March 22, 2018

Mr. William Coen
Secretary General
Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel
Switzerland

Re: BCBS Consultation Paper on Stress Testing Principles

Dear Mr Coen:

The Institute of International Finance (IIF) appreciates the opportunity to comment on the Basel Committee on Banking Supervision's (BCBS) "Consultative Document stress testing principles" ("the consultative document"), issued for comment by March 23, 2018, and intended to replace the existing principles published in May 2009.

IIF members support the overall intention of the BCBS to update the principles that govern the stress testing frameworks applicable in different jurisdictions, both for banks and supervisors, and they specifically support the proposed nine high-level principles. This is an important and timely review given the rapid developments that have occurred since 2009 and the relevance that stress testing has acquired as both a supervisory tool and a tool for internal risk management purposes and strategic business insight. The industry also welcomes the intention to establish those principles at a high enough level so that they are robust and stable over time and do not impede innovation, while taking into account the need for appropriate benchmarking in order to avoid the risk of fragmentation arising from jurisdictional divergence.

The IIF also welcomes the initiative to publish periodically reports about stress testing practices, however, we believe it will be important to clarify the specific purpose of such papers beyond being informative and supportive to the stress testing principles. Future reports seem to be intended only to show the wide range of practices and frameworks, and the principles now subject to consultation would encompass them all. The IIF believes it will be more useful for the BCBS to identify leading practices for supervisors and banks to promote a more level playing field across jurisdictions.

We note that the principles in the consultative document are intended to be applied to a broad scope of stress testing exercises. Although formulated with a view towards application to large, internationally active banks and relevant authorities in the BCBS jurisdictions, the IIF finds there is risk that authorities could set an expectation that all banks, including the smaller banks, or those with less resources, meet all the principles. Therefore, the IIF believes there should be further emphasis as to how the principles can be applied proportionally to different sized banks with different levels of resourcing and sophistication.

Furthermore, the principles also refer to any type of stress testing exercise. As currently drafted, the principles capture not only the main supervisory stress test exercise in each jurisdiction, internal capital adequacy assessment processes at group level and at the relevant subsidiaries level, but also capture any other type of exercise that could be defined as a stress test. This includes, and not limited to, stress testing at risk level, portfolio level, and any supervisory ad-hoc exercises. While the IIF already expressed its support to the principles, we believe they reflect a level of granularity and commitment in terms of governance, processes resources, and documentation that might not be suitable for smaller stress testing exercises and/or smaller banks. As such, there should be consideration about the use proportionality. So far, the consultative document only includes a reference to proportionality when applying the principles to smaller banks, and when discussing in principle seven the level of sophistication of the models regarding the objectives of the exercise and the type and materiality of the portfolios being monitored using the models.

Therefore, the IIF would welcome further consideration of proportionality, recognizing that all nine principles should be applied commensurately not only to the size of the bank, but also taking into account a number of other factors, including the relevance of the different stress testing frameworks, the materiality of the risks or portfolios being tested, the frequency and use of those exercises, and the relevance of the exercise for the banks, for the authorities, or for the market. In summary, stress testing exercises should be fit for purpose, and that should guide their level of sophistication. For example, an internal one-time stress test of a portfolio or an ad-hoc supervisory stress test performed as part of an on-site inspection should not require the same level of sophistication as the main supervisory enterprise-wide stress test or the thorough and comprehensive Internal Capital Adequacy Assessment Process (ICAAP) exercises.

This principle on proportionality could be complemented with the recognition that different banks and authorities within the G20 jurisdictions are at different stages in evolving their stress test frameworks, so that it makes sense to promote and facilitate that evolution towards leading practices in a progressive way. Such an approach might require an identification of those leading practices and shortcomings similar to the BCBS's Regulatory Consistency Assessment Programme (RCAP).

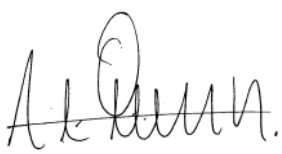
Finally, as stated in the consultative document, the principles are addressed to banks and authorities alike, but our members observe that they are more heavily geared towards banks, with the main concerns remaining on the supervisory side, specifically around the need to ensure coordination and consistency across jurisdictions with regards to various stress testing approaches and assumptions. This is the case for supervisory stress tests with micro-prudential objectives, where the principles should call for more enhanced transparency as to how supervisors use the stress tests to inform Pillar II decisions. In the same vein, we caution against potential overreliance of supervisors on single, macro-economic stress scenarios which are reported regularly. Such an overreliance may produce the undesired effect that all banks position themselves and their balance sheets / hedging activities in a very similar way to mitigate the severe systematic crisis of the supervisory scenario. If a real crisis materializes in a different area than expected by the supervisory scenario, banks positions will be similarly affected and might create a systemic risk.

Additionally, more transparency is also welcome from supervisors around the stress test models, methodologies and their results. We view that enhanced transparency would contribute to increase market and public confidence and to reduce banks uncertainty regarding the results and their consequences.

Please find further in this document, specific comments on each of the nine principles that the BCBS might find useful in its effort to replace the current stress testing principles.

The IIF reiterates its support for the important and timely review of the stress testing principles, and we hope our comments are helpful in enhancing these draft principles subject to consultation. As always, the IIF is available to provide any necessary expansions and/or clarification on our comments. If you have any questions on issues raised in this letter please contact myself, Martin Boer (mboer@iif.com) or Jaime Vazquez (jvazquez@iif.com).

Sincerely,



Andrés Portilla
Managing Director, Regulatory Affairs

Specific Comments

Principle 1: Stress testing frameworks should have clearly articulated and formally adopted objectives.

At the outset, the IIF agrees that clear and well-articulated objectives are of paramount importance to be able to design sound and effective stress testing frameworks. This is especially true for supervisory stress testing frameworks as they have greatly evolved and become a pivotal supervisory tool over recent years.

Additionally, authorities design and use stress tests to meet a wide array of objectives that may vary significantly across jurisdictions, including objectives as different as whether they address micro-prudential purposes and/or macro-prudential purposes.

Against this backdrop, it is critical that all stakeholders have a deep understanding of the various objectives authorities intend to achieve through supervisory stress tests. Thus, we invite the BCBS to set forth, as an additional point for authorities, the need to clearly set out transparent objectives, which encompass how supervisory and internal stress testing are used to inform supervisory decisions on Pillar 2 add-ons to ensure the adequacy of capital and/or liquidity levels in the same way that banks are asked to be transparent on the use of stress testing to inform strategy and business decisions (principle three).

As an additional comment, we note that supervisory authorities primarily use supervisory stress test results "for reviewing and validating the Internal Capital Adequacy Assessment Process (ICAAP) of banks and their liquidity adequacy assessments"[1]. In this regard, we would like to highlight that internal and supervisory stress tests can have different underlying assumptions and purposes. Consequently, we invite the BCBS to recommend that authorities should rather consider supervisory stress tests and banks' internal stress tests as complementary tools.

Principle 2: Stress testing frameworks should include an effective governance structure.

The IIF shares the BCBS's view that appropriate and clear governance is a key aspect of stress testing frameworks and, accordingly, supports principle two that calls for an effective governance structure.

However, we suggest removing from the final principles the provision relating to second and third lines of defense. Although they play a very important role, this reference to the different lines of defense is not necessary to set out a high-level principle in that other sections already provide for the need to specify all roles and responsibilities for all aspects of the stress testing. Additionally, the provision as set forth is somewhat vague and may lead to different interpretations as to the scope and functions covered by the terms second and third lines of defense in the context of stress testing frameworks.

[1] BCBS, *Supervisory and bank stress testing: range of practices*, December 2017, document reference d247, page 6.

Further, we believe the primary responsibility for establishing a proper coordination mechanism across the banking industry on interpretative issues arising over the course of supervisory stress test exercises should reside with the lead supervisor.

Principle 3: Stress testing should be used as a risk management tool and to inform business decisions.

The IIF concurs with the BCBS that stress testing is an important tool for risk management and that bank management should consider stress test results when making business decisions.

As the BCBS points out it is important that senior management and authorities have a clear understanding of the main assumptions and limitations of each stress testing framework, and we would add the understanding of the sensitivity of results to those assumptions. The range of likely outcomes can be broad, and there is value in that analysis.

In contrast, board reports should only include those assumptions/limitations which are strictly necessary for facilitating the board's decision-making. Hence, as long as there is appropriate board delegation committees and a proper educational setup, reports should provide mainly a high-level analytical view (e.g. quarter-on-quarter comparisons). In this regard, we encourage the BCBS to recommend to authorities to disclose as much information as possible to banks on the models used for supervisory stress tests, including changes from the previous time the test took place.

Additionally, authorities should consider adjustments to address limitations stemming from the application of a standardized stress testing methodology to different business models and risk profiles. At the very least, authorities should consider providing banks with the opportunity to comment on their results of supervisory stress tests and to encourage banks to give feedback on the supervisory methodology. We would also encourage to include in this principle caution on the supervisor's side against potential overreliance of supervisors on single, macro-economic stress scenarios, which may produce the undesired effect that all banks position themselves and their balance sheets / hedging activities in a very similar way to mitigate the severe systematic crisis of the supervisory scenario, thus potentially creating systemic risk. Hence, scenario-based stress-tests by regulators should be carefully balanced with internal stress testing exercises, which target specific vulnerabilities of each institution and should have the same if not bigger importance than the supervisory stress test.

We also note that, even though "most authorities allow banks to report their projected capital position including management actions"[2], that is not always the case, as some major jurisdictions do not allow such practices. Consequently, we urge the BCBS to specify that management actions should be accepted for supervisory stress test exercises. Further, it is worth pointing out that management actions considered for stress testing and for Recovery and Resolution Plans (RRP) purposes may overlap but do

[2] BCBS, *Supervisory and bank stress testing: range of practices*, December 2017, document reference d247, page 7.

not necessarily have to be consistent, as RPP's are addressing a different type of situation, that is, a gone-concern scenario.

Finally, as noted in our comments on Principle one, we deem crucial that authorities explicitly set out the purpose and objective of their supervisory stress tests, especially when their outcomes could lead authorities to set additional capital and liquidity requirements or any other Pillar 2 measures.

Principle 4: Stress testing frameworks should capture material and relevant risks and apply stresses that are sufficiently severe.

The IIF strongly supports the need for stress testing frameworks to capture material as well as relevant risks determined by a sound risk identification process. Where the latter process is indeed in place, the BCBS should encourage supervisors to be more transparent in providing justification around material differences in judgements between banks' and supervisors' risk assessments.

The IIF would also appreciate further clarity from the BCBS around the understanding of the terms: "varied", "sufficiently severe", and "ahistorical" versus "hypothetical".

Principle 5: Resources and organizational structures should be adequate to meet the objectives of the stress testing framework.

The IIF believes principle five is an important principle to be able to conduct a successful exercise, as it helps guarantee the quality of the results and that every party involved has sufficient time to undertake the different components of the stress test. However, resources are not always enough, at banks or the supervisors, and that should be taken into account when deciding on the milestones and deadlines of the tests. For that reason, the principle could be expanded to say two things: first that banks and regulators should carefully balance the workload involved and the value gained from the stress testing exercises, so that they do not "over-engineer" the tests; and second that the resources available, specially at the authorities' level, should also inform the frequency and complexity of the supervisory stress tests in order to avoid compromising the quality of the supervisory exercise and imposing unnecessary burdens on participants.

While we do recognize the need for supervisors to strengthen their organizational structure for running stress tests, we caution against the potentially harmful consequence of an increase in resources leading to an incentive on behalf of supervisors to further increase requirements in terms of number of exercises, level of sophistication and granularity, disclosures, etc. thus creating a vicious cycle.

Principle 6: Stress tests should be supported by accurate and sufficiently granular data and by robust IT systems.

The industry agrees that the accuracy, completeness, and availability of data and having robust data infrastructure is key for running a successful stress testing exercise. However, the principle lacks a reference to the materiality of the data involved, as not all data has the same importance. This principle should include such a reference to proportionality as an additional point for authorities, and more so since their assessment of the quality of data might impact their decision about any Pillar 2 add-ons.

Additionally, we agree with the need to adequately define the segmentation and granularity of the data in line with the objectives of the stress test framework. The IIF views that part of the principle could be strengthened to align supervisory expectations around granularity, as in some instances the level of segmentation and granularity requested by supervisors have no impact on the output of the stress test and is time consuming for both banks and authorities in terms of providing the information and reviewing it respectively. In addition, a more granular segmentation does not always lead to a more accurate outcome, but an increase in complexity. We again make the point that stress testing exercises should not be over-engineered. This fact is also linked to the proposed principle of proportionality. For all those reasons, this principle should call for more interactions between banks and supervisors to enhance the efficiency of stress testing exercises. There is also a need to clarify expectations around the "timeliness" of ad hoc exercises given some internal stress tests take a long time to run outside the regulatory cycle (e.g. ICAAP/ILAAP).

Furthermore, it is not clear if there is anything over and above what is stipulated under BCBS's "Principles for effective risk data aggregation and risk reporting" document (issued January 2013) for compliance with this principle.

Regarding robust IT systems, given the increase in cyber incidents, it would be important to ensure the proper protocols are in place on both sides. Data that is not material should be considered to be excluded so as to limit the amount of data that could be compromised in a breach.

Principle 7: Models and methodologies to assess the impacts of scenarios and sensitivities should be fit for purpose.

This principle rightly states that models and methodologies to assess the impacts of scenarios and sensitivities should be fit for purpose and the intended use of the stress test, but the IIF wants to suggest that when new models and methodologies are created, banks should be given sufficient time to develop them.

Additionally, this principle also describes that *"the modelling choices and calibration decisions should consider the interactions between different risk types, as well as the linkages between models"*[3]. However, the principle should also mention explicitly:

- When setting economic assumptions for each jurisdiction, supervisors should consider the point in the economic cycle of each jurisdiction that a bank operates in, and also give consideration to joint probabilities of different locally stressed scenarios in those jurisdictions.

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[3] BCBS, *Consultative Document stress testing principles*, December 2017, document reference d428, page 12.

- The business models of banking institutions, and whether they follow a centralized business model in terms of capital and liquidity, or a more decentralized one, where each subsidiary of the Group is independent in terms of capital and liquidity. In such cases, stress tests may provide biased results if decentralized banks are compelled to calculate the scenario impacts assuming it is managed under a centralized business model (and vice versa).
- The positive effect of diversification should be accounted for when conducting stress tests at consolidated level, as the sum of stress test impacts at each subsidiary level does not necessarily lead to a consolidated impact at group level.

In addition, the IIF would appreciate further clarity from the BCBS on how to address two seemingly contradictory requirements between principles: the use of a range of methodologies (static/dynamic approaches) and the need to ensure consistency and reconciliation between group/legal entities as well as between bank/supervisory stress tests.

Finally, there is also a need for clarity around interaction between supervisors' macro/micro stress testing models for the purposes of Pillar 2 (micro). A clear distinction is not in place, let alone homogenous, across jurisdictions regarding systematic versus idiosyncratic loss (as well as any associated combined buffer offset). There is therefore a risk of overlap and double counting between capital measures taken for micro/macro prudential purposes. Further analysis would be warranted in order to come up with a single framework to address these issues.

Principle 8: Stress testing models, results and frameworks should be subject to challenge and regular review

The IIF agrees that regular review and challenge are critical steps in the stress testing process for both banks and authorities. We view a rigorous level of challenge and review at multiple levels of a bank's governance structure and by authorities is integral in improving stress test results, identifying shortcomings, areas of enhancement and testing the framework's objectives.

Further clarity would be helpful with regards to supervisory expectations around the statement that "reviews should provide coverage of **all** aspects of ST framework on a **periodic** basis and frameworks are **regularly** updated"[4]. This is important to promote consistency across jurisdictions and to avoid fragmentation.

Principle 9: Stress testing practices and findings should be communicated within and across jurisdictions.

The IIF agrees that communication of stress testing activities across relevant internal and external stakeholders can have benefits for both banks and supervisors. The transparent communication and coordination between banks' group-level stress testing functions and individual subsidiaries or other

[4] BCBS, *Consultative Document stress testing principles*, December 2017, document reference d428, page 13.

relevant legal entities is beneficial for risk identification, business decision making and consistency of approaches and impacts across jurisdictions. However, it should be emphasized in this principle that communication and disclosure of internal stress testing activities to external stakeholders, with the exception of home authorities, should remain at the discretion of the bank.

The IIF supports the BCBS's view that disclosures of results of supervisory stress tests can help to improve market discipline and provide confidence in the resilience of the banking sector to identified stresses. However, this strongly relies on the assumption that there is comparability across jurisdictions, which we believe is the responsibility of the authorities (e.g. management actions). As stipulated in the principle, disclosure of such results should consider ways to ensure that market participants understand data that is disclosed, including limitations and assumptions on which it is based.

In light of this, we encourage authorities to be cognizant of the potential implications of inappropriate disclosure of stress test exercises on banks. It is worth highlighting that the publication of results of supervisory stress tests carried out pursuant to theoretical and excessively severe scenarios, if not disclosed in the correct context to other authorities and to market participants, may lead to unwarranted reactions, which consequently might cause real financial difficulties and costs for banks.

The IIF understands that there are currently various levels of disclosure across different jurisdictions. For example, the U.S. authorities publicly disclose supervisory estimates of post-stress capital ratios for each bank under adverse and severely adverse economic and financial conditions with detailed information on losses and revenues. Further, authorities in the European Union publish the quantitative results at the bank level and provide granular data for several types of portfolios on a regular basis. In contrast, Australian authorities have traditionally disclosed only aggregate results. The various levels of disclosures are further highlighted in the BCBS's survey of authorities with 38% authorities not disclosing at all, 50% disclosing aggregated results, 35% disclosing methodologies, 27% disclosing scenarios and 12% disclosing actions[5].

It should also be recognized that enhanced and consistent disclosures in supervisory stress testing exercises across different jurisdictions provides information symmetry for market participants, which is beneficial in their understanding of the supervisory stress testing framework and thus, evaluation of banks.

Furthermore, we note that the principle could be further enhanced by broadening disclosures by authorities to other critical pieces of information of the supervisory stress test exercise (e.g. the objectives, methodologies, scenarios, and actions). We believe further transparency around disclosures of other components (e.g. methodologies and scenarios) of the stress testing exercise has benefits in rationalizing the results to the market and subsequently, mitigating any unintended consequences on banks.

[5] BCBS, *Supervisory and bank stress testing: range of practices*, December 2017, document reference d247, page 22.

The IIF supports the BCBS's principle that authorities should foster transparency in stress testing processes and results and establish processes to communicate and coordinate stress testing activities with their peers in other jurisdictions. We agree that better communication and coordination between authorities and with the banking industry can provide deeper insights into systemic vulnerabilities (specifically emerging risks that might threaten financial stability), improve consistency in supervisory testing exercises, ensure comprehensive risk coverage, and cultivate leading practices and synergies to improve the quality of final stress test results. Similarly, the IIF agrees that banks should have legal entity results aggregation capabilities in place.

However, in order to be useful, results need to be comparable across jurisdictions. We want to emphasize that collaboration between home and host jurisdictions and the compatibility of objectives between supervisors is key. Further, comparability is not possible without harmonization of supervisory practices as a precursor to ensuring alignment between legal entities. For example, setting different expectations for stress testing practices and applicable scenarios at legal entity versus those applied to the parent firm may result in inconsistent stress estimates or process requirements (including exposure aggregation) across the consolidated firm. This becomes particularly important where local stress tests become more restrictive; requiring increased capital or liquidity at the local level, which generally ignore the capacity of capital and liquidity flows from parent organization through exercising the of "source of strength" doctrine.

While the IIF understands that that the BCBS considers supervisory colleges as a forum for home authorities to share such information with host authorities, we note that in many instances, most of the authorities do not have a formal process for coordinating and collaborating stress testing activities with other authorities. Based on the BCBS's survey of authorities, 42% authorities have no coordination with external authorities and 27% have only an informal process in place[6].

The IIF views that the international coordination and collaboration between authorities should set out specific objectives it is intended to meet. As an illustration, supervisors should coordinate to make sure quantitative definitions and objectives used in supervisory stress tests are overall consistent across jurisdictions while addressing local specificities. This is of foremost importance for notions like severity, likelihood, and macro-economic outlooks retained for supervisory stress testing purposes. Beyond quantitative features, coordination should help enhance consistency across supervisory stress testing exercises. Authorities should leverage the information and endeavor to implement consistent approaches in terms of the scope of institutions and variety of risks covered, frequency, level of transparency and disclosed information.

Finally, as stress testing has become a pivotal supervisory tool to set additional requirements for a given institution, it is crucial that authorities coordinate with their peers in other jurisdictions to preclude any overlaps or double counting between the various capital and liquidity requirements, including Pillar 1, various capital and liquidity buffers, macro-prudential measures, etc.

[6] BCBS, *Supervisory and bank stress testing: range of practices*, December 2017, document reference d247, page 23.

The principle could be strengthened by further emphasizing the importance of effective communication and coordination across jurisdictions for enhanced and consistent stress testing practices and results. In addition, the IIF believes that ongoing and constructive communication with all stakeholders, including the banking industry, is beneficial at the international level. As such, the IIF and its member banks would be eager to participate and engage in discussions with the BCBS and home authorities around these topics.