as a less than 10% increase in the average CET1 ratio, from 7% to 7.59% where the 7% starting point is the baseline CET1 capital requirement for a non-G-SIB (including the capital conservation buffer). However, as already discussed above, Basel monitoring data show that the largest internationally active banks globally now have nearly twice as much CET1 capital resource as in 2011, partly driven by changes in capital requirements and much tougher RWA measurement. To accurately measure the marginal benefit of the additional capital raised by SIBs due to the TBTF reforms, it would be necessary to measure the marginal increase in capital starting from today's much higher level of CET1. The analysis of the net social benefits of the TBTF reforms is strongly influenced by the CET1 starting point, and therefore should use a baseline that is more consistent with actual capital levels in the banking system today.

Impact of TBTF reforms on lending. In general, the FSB suggests that the TBTF reforms did not materially affect aggregate lending, despite a fall in the share of credit/GDP by SIBs. However, it is not clear that the Report investigated the appropriate question to deliver evidence in support of that conclusion. The Report investigated the general trends in credit/GDP before and after the reforms, but the relevant question is whether the credit supply was sufficient to meet credit demand in the post-crisis period and, if it was constrained, was that due to TBTF reforms constraining bank lending?

Role of NBFIs in credit intermediation. While it is not clear that the Report proves that non-bank finance may have "*picked up the slack*"[72] in terms of meeting some post-crisis lending demand (see previous paragraph on the impact on lending), it does show that non-bank financing has increased in many countries over the past 10 years or so. In their cost-benefit analysis, the FSB does not directly account for changes in the regulatory perimeter and potentially higher risks from NBFIs as an indirect consequence of the TBTF reforms on banks, although it does account for increased lending by NBFIs to discount the social costs of the reforms. This asymmetry in the analysis should in our view be corrected.

As stated in the TBTF Report:

> *"As non-bank financial institutions have picked up market share, some risks have moved outside the banking system. This shift may enhance the stability of the financial system, partly because it may lead to a diversification of funding sources. However, it could also be a source of financial instability. The evaluation has not examined the implications for non-bank financial intermediaries, but the findings on the banking sector reinforce the importance of continuing work by the FSB and standard-setting bodies to assess*

[72] FSB Report. Page 7.

vulnerabilities and develop policy recommendations designed to address related financial stability risks." [73]

This suggests that, if the FSB had taken a broader scope in the cost-benefit analysis, it would likely have reduced the measured net benefits of the TBTF reforms. The approach taken here by the FSB in the TBTF evaluation is at odds with the broader FSB monitoring in this area, which has been ongoing for several years and has focused on *"[NBFI] credit intermediation activities that may pose bank-like financial stability risks (ie credit intermediation that involves maturity/liquidity transformation, leverage or imperfect credit risk transfer) and/or regulatory arbitrage*".[74]

Reduced liquidity in some key markets, including repo and certain fixed income markets. The FSB's analysis of social costs focuses largely on credit provision, but banks provide a number of other economic services. For example, large banks play a key role in capital formation and market making. The social cost of disruptions to these activities can be important, as manifested in the March/April market disruptions following the COVID-19 shock. It is notable that the implications of TBTF reforms on market liquidity are not discussed at all in the FSB's Report, even though the topic has received considerable attention in the literature and by regulatory authorities over recent years.[75] As well as reducing market efficiency and access for certain clients, lower liquidity can increase market fragility during stress periods. There are examples of this, including during the severe market stresses in March 2020 following the COVID-19 shock (see Box 1).[76] Reduced liquidity in repo and corporate bond markets has been partly attributed to post-crisis regulation including in two reports by the BIS Committee on the Global Financial System.[77]

Impact on bank business models and reduced profitability. The Report excludes the possibility that low profitability for major firms in the banking industry can generate social costs. However, we would argue that long-term low profitability can generate social costs by having an impact – for example, higher end pricing or withdrawal of services – on the many channels through which banks provide critical economic services, and due to less organic capital generation and franchise value to absorb shocks.[78] Low profitability can present additional challenges during severe global

[73] FSB Report. Page 69.

[74] See for example FSB 2011. *"Shadow Banking: Strengthening Oversight and Regulation"* (October) and FSB 2020. *"Global Monitoring Report on Non-Bank Financial Intermediation 2019"* (January)

[75] Bank of England 2016. "*Financial Stability Report*" (July). See chapter on 'Developments in market liquidity'; ESRB 2016. *"Preliminary investigation into the potential impact of a leverage ratio requirement on market liquidity"* (October); Duffie 2016. "*Submission in Response to U.S. Treasury Notice Seeking Public Comment on the Evolution of the Treasury Market Structure*" (April); Ip 2019. *"Reforms Have Made Banks Safer but Markets More Brittle"* Wall Street Journal article (September 25); and Covas and Nelson 2019. *"Bank Regulations and Turmoil in Repo Markets"* (September).

[76] Another example was from the September 2019 repo market stress. The IMF and other commentators partially attributed that spike in repo rates to the more inelastic supply of repo funding by banks "likely reflecting both tighter regulation and supervision and more conservative internal risk controls following the global financial crisis". See IMF 2020. *"Global Financial Stability Report"* (April). Annex 1.1.

[77] BIS Committee on the Global Financial System 2016. *"Fixed Income Market Liquidity"* (January); BIS Committee on the Global Financial System 2017. *"Repo market functioning"* (April); BIS Committee on the Global Financial System 2016. *"Structural changes in banking after the crisis"* (January); PWC 2015. *"Global financial markets liquidity study"* (August).

[78] Xu et al. 2019. *"Bank Profitability and Financial Stability"* (January). IMF Working Paper No. 19/5, page 26.

stresses such as the one caused by the COVID-19 crisis. As we have already seen in the ongoing COVID-19 crisis, banking systems globally have been and will continue to be an important part of the short- and long-term crisis response by providing support to their clients and the real economy – and in most cases the direct channel through which governments are supporting economies. However, this can expose banks to risks and higher losses in the process. In the context of banking system profitability being under pressure in some regions, wide-spread and severe shocks such as COVID-19 can challenge the long-term viability of business models at some banks.[79]

Market fragmentation. The FSB's Terms of Reference stated that the TBTF evaluation would examine issues related to market fragmentation and the FSB also stated in an October 2019 update on its work on market fragmentation that "*the [TBTF] evaluation will explore whether and how resolution reforms (including TLAC) affect G-SIBs' cross-border presence and management of capital resources for home and host jurisdictions, and what the implications may be for financial stability.*"[80] As discussed above, the issue of market fragmentation is treated in two themes in the Report: cross-border credit provision and ring-fencing of internal TLAC. On the latter topic, the Report focuses narrowly on internal TLAC and does not explore other sources of market fragmentation. In general, fragmentation resulting from excessive regulatory and supervisory divergence can endanger financial stability by trapping capital, liquidity and risk in local markets, and reduce overall resilience. This also creates significant financial and operational inefficiencies that generate unnecessary costs to end-users, and reduce the capacity of financial firms to serve both domestic and international customers.[81] Taking a broader approach in the assessment of market fragmentation would likely show an increase in the measured social costs.

[79] In presenting the ECB's COVID-19 vulnerability analysis, Andrea Enria commented during a *"media briefing"* on the link between profitability and a bank's ability to absorb shocks in severe macroeconomic scenarios: *"For instance, one of the results highlighted in our findings is that more profitable banks are better able to take on the shock of the severe scenario. This is not a surprise, of course. The generation of profits is the first line of defense for a bank in difficult macroeconomic conditions."* (July 28, 2020).

[80] FSB 2019. *"Updates on the Work on Market Fragmentation"* (October).

[81] FSB 2019 (June). Page 4. *"Market fragmentation can manifest itself in a number of ways. One symptom may be a limited presence of foreign providers of financial services within a given jurisdiction. Another may be a reduction in cross-border capital flows and/or the existence of multiple prices for the same or economically similar financial assets across different jurisdictions or markets. A further symptom may be the segregation of levels of capital and liquidity within local markets that go beyond those commensurate with local risks, or a reduction in the availability of financial services for end-users."*

***The following section relates to Questions 2 and 11 in the Report.**

Suggestions for the global forward agenda

We request that the FSB consider the points outlined in this response when finalizing the TBTF evaluation, and when drawing up the forward agenda of the FSB and global standard setting bodies. The Industry supports the view that the *"G20 financial reforms have delivered a safer, simpler and fairer financial system" and "(i)t is critical to maintain momentum and avoid complacency in order to achieve the goal of greater resilience"* as noted in the FSB's 2020 work programme.[82] We think priorities for the forward agenda should include the following, many of which are either already underway or planned by the FSB, or otherwise indicated as important in the FSB's Consultation Report and other recent publications.

As indicated in the Report or planned by the FSB:

- Ongoing implementation and evaluation by the official sector to make progress on going-concern **cross-border coordination and cooperation** and practical preparedness for any future resolution scenarios, with a particular emphasis on **cross-border aspects in resolution planning. Greater transparency by resolution authorities** could be a helpful mechanism to encourage progress in some areas.

- **Work by authorities on operational continuity and access to FMIs in resolution.** As noted in the Report: *"A bank in resolution needs to continue to have access to FMIs (for example payments systems and CCPs) in order to continue to carry out its critical functions and meet obligations. Many jurisdictions are still working on financial and operational continuity and access to FMIs in resolution, but in most cases, this is at an early stage and is focused on G-SIBs only."*[83] The banking industry has made significant efforts to ensure operational continuity with their network of FMIs, but more is still needed in terms of globally consistent engagement between FMIs and resolution authorities on this issue.

- As indicated in the FSB's Report, **continued review of the financial stability implications of a shift in credit intermediation to NBFIs and work on a mapping exercise to understand the critical connections between the banking and non-bank sectors.**[84] We welcome the FSB's planned *"post-mortem of the market turmoil in March 2020"*[85] and the planned **evaluation into the effects of Money Market Fund reforms**.[86]

- A **holistic review of the market disruption after the COVID-19 shock**, which the FSB will present to G20 leaders by November 2020.[87]

[82] FSB 2019. *"FSB work programme for 2020"* (December). Hereafter referred to in footnotes as "FSB 2019 (December)".
[83] FSB Report. Page 29.
[84] See 'Reprioritisation of the FSB work programme' section here.
[85] Ibid.
[86] FSB 2019 (December).
[87] See footnote 6.

Already underway at the FSB:

- **Work to complete CCP resilience, recovery and resolution policy**. As remarked in the FSB Report "*CCPs are increasingly important for financial stability. A substantial amount of work has therefore been - and continues to be - devoted to maintaining their resilience, identifying options for their recovery and ensuring that they are resolvable. It is important that this continues and the work on CCP resolution is completed*."[88] We agree that some important issues remain to be addressed in international regulatory standards for CCPs to ensure that CCPs are appropriately capitalized, credible CCP resolution strategies are in place and that there is sufficient transparency around risks to clearing members and end users, including in recovery and resolution.[89] More can be also be done in terms of improving cross-border coordination between authorities, including completing the establishment of CMGs, developing playbooks and conducting resolution simulation exercises.[90]

- Continued monitoring and investigation into the causes of and ways to address **market fragmentation**, building on the work that has already been undertaken by the FSB and bringing in any new examples that have emerged during the current COVID-19 crisis (such as the challenges of capital and liquidity requirements).[91] The industry considers that there is a need to develop an improved global consensus among regulators and with the FSB on resource allocation between home and host authorities in relation to internal TLAC, capital and liquidity.

Additional suggestions for the forward agenda:

- A **holistic review of the design and calibration of the G-SIB buffer framework**. As discussed above and in 'COVID-19 Box 1'. Equally, some national authorities may want to revisit the design and calibration of their D-SIB buffer frameworks. This could take place as part of the next BCBS review of the G-SIB methodology. A broader holistic evaluation of the Basel III buffer framework would also be valuable in light of the COVID-19 experience, for example as part of the Basel Committee's recently announced evaluation of its post-crisis reforms.[92]

- An investigation into the impact of the suite of post-crisis and TBTF reforms on **market liquidity**. We note that the UK Financial Policy Committee stated in its August 2020 Financial Stability Report that it has "*identified the need for further work domestically and internationally to examine … limits to dealers' capacity to intermediate markets"* and other factors affecting

[88] FSB Report. Page 7.
[89] IIF 2020. *"Response to the FSB Consultation Paper "Financial resources to support CCP resolution and the treatment of CCP equity in resolution"* (August).
[90] See FSB 2019. *"2019 Resolution Report – "Mind the Gap""* (November). As of end-2019, for the 13 systemically important CCPs, only 11 have CMGs, only 5 have Cooperation Agreements and credible resolution plans are still lacking in many jurisdictions.
[91] FSB 2020 (July). *"While capital released in a home jurisdiction can have positive externalities across all jurisdictions, excessive capital retention at the level of an individual subsidiary level could reduce financial institutions' resilience and efficient allocation of funds."*
[92] BCBS 2020. "*Basel Committee approves annual G-SIBs assessment, updates workplan to evaluate post-crisis reforms.*" Press release (September 25).

the provision of market-based finance, including the role of NBFIs and links between the banking and non-banking systems.[93]

***The following Box relates to Questions 5, 6, 8 and 10 in the Report.**

Box 1: Financial stability observations from COVID-19, which are relevant to the FSB's TBTF evaluation[94]

Banking systems globally entered this crisis having built up a high level of resilience and they have been able to maintain confidence through this highly uncertain period. As remarked by the Bank of England: *"The core banking system remained resilient, largely due to reforms introduced in the decade after the global financial crisis, which have significantly improved the ability of UK and other banking systems to absorb losses while continuing to lend to the real economy."*[95]

During the ongoing COVID-19 crisis, the banking industry has also shown its commitment to being a key part of the solution and is dedicating enormous resources to help minimize the economic fallout globally. The industry embraced its role as provider of credit and liquidity to the economy and responded to calls from policy makers to take on additional risk and balance sheet usage, including by lending to firms and households. This constructive response has been recognized by the FSB and other authorities.[96]

The COVID-19 crisis has shown the continuing importance of the banking system to support clients and the broader economy. Banking systems have remained well capitalized and liquid, as well as operationally resilient. So far, no significant banks have failed. Many government and central bank support measures have been executed through the banking system.[97]

COVID-19 crisis has arguably been the first major global test of the post-global financial crisis regulatory framework, including the TBTF reforms.[98] Some initial observations include:

- During the market stress that began in March 2020, many entities, especially NBFIs, sought to raise cash urgently (including money market funds, open-ended funds, and leveraged hedge funds). In addition, CCPs [99] and other intermediaries raised initial margin

[93] Bank of England 2020. *"Financial Stability Report"*. (August). Hereafter referred to as "Bank of England 2020 (August)".
[94] There are many other observations about the functioning of post-crisis regulation during the COVID-19 crisis, but we focus here on those that relate to systemically important institutions and other issues relevant to the TBTF evaluation.
[95] Bank of England (2020).
[96] Ryozo Himino 2020. "*Introductory remarks at FSB Virtual Meeting on Policy Responses to COVID-19*" (May). FSB 2020 (July).
[97] See *"IIF COVID-19"* and navigate to COVID-19 Global Policy Response Summary, which is updated on a daily basis.
[98] Although, as discussed in the FSB report, there have been idiosyncratic cases of bank distress and failure in recent years.
[99] BIS 2020. *"The CCP-bank nexus in the time of Covid-19"* (May).

requirements substantially (an average increase of 67% over 2020 Q1).[100] The Bank of England summarized this period as the "Dash for Cash".

- At the same time that demand was spiking, many bank broker-dealers were constrained in their ability to intermediate in this urgent rebalancing.[101] This has been attributed to various restrictions including leverage ratio (LR), LCR, G-SIB surcharges, procyclical RWA increases, legal entity constraints and sometimes the combination of the above.[102] A sharp increase in demand met a relatively constrained supply, leading to the significant disruptions observed in many markets.

- The ability to use Basel III buffers is being tested in a global crisis for the first time. Despite helpful statements about the usability of buffers from the BCBS and individually by some central banks, some challenges to buffer usability have been observed. Certain buffers – particularly systemic buffers - appear to be less 'usable' than others like the countercyclical or capital conservation buffers. The prospect of future G-SIB buffer increases due to the 'footprint' of the Crisis and response measures on banks' balance sheets is a medium-term concern, which could have a procyclical effect.

- Regulatory authorities across the world have needed to deploy hundreds of measures,[103] including policy adjustments, to address these issues and enable the banking system to play a more countercyclical, shock-absorbing role. In general, a high degree of regulatory and supervisory coordination has been demonstrated, which has contributed very positively to the effectiveness of measures taken. However, some regulatory interventions further inhibited the flow of capital and liquidity between group entities. For example, through constraints on internal dividend payments within a group, which are used as a means of

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[100] Bank of England 2020 (August). Figure for non-UK CCPs; the Bank of England noted that UK CCPs reported similar increases in initial margin.

[101] For example, see BIS 2020. *"US dollar funding markets during the Covid-19 crisis - the money market fund turmoil"* (May). Also noted in Bank of England 2020 (August). Page 74: *"While dealers did not immediately step back as the demand for liquidity surged, evidence suggests their capacity was constrained, including in the US Treasury and gilt markets — so the cost of trading spiked and market illiquidity intensified just as market participants were seeking the cash to meet those margin calls."*

See also Duffie 2020. "*Still the World's Safe Haven? Redesigning the U.S. Treasury market after the COVID-19 crisis*" (June).

See also article by Justin Baer, Wall Street Journal 2020, *"The Day Coronavirus Nearly Broke the Financial Markets"* (May 20): "*In one prominently reported anecdote, on March 16, when Vikram Rao, the head bond trader of Capital Group, asked executives that he knew at many of the big banks "for an explanation on why they wouldn't trade, they had the same refrain: There was no room to buy bonds and other assets and still remain in compliance with tougher guidelines imposed by regulators after the previous financial crisis. In other words, capital rules intended to make the financial system safer were, at least in this instance, draining liquidity from the markets. One senior bank executive leveled with him: 'We can't bid on anything that adds to the balance sheet right now.'*"

[102] Council on Foreign Relations, Blog Post 2020. *"Revisiting the Ides of March, Part III: Scary Stories to Tell in the Dark"* (July) and BPI 2020. *"The LCR Catch-22 — to Disclose, or Not to Disclose"* (July).

[103] See *"IIF COVID-19"* and navigate to COVID-19 Regulatory Measures, which is updated on a daily basis. Also see FSB 2020. *"COVID-19 pandemic: Financial stability implications and policy measures taken – Report to the G20"* (July). Where "(a)s of 30 June, FSB members have submitted more than 1,500 entries to the FSB repository of policy measures"

allocating capital between group entities as needed, and similar constraints on the movement of liquidity between entities.

We encourage policy makers to examine the COVID-19 crisis and consider what lessons can be learned about the current global regulatory framework. While ad-hoc measures will always be needed to address the specifics of a crisis, we should be able to improve the framework and reduce the scale and urgency of required action. We suggest a focus on a few elements, including: procyclicality of capital measures and liquidity (e.g. initial margin), the design and usability of buffers, the challenges of legal entity fragmentation, and the interactions of requirements (such as LR, LCR and G-SIB surcharges). We therefore welcome the Basel Committee's recently announced update to its work programme to evaluate its post-crisis reforms, incorporating lessons learned from the COVID-19 crisis.[104]

A crisis of this severity is a natural test of the credibility of resolution reforms. Different data sources indicate that TLAC debt is behaving as a 'normal' credit-bearing debt class. For example, data on U.S. G-SIBs shows that spreads on comparable holding company and operating company debt spiked in March 2020 with holding company spreads taking longer to return to pre-COVID levels, likely indicating the higher perceived likelihood of negative tail events and potentially bail-in.[105] (See Annex for further evidence.)

In the final phase of its TBTF evaluation, the FSB could explore data from the COVID-19 crisis for further evidence about the credibility of the TBTF reforms during a period of heightened stress.

[104] BCBS 2020. "*Basel Committee approves annual G-SIBs assessment, updates workplan to evaluate post-crisis reforms.*" Press release (September 25).
[105] Also see BPI 2020. *"Putting "Too Big to Fail" to Rest: Evidence from Market Behavior in the COVID-19 Pandemic"* (September 9). This article measures how the pandemic affected U.S. G-SIB bank funding costs, namely the behavior of unsecured bond spreads, compared to funding costs for non-GSIBs during 2020. One of the results is that spreads of G-SIBs showed a stronger response to changes in the economic outlook relative to the spreads of non-GSIBs during the early stages of the COVID-19 pandemic.

Annex: Additional evidence on the TBTF subsidy

***The Annex material relates to Questions 1, 3, 5 and 8 in the Report.**

Other market-based measures show that the cost of SIB funding is now sensitive to its riskiness. In recent years, large U.S. and European banks' debt has been trading roughly in line with - or a bit wider than - comparable industrial debt spreads, whereas banks often traded below industrials before the global financial crisis perhaps because of perceptions of TBTF (see Figures 2 and 3). After a generalized spike in all spreads in 2008-09, a new equilibrium was reached where banks became a relatively "normal" credit class and the cost of large bank funding has become more sensitive to its riskiness.[106]

This pattern has been stable so far during the COVID-19 crisis, which caused an initial spike in both bank and industrial spreads. These data suggest that markets were not pricing in a TBTF subsidy for large U.S. or European banks during the significant COVID-19 shock.

The U.S. market also provides an interesting one to further explore this topic given that the small bank sector has been subject to FDIC resolution nationwide for many years. The spreads between G-SIBs and smaller banks widened during the global financial crisis, suggesting a perception of increased protection; however, now the average spread for G-SIBs tends to be slightly wider than regional banks. Although Europe is a more heterogenous market, capital markets data shows that European banks trade in a similar fashion to their U.S. peers. The spread relationship in European banks broadly suggest that MREL instruments are trading as expected for a normal credit class.

The FSB Report suggests that, while reforms have reduced perceptions of a TBTF subsidy relative to the peak of the global financial crisis, they may not have achieved significant change relative to the years preceding the global financial crisis. We suggest that the evidence from certain markets, such as the U.S., would support a stronger conclusion that the TBTF reforms have shifted expectations much more strongly, and suggest that any TBTF subsidy is now very small.

[106] After the global financial crisis, spreads on U.S. Agency debt became significantly less volatile (see pale blue line in Figure 2) and compressed towards U.S. Treasury rates as the perceived implicit government guarantee for Agency debt caused investors to price them more akin to government-backed securities such as Treasury bonds.

Figure 2: US Bank vs. US Industrial vs. US Agency: LUCI spread comparison

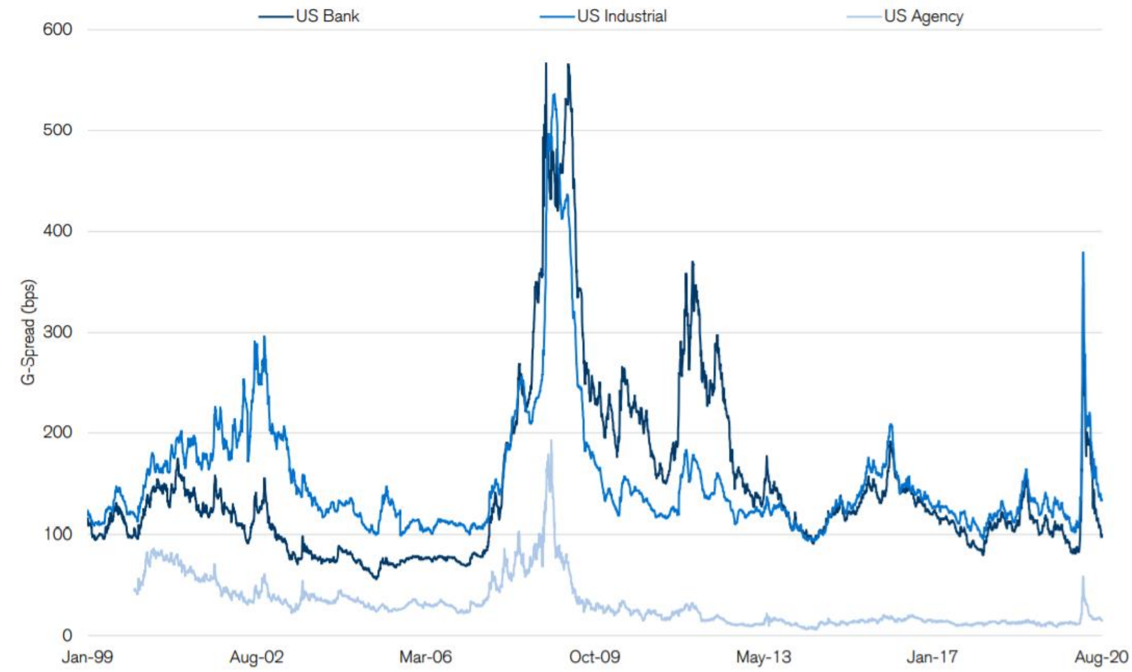
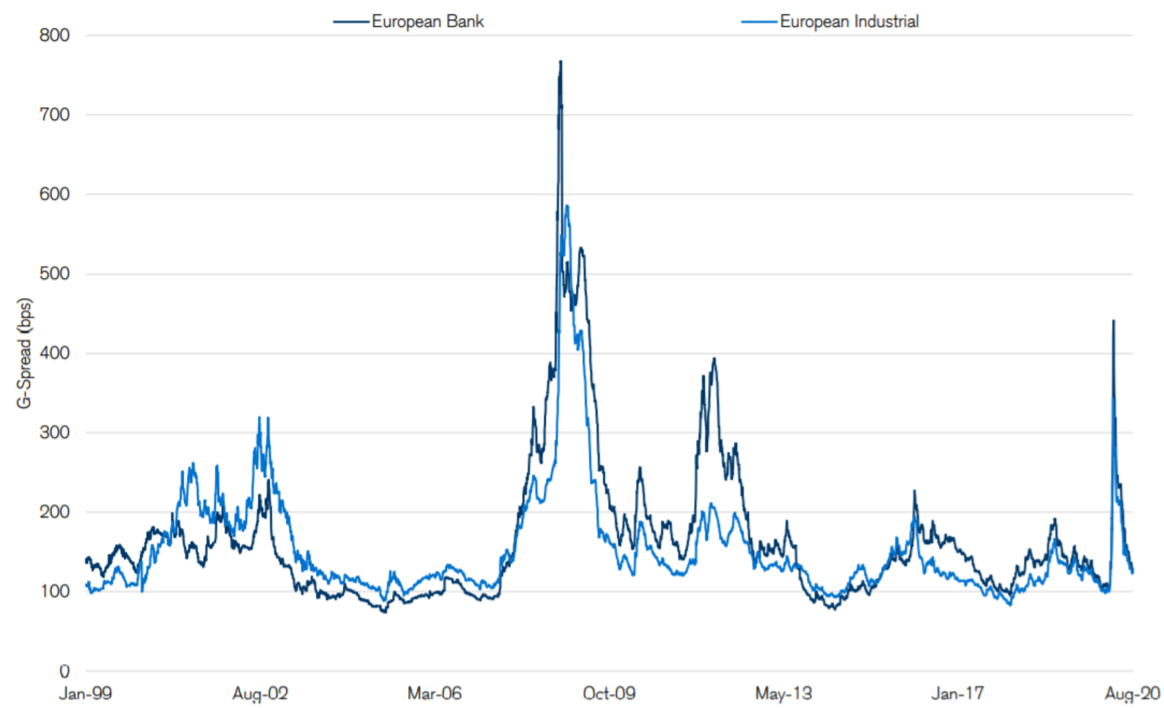


Figure 3: European Bank vs. European Industrial: LUCI spread comparison



Sources for both figures: Credit Suisse, Credit Suisse Liquid USD Corporate Index