Basel Committee
on Banking Supervision

Consultative document

Global systemically important banks - revised assessment framework

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I. Introduction

The Basel Committee on Banking Supervision (Committee) published the global systemically important banks (G-SIB) assessment framework in July 2013.[1] This consultative document seeks feedback from the public on proposals for revising that framework.

G-SIB assessment methodology

The objective of the G-SIB framework is to identify "global systemically important banks" by assessing their contribution to systemic risk and to mitigate the impact of a G-SIB's distress or failure. The two main components of the framework are: (i) a methodology to identify G-SIBs based on their systemic impact; and (ii) the imposition of higher capital requirements on G-SIBs to reduce their probability of failure.

The identification methodology assesses the relative systemic importance of a large sample of internationally active banks on an annual basis via an approach based on 12 indicators in five categories. The categories are equally weighted at 20%, and each category is comprised of sub-indicators, resulting in a score that measures the systemic importance of each bank. The bank's overall score is mapped to buckets that are associated with a higher loss absorbency (HLA) capital requirement. A G-SIB's supervisor may consider ancillary indicators and, as a result, adjust the HLA requirement. For the purposes of transparency and market discipline, the framework requires all banks in the assessment sample to disclose the 12 indicators used to compute the G-SIB score.

As of the most recent G-SIB assessment using end-2015 data, there are four populated buckets and one empty top bucket. The magnitude of the HLA requirement for the highest populated bucket is 2.5% of risk-weighted assets, with an empty top bucket of 3.5% of risk-weighted assets. The higher loss absorbency requirement for the lowest bucket is 1.0% of risk-weighted assets. The higher loss absorbency requirement is met with Common Equity Tier 1 (CET1) capital as defined by the Basel III framework.

The Committee updates the G-SIB list annually based on the G-SIB assessment methodology and submits it to the Financial Stability Board (FSB) for endorsement and publication. The G-SIB list published in November 2016 (based on end-2015 data) comprises 30 banks designated as G-SIBs that are subject to the HLA requirements described above, as well as the following:

- Total Loss-Absorbing Capacity (TLAC) requirements, ie G-SIBs will be required to meet the TLAC standard, resolvability requirements, including group-wide resolution planning and regular resolvability assessments.
- Higher supervisory expectations relating to risk management, risk data aggregation capabilities, risk governance and internal controls.

The review clause of the G-SIB assessment methodology

The G-SIB methodology introduces incentives for banks to change their risk profile and *modus operandi* in ways that reduce their systemic spillover effects. The Committee published its *Global systemically*

[1] BCBS, *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, July 2013, www.bis.org/publ/bcbs255.pdf.

important banks: assessment methodology in July 2013[2] and agreed to review the framework every three years to determine whether any change to the G-SIB assessment methodology may be warranted. The three-year review reflects the Committee's understanding that changes in the financial environment could introduce new dimensions of systemic risk not previously anticipated. Put differently, such a periodic review helps the Committee ensure that the framework remains consistent with its objectives in the light of any structural change to the global banking system or to banks' business models.[3]

The consultation process and next steps

This consultative document seeks comments on two groups of potential changes. In the first group (Section II), the Committee has a clear understanding of how those changes could be reflected in the assessment methodology and the respective HLA requirement. The Committee has assessed the potential quantitative impact of each proposed item in Section II and presents those findings in aggregate. In the second group (Section III), the Committee presents an issue for discussion that would benefit from broader input on the usefulness and potential implications if included in the assessment methodology.

Following the three-month consultation period, the Committee will conduct a comprehensive quantitative impact assessment to analyse the impact of the proposed changes, after which it will publish the revised version of the G-SIB framework. Thereafter, the revised framework will be submitted to the FSB for endorsement.

Any required changes to the standards embodied in the *G-SIB assessment methodology and the higher loss absorbency requirement*[4] and *The G-SIB assessment methodology – score calculation*[5] will be released after the consultation process has concluded. The Committee welcomes comments on all aspects of the consultative document. Comments should be uploaded by 30 June 2017 using the following link: www.bis.org/bcbs/commentupload.htm. All comments will be published on the website of the Bank for International Settlements (BIS) unless a respondent specifically requests confidential treatment.

II. Overview of the proposed changes to the G-SIB assessment methodology

This section provides a summary of the proposed changes to the G-SIB assessment framework. These proposed changes include:

1. Removal of the cap on the substitutability category;
2. Expansion of the scope of consolidation to include insurance subsidiaries for three categories;
3. Amendments to the definition of cross-jurisdictional activity;

[2] BCBS, *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, July 2013, www.bis.org/publ/bcbs255.pdf.

[3] Paragraph 39 of *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, July 2013, states that: "The methodology, including the indicator-based measurement approach itself and the cut-off/threshold scores, will be reviewed every three years in order to capture developments in the banking sector and any progress in methods and approaches for measuring systemic importance. In future reviews, particular attention will be paid to branches. As regards the structural changes in regional arrangements – in particular, the European Union – they will be reviewed as actual changes are made. In addition, the size of the sample of banks will be reviewed every three years."

[4] Available at www.bis.org/publ/bcbs255.pdf.

[5] Available at www.bis.org/bcbs/publ/d296.pdf.

4. Modification of the weights in the substitutability category and introduction of a trading volume indicator;

5. Revisions to the disclosure requirements;

6. Further guidance on bucket migration and associated HLA surcharge; and

7. A proposed transition schedule.

Table 1 sets out the proposed revisions to the identification methodology in red text, and Annex A describes the specification of each proposal.

The Committee is conscious of the need to maintain consistency with the broader Basel framework. While the G-SIB assessment framework takes a macroprudential view of impact and risk, it is important to ensure that future changes to the G-SIB assessment framework are consistent with the Committee's overall objectives. The Committee has consulted with other standard-setting bodies in developing these proposals, and will continue to do so when considering the feedback received in response to this consultative document.

1. Guiding principles for review of G-SIB assessment methodology

The review of the G-SIB framework was guided by three high-level principles and each proposed change has been assessed against these principles.

Principle 1: Changes should be consistent with the fundamental principles of the G-SIB framework

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.[6]

Principle 2: Changes should be both sound and implementable

The Committee sought to identify proposals that had a sound rationale, were feasible to implement, and their impact could be measured. The relative nature of the G-SIB framework places emphasis on clear specifications for any methodology changes that could be based on high-quality and readily available data. Otherwise, different interpretations or poor data quality may have negative repercussions for the stability of the overall assessment methodology.

Principle 3: Changes should be consistent with the objectives of the Committee's overall regulatory framework

The G-SIB methodology provides incentives for banks to reduce concentration in categories associated with high externalities in the event of default. Consequently, the G-SIB assessment methodology may encourage banks to reduce their activities or exposures. While this may be desirable to reduce systemic importance in isolation, it is important to ensure that such proposals do not conflict with other areas of the Committee's regulatory reform agenda.

[6] 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.

Table 1 outlines the proposals on the G-SIB assessment methodology, as described in Sections II.1 to II.7.

Overview of proposed revisions to the G-SIB assessment framework — Table 1

Category	Indicator	Indicator weight: Current framework	Indicator weight: Revised framework
Cross-jurisdictional activity (20%)†	Cross-jurisdictional claims	1/10 = 10%	1/10 = 10%
	Cross-jurisdictional liabilities	1/10 = 10%	1/10 = 10%
Size (20%)††	Total exposures	1/5 = 20%	1/5 = 20%
Interconnectedness (20%)††	Intra-financial system assets	1/15 = 6.67%	1/15 = 6.67%
	Intra-financial system liabilities	1/15 = 6.67%	1/15 = 6.67%
	Securities outstanding	1/15 = 6.67%	1/15 = 6.67%
Substitutability/financial institution infrastructure (20%)*	Assets under custody	1/15 = 6.67%	1/15 = 6.67%
	Payment activity	1/15 = 6.67%	1/15 = 6.67%
	Underwritten transactions in debt and equity markets	1/15 = 6.67%	1/30 = 3.33%
	Trading volume		1/30 = 3.33%
Complexity (20%)††	Notional amount of OTC derivatives	1/15 = 6.67%	1/15 = 6.67%
	Level 3 assets	1/15 = 6.67%	1/15 = 6.67%
	Trading and available-for-sale securities	1/15 = 6.67%	1/15 = 6.67%

* no cap on the substitutability category

† amended to include derivatives in claim and liabilities definitions, on a consolidated basis.

†† expanded scope of consolidation to include exposures under insurance subsidiaries

2. Removal of the cap on the substitutability category

The cap on the substitutability category was introduced in the G-SIB Updated Assessment Methodology (July 2013)[7]. The Committee also noted[8] that it would reconsider the cap on the substitutability indicator as part of the first three-year-review of the G-SIB updated framework.

Relative to the other categories that comprise the G-SIB framework, the substitutability category has a highly skewed distribution. Consequently, this category had a greater impact on the assessment of systemic importance than the Committee initially intended for banks that are dominant in the provision of payment, underwriting and asset custody services.

Accordingly, when the G-SIB updated assessment methodology was published in July 2013, a cap of 500 bp on the substitutability category score was introduced. The cap was set at a level to allow the substitutability category to remain an important factor in the Committee's assessment of systemic importance. Since 500 bp multiplied by the substitutability category weight (20%) yields the bucket size (100 bp), this approach meant that the substitutability category score for a bank could be enough to move a bank up by one bucket, but not more.

7 See www.bis.org/publ/bcbs255.pdf.

8 See footnote 10 of *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, July 2013.

The Committee's analysis, subsequent to the introduction of the cap, suggests that use of the cap – or other non-linear transformations – reduces the impact of a category in the overall G-SIB score reducing banks' incentives to become less systemically important. The provision of payments, custody, and underwriting services can be disrupted and difficult to substitute in the event of a bank's failure, thereby undermining financial markets in a manner that does not necessarily diminish concentration in the provision of these services. In contrast to the cap, a linear relationship between concentration and the G-SIB substitutability category score, which is the default in all other categories, is viewed as providing balance across key policy objectives.

The Committee has assessed the implications of removing the cap on the substitutability category. Its findings suggest that the removal of the cap affects the scores of four banks based on the end-2015 scores. Consequently, the Committee proposes to remove the cap on the substitutability category with the aim of providing banks with an incentive to reduce concentration in the provision of these services.

3. Expansion of the scope of consolidation to include exposures under insurance subsidiaries

The G-SIB framework does not explicitly capture the systemic impact of insurance subsidiaries of banking groups. It is also noteworthy that the International Association of Insurance Supervisors (IAIS) published a methodology for identifying global systemically important insurers (G-SIIs) that excludes bank-owned insurance subsidiaries from the G-SII framework. This presents a gap at the macroprudential level for the risks presented by insurance subsidiaries of banking groups, as neither the G-SIB nor the G-SII framework captures these entities.

Certain member jurisdictions do require G-SIBs to include insurance subsidiaries in their regulatory scope of consolidation while others do not, which creates inconsistencies in the systemic assessment of banking groups across jurisdictions. For increased consistency, the Committee proposes to expand the regulatory scope of consolidation in the G-SIB framework to include exposures from insurance subsidiaries in the G-SIB categories that best reflect the systemic risks common to banks and insurers, namely: size, interconnectedness and complexity.

The Committee believes that incorporating insurance activity better captures the loss-given-default (LGD) of banking groups – the framework's primary objective. Consequently, the proposal should both reduce the potential for regulatory arbitrage by moving activities from banking groups into their insurance subsidiaries and by reflecting some of the systemic risks stemming from the insurance businesses. Nevertheless, it should be noted that the expansion of the regulatory scope of consolidation to include insurance activities would be limited to assessing G-SIBs. Furthermore, the modification should take into consideration further work that is being undertaken jointly with the IAIS to address any inconsistencies in the overall G-SIB and G-SII frameworks.

The empirical results indicate that the average absolute change in banks' overall scores is modest but not insignificant. From the banks in the end-2015 main sample, 24 banks would experience an increase in their overall systemic score and 49 banks would experience a decrease. The relatively large number of banks experiencing a decrease reflects the change in the global denominators on banks with limited or no insurance activities or whose insurers are already included in the regulatory scope of consolidation.

4. Amendment to the definition of cross-jurisdictional indicators

The current G-SIB assessment methodology estimates cross-jurisdictional liabilities (CJL) based on the BIS consolidated banking statistics calculated at the solo level, by adding branches and subsidiaries and subtracting a bank's intragroup operations. While, in the BIS statistics, derivatives claims or receivables are reported at the consolidated level, derivatives liabilities are currently captured at the solo level based on local accounting rules. To avoid inconsistencies in the treatment of derivatives assets and liabilities, the later have been excluded from the current indicators (claims and liabilities).

Recent enhancements to the BIS's collection of consolidated banking statistics of liabilities enable the Committee to enhance the quality of CJL. A new CJL indicator, defined to include derivatives on the liability side and reported on a consolidated basis, can now be calculated.[9] Symmetrically, derivatives can be included in cross jurisdictional claims. The use of higher quality and harmonised data for claims and liabilities across jurisdictions is consistent with the principles of the G-SIB framework in that the aim is to measure loss given default.

This proposed revision to the definition of cross-jurisdictional indicators is not expected to materially affect the final G-SIB scores for most banks. When the impact of this proposed change is considered in isolation, using end-2015 data, 68 banks experience an impact of between plus and minus 3 bp. Together with the G-SIB assessment as of end-2016, the Committee will re-assess the quantitative impact of this proposed change.

5. Inclusion of a new indicator of trading volume

Within the substitutability and financial institution infrastructure category, the Committee is proposing to reduce the weight of the underwriting indicator from 6.67% to 3.33% and to include a new indicator on trading volume with a weight of 3.33%, as reflected in Table 2.

Indicators weights within the substitutability category

Table 2

Indicator	Indicator weight: Current framework	Indicator weight: Revised framework
Payments	6.67	6.67
Custody	6.67	6.67
Underwriting	6.67	3.33
Trading volume		3.33
Total substitutability	20.00	20.00

The trading activities of banks sustain market liquidity, which, in turn, enables price discovery and permits market participants to manage a wide variety of financial risks. Disruptions to market liquidity can lead to a dislocation of asset prices putting pressure on market participants' balance sheets and potentially resulting in adverse feedback loops such as preventing market participants from raising capital.

Banks facilitate market liquidity through "market-making" (ie assuming the risk of holding securities in order to provide liquidity immediacy for clients) and agency-based trading, both of which are supported by substantial technology infrastructure and internal data systems that are difficult to substitute in the event of default. In addition, certain banks are large traders on their own account. A G-SIB failure can therefore immediately undermine market facilitation and hence liquidity. The trading volume indicator would reflect banks' activities in the secondary market, in addition to the underwriting indicator, which captures activities in the primary market.

[9] In order to monitor the effects of full consolidation and inclusion of derivatives, an alternative indicator was defined as liabilities excluding derivatives according to the current methodology, plus derivatives liabilities reported separately on a consolidated basis.

Furthermore, by adding a trading volume indicator and reducing the weight on underwriting, the banks' scores are likely to be more stable over time, putting more emphasis on the structural dimension of systemic importance. While underwriting is important as an indicator of systemic importance, there is a fair amount of year-to-year volatility in that indicator. This intertemporal volatility is likely to be smaller for trading volumes than for underwriting. In addition, as a "flow" measure, trading volumes would complement the "stock" measures in the "trading and AFS securities" and "OTC derivatives" indicators under the complexity category, and thus be less prone to the potential for balance sheet changes that may occur at period-end.

The benefits of including a trading volume indicator are in line with the Committee's overall objectives for the Basel regulatory framework. The Committee has considered that the potential introduction of a trading volume indicator could affect market-making.[10] Given the competitive nature of securities markets, it is envisaged that smaller banks and securities firms could increase service provision in the medium term. This relocation of trading would increase market resiliency through reduced concentration, especially during times of stress. Moreover, the modest weight of 3.33% assigned to the proposed trading volume indicator helps to manage potential risks associated with any reduction in liquidity provision. As the provision of liquidity services may vary across market segments, the Committee analysed trading volume data associated with different asset classes when formulating the proposal, in particular:

1. Central bank and central government obligations;
2. Subnational governments and other public sector entity obligations;
3. Other fixed income securities;
4. Listed equities; and,
5. All other securities.

Central banking and central governmental securities are key instruments for conducting monetary policy and the regulatory treatment of which is being reviewed elsewhere in the Basel framework. Against this background, the Committee proposes to exclude central bank and central government instruments from the trading volume indicator given its intent to undertake an assessment of the appropriate treatment of sovereign risk.

6. Revision to the disclosure requirements

The G-SIB assessment framework requires all internationally active banks with a "leverage ratio exposure measure" greater than EUR 200 billion, as well as banks that were designated as G-SIB in the previous calendar year, to publicly disclose the 12 high-level indicators used in the G-SIB score computation. In recognition that disclosure regimes differ across jurisdictions, banks may disclose these indicators in their public financial statements, on their corporate websites or via publicly available regulatory reports.

The reporting instructions for the G-SIB assessment methodology state that banks should disclose the 12 indicators no later than four months after the financial year-end and, in any case, no later than end-July of the calendar year. The G-SIB assessment and data quality review is performed from June to August. The current work plan requires banks to potentially submit two or more rounds of data before they are considered final for use in calculating the proportional G-SIB scores. The final submissions for each bank are used to compute the annual G-SIB scores in August of the calendar year.

[10] If the proposed change results in lower liquidity for some G-SIBs in the form of higher bid-offer spreads and liquidity premia, the effects would provide incentives for new entrants, thereby reducing concentration in service provision.

The disclosure is designed to ensure that market participants are able to replicate the G-SIB methodology using publicly available information. The disclosure also allows for analyses of the key drivers of systemic risk for individual banks and on a horizontal basis across banks. The importance of market discipline underpins the Committee's proposal for banks to publicly disclose the final data used to calculate the G-SIB scores.

Typically, any differences in the data disclosed by banks and used in the G-SIB calculations have not been material enough to affect the HLA assigned to banks in the G-SIB sample. Nonetheless, it is important to note that data corrections affect not only the score of the reporting bank, but all banks in the sample, given the relative nature of the framework as each bank's values contribute to the denominator.[11]

To avoid the potential for inaccurate public disclosures and ensure consistency with the consolidated Pillar 3 requirements,[12] the Committee seeks public feedback on the proposal to require banks to disclose the indicators used in the final G-SIB calculations. This proposal may have the implication of obliging some banks to re-state their public disclosures if they occur prior to August of the calendar year.

To ensure consistency with the revised Pillar 3 reporting requirements, the Committee proposes that:

- On an annual basis, banks are required to disclose at least the 12 high-level indicators used in the G-SIB assessment based on financial year-end data. Banks should note in their disclosures that those figures are subject to revision and re-statement;
- Banks must further publicly disclose if the data used to calculate the G-SIB scores differ from the figures previously disclosed. To the extent that a revision to the data is required, banks should disclose the accurate figures in the financial quarter immediately following the finalisation of the Committee's G-SIB score calculation;[13] and,
- Banks disclosures must follow Pillar 3 reporting requirements and timelines.

7. Further guidance of bucket migration and associated HLA surcharge

The Committee has identified a need to clarify the HLA requirement in situations where a bank's G-SIB score has declined substantially from one year to the next. Currently, the Basel rules text allow for a 12-month delay in implementation when a bank moves up a bucket, to allow a bank sufficient time to build up the capital needed to meet the higher requirement. However, the current rules text is silent on the timing of the release of HLA capital in the event of a downward bucket migration.

A stylised example is provided to help illustrate the need for additional guidance. In November 2015, Bank A is designated as a G-SIB with a corresponding HLA requirement of 1.5% starting in January 2017, subject to the phase-in arrangement. In November 2016, after some structural changes relative to other banks in the G-SIB assessment sample, Bank A remains a G-SIB with a corresponding HLA requirement of 1% starting in January 2018. The current guidance could be interpreted in two different

[11] Market participants' ability to calculate the scores for other banks should be unaffected by data errors in one bank. This is because the Committee publishes the final denominators used in the calculations.

[12] See "Template GSIB1 – Disclosure of G-SIB indicators" in Part 5 of *Pillar 3 disclosure requirements - consolidated and enhanced framework - consultative document*, March 2016, www.bis.org/bcbs/publ/d356.pdf.

[13] If a Pillar 3 disclosure is required to be published for a period when a bank does not produce any financial report, the disclosure requirement must be published as soon as practicable. However, the time lag must not exceed the time the bank has for its financial reporting. For example, if a bank reports only annually and its annual financial statements are made available five weeks after the end of the annual reporting period-end, interim Pillar 3 disclosures on a quarterly and/or semiannual basis must be available within five weeks after the end of the relevant quarter or semester.

ways. Bank A's HLA requirements for 2017 and 2018 could be 1.5% and 1%, respectively, or 1% in 2017, if the 2018 requirement is based on the results of the November 2017 exercise. The question is whether a bank is permitted to immediately adhere to the new, lower requirement, or must wait 12 months before doing so.

To promote a harmonised implementation of the G-SIB framework, the Committee's proposal is to allow banks to immediately release the HLA requirement in circumstances where the G-SIB score falls, resulting in a lower HLA requirement. The Committee believes that this proposal provides strong incentives for banks to reduce their systemic importance, which is in accordance with the G-SIB framework's objectives and that HLA requirements should reflect the most recent information. As is provided elsewhere in the G-SIB framework, the Committee acknowledges that, in these circumstances, national authorities may exert discretion and require a bank to delay the release of HLA requirements. Such an approach would be consistent with national authorities' discretionary ability to assign a bank to a different G-SIB bucket associated with higher HLA even if the automated scoring methodology implies a lower requirement.

8. Transitional schedule

The annual G-SIB scoring exercise will be based on the framework published in July 2013 until any proposed revisions to the assessment method have been finalised and approved by the Committee. Consequently, the annual G-SIB assessment will rely on the July 2013 assessment methodology until the 2018 G-SIB assessment (based on end-2017 data).

If a revised G-SIB framework is adopted, this timeline would allow banks to maintain a certain degree of consistency with the 2013 G-SIB assessment methodology. It would also provide national authorities with the time to implement the changes in their respective regulatory frameworks. Under this option, any revisions announced in November 2017 would take effect in 2019 (based on end-2018 data), and the resulting HLA requirement would be applied in January 2021. The Committee will further consider implementation dates based on the scope and magnitude of any revisions to the framework, as well as the phase-in of any relevant components of Basel III. Table 3 summarises the transitional schedule.

Transitional schedule — Table 3

Year of assessment	Methodology of reference	Data of assessment	HLA requirement
2017	Current (published in July 2013)	end-2016	1 January 2019
2018	Current (published in July 2013)	end-2017	1 January 2020
2019	Revised (to be published in 2017)	end-2018	1 January 2021

9. Quantitative assessment of the impact of the proposed changes

This section presents the summary of the quantitative assessment[14] of the proposed changes to the G-SIB framework, ie the removal of the substitutability cap, the expansion of the scope of consolidation by including the indicator values of banks' insurance subsidiaries, the amendment of the definition of the

[14] In terms of both the marginal and total impact (ie change) to the end-2015 G-SIB scores after accounting for the proposed methodological changes.

cross-jurisdictional indicators, and the inclusion of a new trading indicator. The section also presents the cumulative impact of those proposals.

The analysis was performed on end-2015 data submitted by banks on a best-efforts basis.[15] The Committee considers the quality of data used in this analysis to be generally satisfactory.

Table 4 presents general statistics of the distribution of the change in scores for each of the proposals in Section II of this consultative document, as well as the statistics of the distribution of the issue for discussion related to the inclusion of the short-term wholesale funding (STWF) indicator (discussed further in Section III). Graph 1 presents the histogram of the change in score for each of the proposed changes to the G-SIB framework. Graph 1 and Table 4 indicate that the proposed removal of the cap on substitutability would affect only a few banks.

Summary statistics of proposed methodological changes in basis points — Table 4

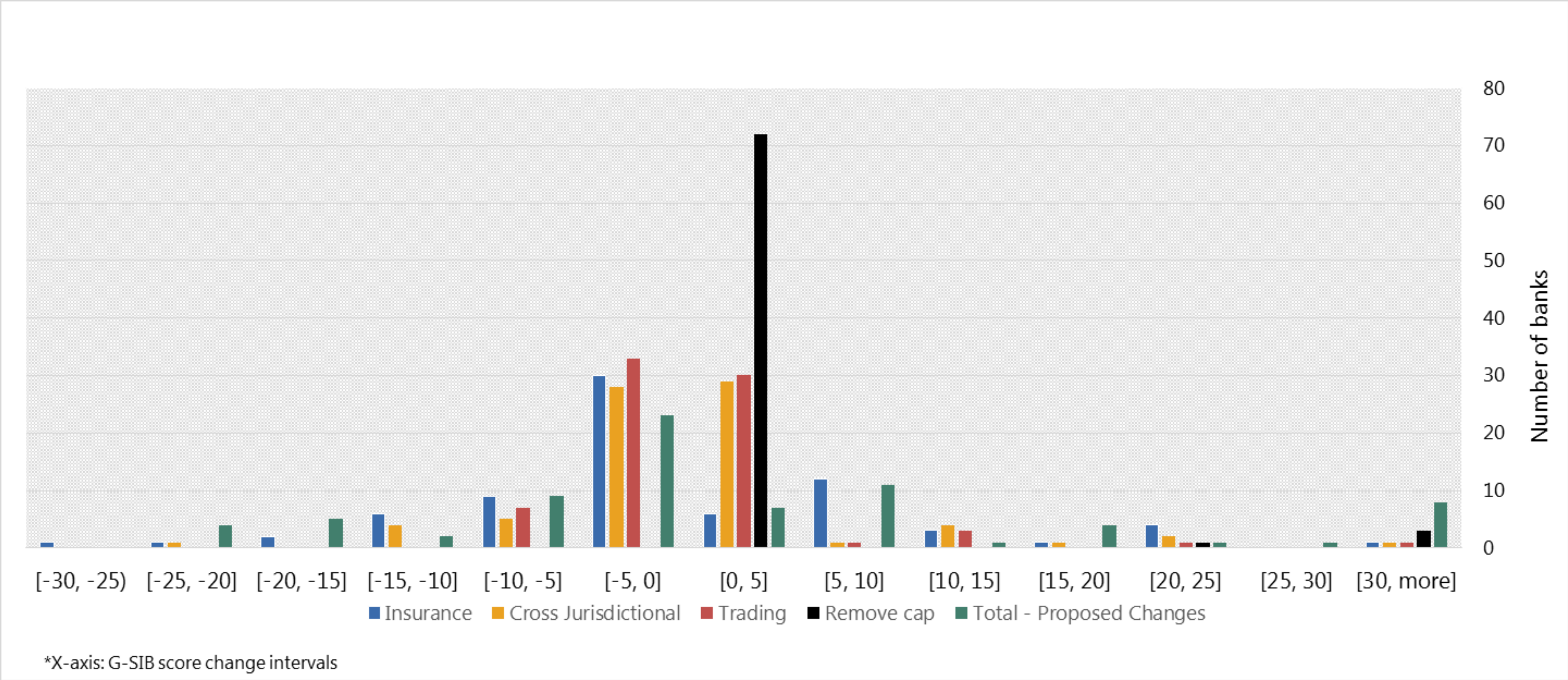
	Min	First Quartile	Median	Third Quartile	Max
Proposed changes					
Remove cap on substitutability category	0	0	0	0	118
Include exposures under insurance subsidiaries	–26	–3	–1	5	57
Amend definition of cross-jurisdictional indicators	–21	–2	0	1	46
Include new indicator of trading volume	–10	–2	0	0	41
Total – proposed changes	–25	–5	–1	7	95
Issues for discussion					
Include short-term wholesale funding	–9	–2	–1	0	15

Table 5 presents the end-2015 denominators used to calculate the current G-SIB list and the estimated denominators (also using end-2015 data) for each of the G-SIB indicators after taking into account all proposed changes to the G-SIB framework. Table 5 also includes the denominator in case the inclusion of an indicator for STWF (an issue for discussion) is implemented.

15 www.bis.org/bcbs/gsib/instr_end15_gsib.pdf. The substitutability cap removal data are of the highest quality as the data are from the category’s indicators.

Histogram of the impact on G-SIB scores for each of the proposed changes

Graph 1



Denominators for each G-SIB indicator if proposed changes and issues for discussion are implemented (based on end-2015 figures)

Table 5

Category	Individual indicator	End-2015 denominator*	Proposed changes end-2015 denominator**	Issues for discussion end-2015 denominator
Size	Total exposures as defined for use in the Basel III leverage ratio	72,857,573,242,973	75,056,198,529,276	
Cross-jurisdictional activity	Cross-jurisdictional claims	17,758,682,250,997	20,296,954,440,427	
	Cross-jurisdictional liabilities	15,884,108,348,862	17,562,892,855,654	
Interconnectedness	Intra-financial system assets	8,098,567,521,260	8,672,227,535,871	
	Intra-financial system liabilities	8,898,527,231,465	8,857,875,704,266	
	Securities outstanding	12,499,382,169,110	12,266,072,570,211	
	Short-term wholesale funding			25,076,368,716,611
Substitutability/financial institution infrastructure	Assets under custody	128,341,774,423,835	128,341,774,423,835	
	Payments	2,262,439,199,421,380	2,262,439,199,421,380	
	Underwriting transactions in debt and equity markets	5,951,676,110,463	5,951,676,110,463	
	Trading volume – fixed income		154,412,574,101,959	
	Trading volume – equity and other securities		166,661,332,843,211	
Complexity	Notional amount of over-the-counter (OTC) derivatives	556,826,675,437,137	558,384,146,688,518	
	Level 3 assets	585,970,930,408	629,886,155,294	
	Trading and available-for-sale securities	3,254,573,599,159	5,107,633,112,362	

* Unit is euro for all denominators.

** Values can decrease due to intragroup transactions and holdings.

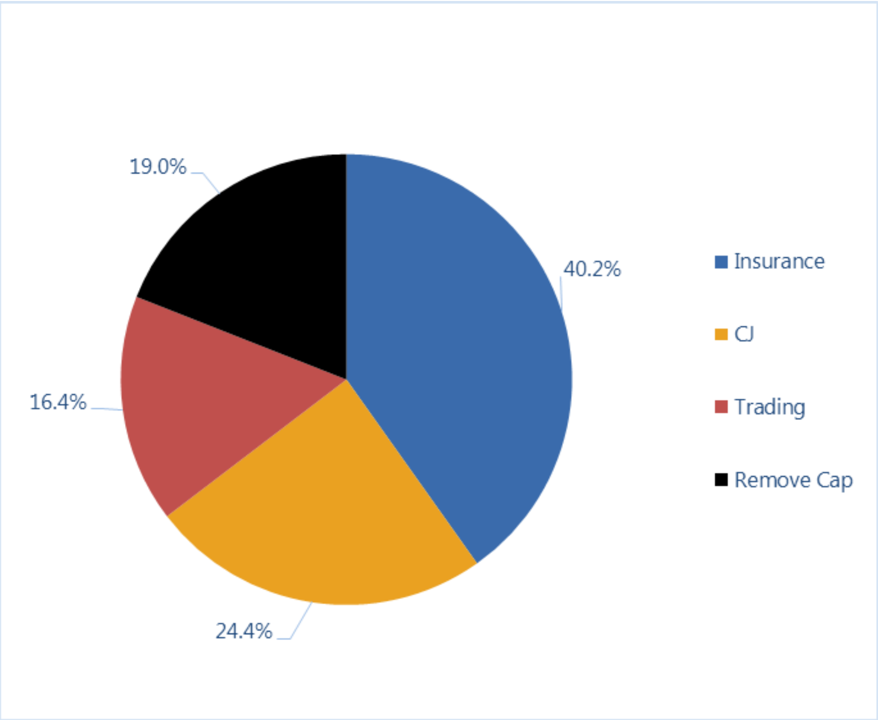
Graph 2 indicates the relative impact of each proposed change to the G-SIB assessment methodology. The percentages in the pie chart represent the sum of all score changes (in absolute values) for each individual proposal divided by the sum of the total score change from the four changes assessed separately (in absolute values). The inclusion of insurance subsidiaries activities has the broadest impact of the four proposals, followed by the change in the definition of the cross-jurisdictional indicator.

The basis point impact and the concentration of the magnitude of the impact on individual banks of the four proposed changes is heterogeneous. Unlike the other three proposed changes, the removal of the substitutability cap affects only four banks (currently capped). The increase in score is larger than 20 bp for those banks, and the scores do not change for the other 72 banks not currently capped.

The inclusion of insurance subsidiaries in the scope of consolidation contributes the largest percentage of the basis point changes (by absolute value) of the four proposals. While 10 banks experience score changes within the range of 15 bp as a result of the proposed change, only seven and two banks, respectively, have the same magnitude of score impact for the definitional change to the cross-jurisdictional indicator and the inclusion of the trading volume indicator. This indicates that the proposed change involving the inclusion of insurance subsidiaries has a broader impact than the other proposals. Further, the change in the cross-jurisdictional definition and the inclusion of an indicator for trading volume result in scores within the range of 5 bp for over three quarters of all the banks in the main sample. For the proposal to include insurance subsidiaries activities, the majority of banks in the main sample has a score change within the range of 5 bp.

Q1. What are respondents' views on each of the proposed changes in the G-SIB assessment methodology?

Relative impact on G-SIB scores of each of the proposed changes — Graph 2



III. Issue for discussion

The Committee is also seeking feedback on the introduction of a new indicator for short-term wholesale funding as a potential revision to the G-SIB assessment framework. This issue for discussion would benefit from broader input on the usefulness and potential implications if included in the assessment methodology.

1. Inclusion of a new indicator for short-term wholesale funding

At the core of the G-SIB identification strategy is the concept that a bank's systemic importance is measured by the losses it imposes on the rest of the financial system and the real economy (ie its system-wide loss-given-default (LGD)) if the bank defaults or experiences distress. While there is no disagreement that a greater reliance on short-term funding increases a bank's probability of default, views may differ on how short-term funding affects system-wide LGD, particularly in the presence of the Committee's Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).

A high dependence on short-term funding can exacerbate system-wide losses for at least five reasons. First, a greater reliance on short-term funding could force banks to engage earlier and to a greater degree in asset fire sales, with attendant negative feedback effects. Second, empirical evidence suggests that financial institutions that rely more heavily on short-term funding cut their lending more severely than counterparts that are funded by deposits in financial distress. Third, in distress, banks will not necessarily reduce the least profitable or economically least desirable assets but those that are easiest to shed. For instance, trade finance was reduced heavily after Lehman Brothers failed, as this was a quick way to reduce assets that required dollar funding. Fourth, evidence from the contagion literature suggests that fragile forms of funding are likely to be withdrawn simultaneously, often regardless of key fundamentals across the different banks. Fifth, at the time of default, creditors may also "fire-sell" collateral.

Different perspectives exist on whether high-quality assets remain high-quality assets (ie assets defined under the LCR) during a crisis, at least in the eyes of investors. As long as high-quality assets are readily available to failing firms, short-term investors should be willing to take these assets as collateral for lending, and G-SIBs' short-term liabilities can be resolved quickly at little cost. However, it could be argued that common liquidity strategies, although rational from a purely microprudential view, can create systemic losses when many banks try to liquidate "safe" assets at the same time. Moreover, a high LCR may quickly become a low LCR when asset values plummet or reliance on short-term funding increases sharply, particularly for G-SIBs. In these cases, microprudential policies that rely on asset liquidation are difficult to execute without eroding bank asset values. While the LCR and NSFR may be useful for preventing investor runs, once a run has begun these rules may lack the flexibility needed to limit social losses.

Notwithstanding these differences in views, the Committee has considered introducing short-term wholesale funding (STWF) as a fourth indicator in the interconnectedness category. This would comprise the proportion of all sources of a bank's wholesale funding with a maturity of less than six months (based on data used to compute the NSFR). This approach produces almost no changes to current G-SIB scores. Two banks have higher capital requirements - each moving up one bucket, with relatively small movements in G-SIB scores.[16] Despite the small scale of changes in the G-SIB scores, the Committee may

[16] It should be noted that this impact could change when combined with the proposed revision to include exposures under insurance subsidiaries. As this proposal would expand the scope of reporting for the interconnectedness category, the STWF indicator would also be subject to the change in the scope of consolidation. This interaction with the expanded scope of consolidation is not accounted for in this section.

further examine specific sources of funding defined in the proposed STWF indicator, keeping in mind that some sources may be more stable than others.

The Committee solicits public comments on this issue and will arrive at a final decision in September 2017. The method for calculating the proposed indicator is presented in Annex B.

> Q2. What are respondents' views on potentially including STWF as an indicator in the interconnectedness category?

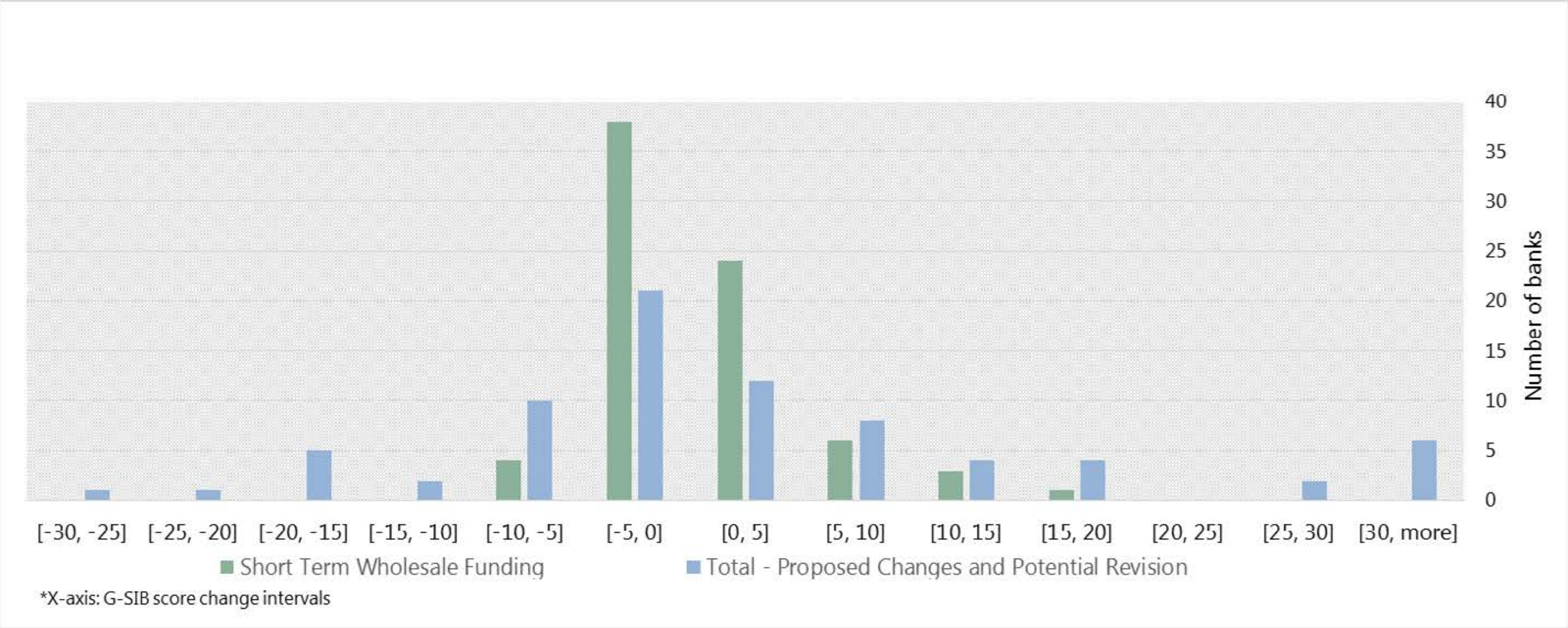
2. Quantitative impact of including the STWF indicator

This section presents the effect of the potential inclusion of a short-term wholesale funding indicator within the interconnectedness category. The cumulative results including both the proposed changes (Section II) and the STWF potential revision are presented. The data analysis performed to incorporate the effects of the potential revision was based on the end-2015 data submission by banks. Graph 3 presents the histogram of the change in score for each of the agreed proposals to change the G-SIB framework.

The effect of including STWF funding as an indicator in the interconnectedness category has a relatively mild effect on individual bank G-SIB scores. Sixty-two banks have a score effect within the range of 5 bp. Twelve banks experience no score change. Only one bank experiences an effect higher than 15 bp.

Histogram of the impact on G-SIB scores of proposed changes to the G-SIB framework

Graph 3



Annex A: Implementation of the proposed changes to the G-SIB framework

Proposals for changes to the assessment framework — Table 6

Proposal:	Category:	Indicator:	Current	Proposed change
Cap removal	Subst./Financial inst. Infra.		Cap: 500 bp	no cap
Insurance	Size	Total Exposures	GSIB1103	
	Interconnectedness	IFSA	(GSIB1033 + GSIB1035 + GSIB1036 + GSIB1037 + GSIB1038 + GSIB1039 + max(GSIB1040 - GSIB1041,0) + GSIB1042 + GSIB1043 + GSIB1044)	GSIB1215
		IFSL	(GSIB1046 + GSIB1047 + GSIB1105 + GSIB1048 + GSIB1049 + GSIB1050 + GSIB1051)	GSIB1221

Proposals for changes to the assessment framework				Table 6
Proposal:	Category:	Indicator:	Current	Proposed change
		Securities outstanding	GSIB1053 + GSIB1054 + GSIB1055 + GSIB1056 + GSIB1057 + GSIB1058 + GSIB1059)	GSIB1226
	Complexity	OTC derivatives	GSIB1078 + GSIB1079	GSIB1227
		HFT and AFS securities	max(GSIB1081 + GSIB1082 - GSIB1083 - GSIB1084,0)	GSIB1275
		Level 3 Assets	GSIB1086	GSIB1229
Cross-jurisdictional	Cross-jurisdictional activity	CJC	GSIB1087	GSIB1087 + GSIB1146
		CJL	max(GSIB1088 - GSIB1089 + GSIB1090,0)	GSIB1148

Proposals for changes to the assessment framework				Table 6
Proposal:	Category:	Indicator:	Current	Proposed change
Trading volume	Subst./Financial inst. Infra.	Fixed income	n/a	GSIB1137 + GSIB1138
		Equity and other securities	n/a	GSIB1139 + GSIB1140
		Trading volume	n/a	=0.5*[FI/SUM(FI)]+ +0.5*[EOS/SUM(EOS)]
		Trading volume	n/a	weight: 3.33%
		Underwriting	weight: 6.67%	weight: 3.33%

Annex B: Implementation of the STWF indicator in the G-SIB framework

Potential revision — Table 7

Proposal (BS/16/103)	Category:	Indicator:	Current	Potential revision
Short-term wholesale funding	Interconnectedness	STWF	n/a	GSIB1188 + GSIB1190 + GSIB1191 + GSIB1192 + GSIB1193
		STWF	weight: n/a	weight: 5.00%
		IFSA, IFSL and Securities outstanding	weight: 6.67%	weight: 5.00%