Thematic Review on Supervisory Frameworks and Approaches for SIBs

Peer Review Report

26 May 2015

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Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards,*[1] to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Thematic reviews focus on the implementation and effectiveness across the FSB membership of international financial standards developed by standard-setting bodies and policies agreed within the FSB in a particular area important for global financial stability. Thematic reviews may also analyse other areas important for global financial stability where international standards or policies do not yet exist. The objectives of the reviews are to encourage consistent cross-country and cross-sector implementation; to evaluate (where possible) the extent to which standards and policies have achieved their intended outcomes; and to identify gaps and weaknesses in reviewed areas and make recommendations for potential follow-up (including via the development of new standards) by FSB members.

This report describes the findings of the thematic review on supervisory approaches and frameworks for systemically important banks (SIBs), including key elements that have been the focus of discussion in the FSB Standing Committee on Standards Implementation (SCSI). The draft report for discussion was prepared by a team chaired by Helen Rowell (Australian Prudential Regulation Authority), and comprising Ben Gully (Canada Office of the Superintendent of Financial Institutions), Thomas Hirschi (Swiss Financial Market Supervisory Authority), Manoranjan Mishra (Reserve Bank of India), Giovan Battista Sala (Bank of Italy), Marco van Hengel (Netherlands Bank), Pei Hong Mok (Monetary Authority of Singapore), Christer Furustedt (Sweden Finansinspektionen), Stephen Bland (United Kingdom Prudential Regulation Authority), and Robert Motyka (United States Federal Reserve Board). Simonetta Iannotti and Grace Sone (FSB Secretariat) provided support to the team and contributed to the preparation of the peer review report.

[1] See FSB, *Promoting global adherence to international cooperation and information exchange standards*, March 2010 (http://www.financialstabilityboard.org/wp-content/uploads/r_100310.pdf).

Glossary

BCBS	Basel Committee on Banking Supervision
BCPs	Basel Core Principles
BMA	Business model analysis
BRRD	Bank Recovery and Resolution Directive
CCAR	Comprehensive Capital Analysis and Review
CMG	Crisis management group
COAGs	Cooperation agreements
DFA	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act")
DNB	Netherlands Bank
EBA	European Banking Authority
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
ESMA	European Securities and Markets Authority
FCA	Financial Conduct Authority
FINMA	Swiss Financial Market Supervisory Authority
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
G-SIB	Global systemically important bank
ICAAP	Internal capital adequacy assessment process
IT	Information technology
JRAD	Joint risk assessment decision
LISCC	Large Institution Supervision Coordinating Committee
MAS	Monetary Authority of Singapore
MIS	Management information systems
MoF	Ministry of Finance
MoU	Memoranda of Understanding
OSFI	Office of the Superintendent for Financial Institutions
PRA	Prudential Regulation Authority
RRP	Recovery and resolution planning
SADC	South African Development Community
SARB	South African Reserve Bank
SIB	Systemically important bank
SIE	Supervisory Intensity and Effectiveness group
SSM	Single Supervisory Mechanism
TBTF	Too big to fail

Executive Summary

In the aftermath of the financial crisis, the FSB and the G20 identified more intense and effective supervision of SIFIs, particularly global systemically important financial institutions (G-SIFIs), as critical to the safety and stability of the financial system. Supervisors also have responsibility for ensuring that the implementation of regulatory reforms to enhance the resilience of financial institutions, including through stronger capital and liquidity requirements, is effective in practice. The FSB, through its Supervisory Intensity and Effectiveness (SIE) group, has explored the changes in tools and methods used by supervisors in order to intensify supervision, and set out recommendations aimed at improving supervisory effectiveness (see Annex A).

This peer review report examines how authorities are interpreting and implementing the SIE recommendations for a more intensive and effective approach to supervision. It assesses progress towards enhancing supervisory frameworks and approaches for systemically important banks (SIBs) since the financial crisis, in particular for global systemically important banks (G-SIBs). The findings of the review, which was conducted in close consultation with the Basel Committee on Banking Supervision (BCBS), are based on questionnaire responses from, and follow-up discussions with, supervisory authorities from home jurisdictions of G-SIBs[2] and a selected sample of G-SIBs.

Implementation of reforms in response to the lessons learnt from the financial crisis has led to a more intensive and interactive approach to supervision. Greater supervisory intensity, however, does not necessarily translate into more effective supervision. Supervision is effective when supervisors proactively influence the behaviour of financial institutions in key areas (such as governance, risk appetite, risk and financial management and, where appropriate, strategy) in ways that enhance those institutions' safety and soundness and thereby contributes to overall financial stability. Further, when institutions do not respond appropriately, effective supervisors take meaningful and timely action.

The peer review found that all surveyed national authorities have taken significant steps to enhance supervisory effectiveness, within the context of their legal and institutional frameworks and in response to the supervisory failures revealed by the crisis. However, authorities have not moved at the same pace across all areas of change and place differing levels of importance on the range of tools being used. This in part reflects the different impacts from the financial crisis in various countries and different supervisory traditions. For example, Switzerland, the United Kingdom and United States have undergone significant changes to their supervisory mandates and powers; and the Single Supervisory Mechanism (SSM), which came into effect on 4 November 2014 as a response to lessons learnt during the financial crisis, will bring significant changes to the supervision of banks across Europe. A common focus across all jurisdictions, particularly those that are home to a G-SIB, has been the development of recovery and resolution plans. Corporate governance is another area of

[2] The G-SIB home authorities surveyed in this report are China, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom, and United States. In addition, Canada, India, Singapore and South Africa volunteered to be included in the review in order to share their experiences on changes to supervisory frameworks and approaches for banks they identify as significant for their economy.

focus for many national authorities, with supervisors in Germany and the United Kingdom regularly attending banks' board meetings and having a more intensive approach to assessing applicants in key management positions for those firms.

Notwithstanding these differences, all authorities have made changes to their supervisory approach, in particular for G-SIB supervision. Substantive changes have been made in authorities' organisational structures, the range and depth of supervisory tools used, and the approach to communication and supervisory actions in response to supervisory findings. Supervision has become more risk-based, with dedicated structures and more resources devoted to G-SIBs. Supervisory tools such as business model analysis, stress testing and horizontal reviews have been enhanced and are increasingly used to provide a more forward-looking approach, capturing both current and emerging risks. The scope of supervision has also expanded to incorporate macroprudential and resolvability considerations. The dialogue with institutions has been enhanced, including at more senior levels of both supervisory authorities and supervised institutions, particularly with institutions' boards, and has included more substantive discussions on risk governance, culture and appetite.

The review has highlighted, however, a number of key outstanding challenges that need to be addressed in order to further progress supervisory effectiveness. These relate to the need for authorities to:

- establish and implement clear and transparent supervisory strategies and priorities against which supervisory effectiveness can be more objectively assessed;
- maintain high-level, constructive dialogue with institutions at a senior level to support supervisory judgement and risk assessment;
- ensure data requests effectively support a more detailed and informed approach to supervisory understanding of institutions' key strategic choices and related risks and vulnerabilities;
- further enhance international supervisory cooperation, including by reassessing and clarifying the objectives to be achieved through supervisory colleges and other strategic supervisory discussions on global institutions; and
- effectively manage the volume of regulatory and supervisory change, including by having sufficient budgetary resources and building and maintaining a skilled, capable, and experienced workforce.

The rest of the Executive Summary provides additional information on the review findings, and includes recommendations to address identified areas where more work is needed.

The scope of supervision has been redefined

Financial stability concerns and an increased emphasis on macroprudential regulation have informed major changes in institutional frameworks as well as internal organisational structures for supervision. In some jurisdictions the focus on a comprehensive macroprudential approach has led to the creation of dedicated financial stability bodies or committees, as well as committees for the identification and monitoring of emerging vulnerabilities and risks.

A number of jurisdictions have also expanded the scope of supervision through strengthened mandates and powers, for example relating to recovery and resolution work as well as sanctions and enforcement powers. Expanded use of recovery and resolution planning, in particular, is identifying organisational and funding structure complexities that can act as impediments to resolution. Work on recovery and resolution is emerging as an integral part of going-concern supervision and supervisors are increasingly focused on removing potential barriers to resolvability. A deeper focus on these areas has helped supervisors gain a better understanding of G-SIB business models and strategies, as well as the sustainability of business lines and products.

The outcomes from macroprudential approaches and recovery and resolution work are increasingly influencing supervisory assessments and activities, with a view towards enhancing financial system stability and the safety of individual institutions. However, fully integrating these activities into 'business as usual' supervision is proving challenging.

Supervision has become more risk-based, holding G-SIBs to a higher standard

Supervisory authorities are tailoring their supervisory practices to the size, business model and systemic importance of institutions. Many authorities have made organisational changes, such as establishing separate divisions or other internal structures dedicated to those institutions that are most important to financial stability. G-SIBs, in particular, have commanded greater supervisory attention due to 'too-big-to-fail' concerns and are now subject to higher loss absorbency requirements, formal recovery and resolution planning expectations, and more intensive supervision than other institutions. Underpinned by strengthened core principles for effective supervision and improved international guidance, supervisory standards and expectations have increased in key areas such as risk governance, risk appetite frameworks, and risk culture.

In some cases, greater supervisory intensity has resulted in a considerable increase in the number, frequency, and scope of data requests from supervisors to financial institutions. Quality data assist supervisors in a number of important ways, including enhancing their understanding of business models and their risk drivers, developing forward-looking risk assessments, and facilitating early intervention. Accordingly, supervisory expectations for institutions' ability to aggregate risk data and develop more accurate and robust information technology (IT) and management information systems (MIS) have increased and the ability of G-SIBs to meet these heightened expectations needs to be improved. Further work is also needed by authorities to ensure that the purpose of data requests is clear and effectively targeted, and that requests are coordinated with other authorities where appropriate. More effective communication to G-SIBs on the purpose of targeted data requests in supporting more detailed and informed supervisory understanding of risks and vulnerabilities will also assist the quality and timeliness of responses.

The supervisory approach has become more engaging and forward-looking

Many of the FSB recommendations were specifically aimed at enhancing the nature of the relationship between supervisors and the G-SIBs they supervise. Greater supervisory interaction with senior management and directors has occurred and, notably, supervisors are engaging in more challenging and sceptical conversations with G-SIBs about business strategy, capital and liquidity needs, governance, risk management and risk culture. Many supervisors also engage with institutions on their process for filling critical leadership and senior staffing roles, with some supervisors directly involved in the selection process.

The engagement between supervisors and G-SIBs is supported by more intensive analysis of institutions' business models, more frequent and more robust stress tests, and greater use of horizontal reviews. This reflects supervisors' increased adoption of a forward-looking perspective, with more in-depth and comprehensive analysis of emerging risks using a broader range of tools, and assessments of institutions' business plans and strategies. These tools are not new, but are now commonly applied across jurisdictions with outcomes feeding into supervisory risk assessments, plans and actions (in particular, capital adjustments).

Supervisory authorities indicated an emphasis on implementing enhanced international standards and guidance in key areas such as risk governance, risk appetite and culture, and recovery and resolution planning. However, effectively assessing institutions' risk governance and culture practices remains a challenge. Further, maintaining this level and quality of strategic dialogue is resource intensive for authorities and requires appropriate supervisory capabilities, which is proving difficult to sustain for many authorities as noted below.

Attracting and retaining supervisory resources remain a challenge

Successful implementation of changes in supervision requires supervisors to have deep experience, strong communication skills, and the ability to exercise sound judgement in effectively challenging G-SIB management on their strategies and approaches. Adopting a more forward-looking and strategic approach to supervision therefore requires enhanced supervisory capabilities, and not just additional resources.

Authorities are generally making progress in establishing clear career paths for supervisors and building a strong pipeline of senior talent. They have also increased their focus on career development and training, as well as enhancing remuneration where possible. An effective talent management strategy that attracts, develops and retains the right staff is seen as critical for success. While progress has been made on this front, many authorities have experienced higher staff turnover in recent years, in part due to changes in supervisory approaches. This creates challenges in maintaining supervisory capabilities and the overall effectiveness of supervision, in light of the fact that deep supervisory experience can only be acquired on the job (i.e. good supervisors are "home grown").

The ability of supervisors to act rests also on operational independence, within a clear accountability framework for the supervisory authority. Importantly, supervisors need strong budgetary resources to achieve their objectives. Following the crisis, IMF-World Bank assessments under the Financial Sector Assessment Program (FSAP) revealed significant weaknesses on supervisory resources and operational independence for G-SIB home jurisdictions. They included: the need for government approval of certain prudential measures; the possibility of arbitrary removal of senior supervisory personnel; the manner in which supervisory authorities are financed; inadequate budgetary resources; and the need to enhance supervisory skills. Most G-SIB home jurisdictions report that they have implemented or plan to implement the FSAP recommendations, particularly those related to increasing supervisory resources and skills. The results will be reported in future FSAP updates.

Supervisory colleges and crisis management groups are effective mechanisms for sharing information but need to be further enhanced

The breadth of information shared within core supervisory colleges has increased and more coordinated supervisory activities are being undertaken. The ability to share substantive information between home and host supervisors, however, remains a challenge as highlighted by both national authorities and G-SIBs. Supervisors indicated that colleges (particularly core colleges) are used to share information and coordinate supervisory activities. However, reaching a coordinated risk assessment, as set out in the FSB's SIFI Framework and agreed by G20 Leaders at the 2010 Seoul Summit,[3] is currently not seen by authorities as an agreed or necessarily achievable objective of such colleges (except in the European Union, where joint risk assessments are explicitly supported by the legal framework). Reaching a common understanding and assessment of key risks and supervisory priorities across jurisdictions is more challenging when there are different national priorities, emphasis on different supervisory methods, and when national reforms go beyond international standards (e.g. "ring-fencing" initiatives).

Further work is therefore needed in fully implementing the BCBS principles for effective supervisory colleges[4] to support effective cross-border supervision of G-SIBs and reinforce expectations for information-sharing. More international policy work may also be needed on the objectives of supervisory colleges (particularly for G-SIFIs), including the extent to which the FSB's objective of achieving a "rigorous co-ordinated assessment of the risks facing the G-SIFIs through international supervisory colleges" can be achieved, and in particular whether the legal underpinnings currently in place are sufficient to support this objective.

Both national authorities and surveyed G-SIBs consider crisis management groups (CMGs) more effective mechanisms for cooperation than supervisory colleges. This is in large part due to the clearer and more aligned objectives of authorities within CMGs (namely, around resolvability), which allows for more focused discussion on identifying and removing impediments to resolvability and may eventually lead to improved coordination of supervisory actions. Discussions on recovery and resolution planning have been insightful for both national authorities and G-SIBs, and have highlighted the significant tensions that can arise between going concern supervision and gone concern, in particular as regards the location of capital and liquidity. As the focus turns increasingly to application of new rules, the importance of fostering strong supervisory cooperation and coordination is increasingly coming to the fore. The FSB, in collaboration with the BCBS, will develop ways to foster a dialogue among heads of supervisory authorities to discuss supervisory issues and other challenges identified by the review, in a format in which confidential supervisory information can be exchanged and protected. Such discussions in good times will help to reduce potential uncertainties during crises.

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3 At the 2010 Seoul Summit, "[G20 Leaders] agreed to conduct rigorous risk assessment on [G-SIFIs] through international supervisory colleges…." See The Seoul Summit Document, October 2014 (https://g20.org/wp-content/uploads/2014/12/Seoul_Summit_Document.pdf), which was further elaborated in the FSB SIFI Framework (recommendation 34): "For G-SIFIs, the quality of information exchanged in supervisory colleges should be adequate to enable a rigorous coordinated assessment of the risks facing the institution."

4 See BCBS, *Principles for effective supervisory colleges*, June 1014 (http://www.bis.org/publ/bcbs287.htm).

Assessing the effectiveness of this more intensive supervisory approach is at an early stage

Assessing the extent to which the more intensive supervisory approach has become more effective in influencing institutions' behaviour remains a challenging task for all supervisory authorities. Effectiveness is viewed as easier to assess where supervision is guided by prudential rules, expectations are clearly laid out, and hence the outcomes of supervision are easier to identify. Assessing effectiveness is, however, more challenging in more qualitative areas where greater judgement is required, such as governance, risk management and risk culture, as well as the independence and effectiveness of control functions.

Supervisory effectiveness is more objectively assessable when authorities have in place a well-defined supervisory strategy, which clearly articulates and prioritises objectives for the authority that are consistent with the authority's risk appetite. Establishing a risk appetite is important because it clarifies supervisory expectations (e.g. the authority's risk tolerance) and strategic priorities. However such essential underpinnings for assessing supervisory effectiveness are not yet in place in many jurisdictions. Most authorities described their supervisory strategy as being implicit in their overall risk based approach to supervision, for example by requiring higher supervision standards for more systemic institutions. Further, only a few authorities have explicitly articulated their risk appetite and related supervisory strategy. Efforts underway by the BCBS on impact and accountability are expected to provide a foundation for moving forward work in this area.[5]

All surveyed G-SIBs noted that the intensity of supervision has increased

Surveyed G-SIBs noted that the focus of supervisors on capital and liquidity has increased. Several G-SIBs also observed greater supervisory focus on risk governance and risk appetite frameworks, operational risk management and related controls, and conduct-related matters. While many G-SIBs indicated that they had embarked upon a path of strengthening their risk governance and risk culture to regain market confidence, they also noted that increased supervisory attention in these areas provided further impetus to their efforts.

G-SIBs highlighted the increase in the number and depth of supervisory reviews and data requests. Supervisory actions in response to findings were also noted as having strengthened. The quality and level of dialogue and engagement with senior supervisors is seen as having improved, supported by a deeper understanding of G-SIBs' business models and strategies. Almost all G-SIBs indicated that discussions on recovery and resolution planning had helped inform their review of business operations, rationalisation of legal entity structures, and identification of critical operations. At the same time, it was noted that some supervisors appear to be adopting an increasingly national focus, especially with regard to capital and liquidity allocation, which was viewed as creating a tension between a G-SIB's planning for ongoing operations (life) and its planning for failure and resolution (or death).

G-SIBs value the role of supervisors in providing an objective, independent, and informed view of risks from an institution's business strategy and business model, and of its risk management practices. In addition, as supervisors have the advantage of seeing a range of

[5] The BCBS set up the Task Force on Impact and Accountability in March 2014. The objective of the task force is to deepen Committee understanding about current supervisory practices, provide opportunity for BCBS members to learn from one another, and identify best practices at an international level. Work is expected to be finalised by end 2015.

practices across the financial system, they can communicate best practices to institutions and thereby promote enhancements in industry practice. Some G-SIBs indicated that they would welcome more open dialogue and constructive challenge from supervisors outside the confines of formal supervisory findings and responses. Some G-SIBs also felt that supervisors' willingness to make important judgement calls could be enhanced.

Supervisors and G-SIBs have different views on the objectives, role and effectiveness of G-SIB supervisory colleges. G-SIBs noted that colleges would be more effective cooperation fora if they provided a platform for joint agreement by home and host authorities on supervisory decisions, priorities and plans, and there was clearer and timelier communication on their outcomes. G-SIBs noted that this would enhance overall communication of supervisory messages and enable them to provide timelier and more focused responses.

The work ahead

In summary, while good progress has been made in implementing the FSB recommendations for more enhanced and effective supervision, more work is needed to further improve supervisory effectiveness and its assessment. Drawing from the findings of the review, this report sets out several recommendations to ensure that increased supervisory intensity is effectively achieving the intended outcomes.

More intense and effective supervision remains a core priority for supervisory authorities, as they seek to adopt practices that assist them to identify and address risks before they become serious problems at supervised institutions. With implementation of the regulatory reform agenda well underway, it is important that the focus on enhancing supervisory effectiveness is maintained throughout the cycle, particularly as memories of the crisis begin to fade. This requires supervisors being both "implementers" of regulatory reforms and "influencers" of financial institution behaviour. In particular, it will be critical that supervisors ensure that institutions' approaches to risk governance, risk appetite, and risk culture promote sound risk management that acts as an adequate defence against excessive risk taking. Supervisors must be prepared, and empowered, to act when this is not the case.

The FSB, in consultation with the relevant standard-setting bodies (SSBs), will continue to discuss supervisory practices for SIBs as well as other SIFIs, and related actions that could be taken to address the challenges and impediments to more effective supervision that have been identified in this peer review. The FSB will report on implementation progress in 2016.

List of recommendations:

1. Each supervisory authority should clearly define its supervisory strategy and priorities, consistent with the authority's risk appetite, and establish a formal process for evaluating supervisory effectiveness against the stated strategy and priorities. Based on the outcomes of BCBS work on impact and accountability, the BCBS by end 2016 should propose ways to assist national supervisors in establishing supervisory strategies and risk appetite frameworks, with a view toward facilitating more objective assessment of supervisory effectiveness.

2. Supervisors should continue to strengthen their engagement with banks, particularly at the board level and with senior management, with the objective of informing supervisory risk assessments through enhanced understanding of G-SIBs' business

strategy, capital and liquidity needs, governance, risk management and risk culture. This engagement should also include clear communication of supervisory objectives, priorities and desired outcomes, and enable more timely feedback on outcomes and key supervisory messages from horizontal reviews, data requests, supervisory colleges, CMGs and other supervisory activities.

3. Supervisors should continue to press banks to improve their IT and MIS to provide robust and timely information on the institutions' risk on an enterprise-wide basis. This will support more timely and accurate data collection for supervisors, which in turn facilitates continuous, forward-looking supervision and recovery and resolution planning activities. The implementation of the *BCBS Principles for Risk Data Aggregation and Risk Reporting*, due in 2016 for G-SIBs, will be a key necessary step to achieve this outcome.

4. Supervisors should continue to ensure that data requests are evaluated for purpose and intent, and effectively targeted to provide more detailed supervisory understanding of risks and vulnerabilities and hence support more effective supervision. Supervisors should also engage early on with institutions on the purposes of data collection exercises so as to assist the quality and timeliness of responses. Home and host supervisors should coordinate and take steps to streamline data collection efforts where appropriate, to reduce unnecessary duplication.

5. By end-2015, the FSB, in collaboration with the standard-setting bodies, will explore ways to promote its objective of achieving a "rigorous co-ordinated assessment of the risks facing the G-SIFIs through international supervisory colleges", including by developing additional guidance for G-SIFI core colleges as needed and by examining the legal underpinnings that may be necessary to support this. The BCBS should work further with national authorities, in particular those home to a G-SIB, to ensure full implementation of its Principles for effective supervisory colleges, and it should report on progress by end-2016.

6. The FSB and BCBS will cooperate to develop ways to foster greater cross-border supervisory cooperation and coordination through discussions amongst heads of supervisory authorities on institution-specific issues, in which confidential supervisory information can be exchanged and protected, and to facilitate resolution of some of the challenges identified by the review, such as how to approach the key objectives of building resilience of a group on a going concern basis while most effectively planning for resolution as a gone concern.

7. National authorities should make further progress on establishing a talent management strategy that supports the attraction and retention of appropriately skilled supervisory resources. This strategy should clearly define the supervisory capabilities that are needed and include targets for supervisory experience and skills. Authorities should monitor outcomes against their strategy, and implement training programs and career development opportunities that promote supervisory capabilities that are consistent with strategic objectives.

Introduction

At the Pittsburgh Summit in 2009, G20 Leaders called on the FSB to propose possible measures to address too-big-to-fail (TBTF) problems associated with SIFIs. The following year at the Seoul Summit, G20 Leaders endorsed the FSB framework for reducing the moral hazard posed by SIFIs (the SIFI Framework).[6]

The objective of the SIFI Framework is to address the systemic risks and the associated moral hazard problem for institutions that are seen by markets as TBTF. It recommends that SIFIs, and initially in particular financial institutions that are clearly systemic in a global context (G-SIFIs), have higher loss absorbency capacity and that these institutions be subject to more intensive co-ordinated supervision and resolution planning to reduce the probability and impact of their failure. To implement the SIFI Framework the FSB developed a multipronged and integrated set of policy measures to address systemically important financial institutions, which was endorsed by the G20 in November 2011.[7] The FSB reported on progress made toward ending TBTF at the 2013 St. Petersburg Summit (the TBTF Report), and presented a summary of progress and remaining efforts, by both G20 authorities and international bodies, to fully and effectively implement the SIFI Framework.[8]

This report takes forward the recommendation set out in the TBTF Report for the FSB to launch a peer review of supervisory frameworks and approaches to identify improvements and remaining challenges in supervisory practices for SIBs, including the ability for supervisors to exercise judgement and more effectively challenge institutions' risk management practices and decision-making processes.

The peer review, which was conducted in collaboration with the BCBS, covers those jurisdictions that are home to a G-SIB[9] and gathers feedback from a representative number of G-SIBs selected by home authorities (see Annex B). Other FSB member jurisdictions volunteered to be included in the review in order to share their experiences on changes to supervisory frameworks and approaches for banks they identify as significant for their economy.[10]

While acknowledging that supervisory frameworks for non-bank SIFIs should be reviewed in due course, the FSB agreed to focus on banks (particularly G-SIBs) in the first instance as implementation was most advanced in this area.

The review takes stock of how supervisors have changed, or plan to change, their supervisory framework and approach for G-SIBs and, as appropriate, other domestically significant banks,

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6 See FSB, *Reducing the moral hazard posed by systemically important financial institutions*, October 2010 (http://www.financialstabilityboard.org/2010/11/r_101111a/).

7 See FSB, *Policy Measures to Address Systemically Important Financial Institutions*, November 2011 (http://www.financialstabilityboard.org/2011/11/r_111104bb/).

8 See FSB, *Progress and Next Steps Towards Ending "Too-Big-To-Fail" (TBTF)*, September 2013 (http://www.financialstabilityboard.org/2013/09/r_130902/).

9 The G-SIB home authorities are based on the November 2013 list of G-SIBs and include China, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom, and United States.

10 These are Canada, India, Singapore and South Africa. The review, however, did not gather feedback from banks in these jurisdictions.

(collectively "SIBs") and what changes they consider most significant for enhancing supervisory effectiveness. Supervisory effectiveness should ensure that the activities and engagement undertaken by supervisors proactively influences SIBs' risk appetite and risk governance, with a view to enhancing both the safety and soundness of individual financial institutions and the stability of the financial system as a whole. This becomes evident when supervisors are able to satisfy themselves that their supervisory action, whether through supervisory practices, such as stress testing, or through dialogue with boards and senior management, have led to better risk governance practices at SIBs.

The review focuses primarily on recommendations set out in the FSB reports on enhanced supervision, particularly those identified in the 2014 progress report, and IMF-World Bank FSAP findings on supervisory resources and operational independence. The review also draws on recent BCBS publications relevant to supervisory effectiveness, but does not assess the implementation or effectiveness of BCBS standards or principles.

The findings of the review are based on the responses to questionnaires from FSB member jurisdictions and from the 13 G-SIBs that FSB members identified to be surveyed.[11] In addition to the responses to the questionnaire, the findings draw on the outcomes of a workshop held with G-SIB national authorities, and on discussions with chief risk officers and other senior management at G-SIBs that participated in the review.[12] The aim of these discussions was to delve more deeply into aspects of the survey responses provided by supervisory authorities and G-SIBs, and in particular, to identify better practices and areas where further work may be needed. The report also includes a brief summary, based on separate discussions with representatives of the Single Supervisory Mechanism (SSM), to capture the relevant supervisory approaches and practices being implemented within the SSM, which took effect among Euro area jurisdictions on 4 November 2014 (after the peer review was launched).

Section I takes stock of changes in supervisory frameworks and approaches towards SIBs since 2009, and specifically in areas considered critical preconditions to effective supervision and that have been identified as requiring more attention in various FSB reports on enhanced supervision (see Annex C) including:

1. *Supervisory mandate, strategy and culture*: Supervisors are re-considering their supervisory strategy to promote a culture that enhances supervisory effectiveness, and have reviewed their objectives to support this strategic shift. Supervisory strategy and culture set the foundation for specific changes in the supervisory framework aimed at enhancing effectiveness.

2. *Organisational structure*: Before the crisis, the SIFI designation was not used as such, and generally insufficient attention was paid to the challenges of the supervision of SIBs. Since then, many national authorities have restructured their

[11] See FSB, *Thematic Review on Supervisory Frameworks and Approaches to SIFIs – Questionnaire for national authorities*, July 2014 (http://www.financialstabilityboard.org/2014/07/r_140704a/) and FSB, *Thematic Review on Supervisory Frameworks and Approaches to SIFIs – Questionnaire for G-SIBs*, July 2014 (http://www.financialstabilityboard.org/2014/07/r_140704b/).

[12] The responses of G-SIBs were not reviewed by their supervisors and in most cases supervisors were not present during the interviews with G-SIBs.

organisation to support implementation of a more intensive approach aimed directly at SIBs supervision.

3. *Supervisory approach, methods and tools*: Supervisors are increasingly shifting towards an anticipatory and strategic approach to SIBs supervision, and need to be armed with appropriate tools, including more reliable information both at the system and individual entity level, in order to achieve a holistic, more integrated perspective on risk, and to support supervisory judgements and applicable responses.

4. *International cooperation*: To enhance supervisory effectiveness, in particular for global institutions, supervisors must leverage national and international cooperation, including via supervisory colleges. This facilitates the identification of emerging risks and a better use of available resources through enhanced coordination and reduced duplication of activities.

5. *Operational independence and resources*: Supervisory authorities need adequately skilled and effectively utilised resources, reflecting the increased scope and level of supervisory activity. An effective change management process is also needed to support implementation of enhanced supervisory approaches.

Section II summarises feedback from surveyed G-SIBs on how changes in supervisory practices across these five areas have affected G-SIBs' overall approach to risk governance, risk management and risk culture, and their strategy and material operations. It also outlines some of the challenges G-SIBs face in meeting heightened supervisory expectations. The summary aims to capture the key messages provided by G-SIBs during the review and to provide an additional window into supervisory effectiveness based on their observations of the changes to date in supervision approach.[13]

Section III describes national authorities' approaches to assessing supervisory effectiveness, including processes for the review of supervisory findings and follow-up actions, and the monitoring of compliance with issued recommendations. It also highlights challenges in objectively assessing supervisory effectiveness.

The overall findings and conclusions are presented in Section IV, which also sets out recommendations to address the challenges identified as hindering progress towards more effective supervision. While the review focuses on SIBs, these recommendations and the better practices identified in the report are relevant for supervisory practices more broadly.

I. Stock-take of changes in supervisory frameworks and approaches

Since the onset of the financial crisis, national authorities have taken a number of important steps to strengthen their supervisory frameworks and approaches to SIB supervision. While some of the changes were essential in order to implement the regulatory reform agenda and new legislative mandates, authorities also recognised that the growth of large, complex global banking organisations needed a fresh, more strategic approach and an enhanced toolkit of supervisory practices. The outcome of these initiatives has been a more intensive and

[13] *Ibid*.

interactive approach to supervision. As several jurisdictions noted, however, the difference between supervision of SIBs and other large banking organisations is largely a matter of supervisory intensity – the tools and methods are somewhat similar but their application is likely to be more frequent and rigorous. Changes to organisational structure within national authorities and the incorporation of macroprudential supervision have facilitated and complemented the greater supervisory intensity.

This section takes stock of the key changes that have been made, and highlights where new practices and tools have led, or could lead, to more effective supervision. These are summarised under the five areas outlined above. The stock-take shows that national authorities have taken similar paths toward the goal of supervisory effectiveness, although not all authorities place the same importance on different types of tools or have moved at the same pace across all areas of change. This is to be expected, as some countries have a greater number of SIBs under their jurisdiction and/or have experienced different impacts from the financial crisis. Annex D summarises key elements of the supervisory strategy and approach for SIBs based on the questionnaire responses provided by national authorities.

1. Supervisory mandate, strategy and culture

1.1 Mandates

While the principal mandate for supervisors remains unchanged – that is the safety and soundness of individual financial institutions and the stability of the financial system as a whole – a number of jurisdictions have expanded the scope and scale of supervision through strengthened mandates and powers. Legislative changes to supervisory mandates since the crisis have been aimed largely at enhancing the authority provided to national authorities in order to address the systemic risks posed by the largest financial institutions either globally or in their domestic market. Some of the notable changes include consolidation of regulatory bodies (i.e. for banks and insurers), strengthened powers for consumer protection, enhanced sanctions regimes, greater integration of macroprudential and microprudential supervision, and new powers for recovery and resolution planning.[14]

In Switzerland, for example, new powers and revised mandates were implemented with the establishment in 2009 of the Financial Market Supervisory Authority (FINMA), which merged three predecessor organisations. The Banking Act was changed to allow for specific supervision of SIBs, provide new powers with regard to the liquidation of banks, mandate the development of a new liquidity ordinance, and introduce various new prudential requirements that are more stringent, particularly in the areas of governance, risk management and control, organisation, capital adequacy, liquidity and disclosure.

In the UK there has also been a major institutional and structural change to supervision. The Financial Services Act of 2012 brought major reforms, separating prudential and conduct supervision and creating a new UK regulatory framework focused on financial stability. The Act redesigned the UK financial regulatory system through the creation of an independent

[14] China (under development), France, Germany, Japan, Netherlands, Singapore, South Africa, Spain, Sweden and United Kingdom.

Financial Policy Committee (FPC) at the Bank of England and two new authorities, the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA), replacing the Financial Services Authority. The FPC is charged with the primary objective of identifying, monitoring and taking action to remove or reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The new regulatory architecture was designed in the aftermath of the crisis to ensure that responsibility for financial stability, previously in a "tripartite system" of authorities, is centrally located.[15]

In the US, the Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (DFA) which made substantial changes to the regulatory structure governing banks and holding companies as well as to the prudential regulations applying to these banking organisations and their activities. DFA created the Financial Stability Oversight Council and directed the Federal Reserve to establish, for the largest banking organisations under their jurisdiction, enhanced prudential standards covering risk-based and leverage capital requirements, liquidity standards, requirements for overall risk management, and stress-testing, among many other requirements. DFA encompasses a wide range of new regulatory and supervisory powers for the US federal banking agencies.[16]

A major development impacting banking supervision in the Euro area is the establishment of the SSM. On 4 November 2014, the responsibility for the prudential supervision of the Euro area banks was transferred to the European Central Bank (ECB), with national authorities assisting the ECB in the performance of its new supervisory tasks.[17]

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[15] The UK authorities noted that "This system failed to: identify adequately the problems that were building up in the financial system; to take steps to mitigate them before they led to significant instability in financial markets; and to deal adequately with the crisis when it did break, especially during the first stages in the summer of 2007."

[16] Importantly, Title II of DFA established the FDIC as the authority for the resolution of systemically important bank and non-bank organisations.

[17] See Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions (SSM Regulation), and Regulation (EU) No 468/2014 of the ECB of 16 April 2014 establishing the legal framework for cooperation within the SSM between the ECB and national competent authorities and with national designated authorities, April 2014, at http://www.ecb.europa.eu/ecb/legal/pdf/celex_32014r0468_en_txt.pdf.

The European Single Supervisory Mechanism (SSM)

The SSM is a new system of financial supervision in Europe, comprising the ECB and National Competent Authorities (NCAs) of participating Member States. All Euro area countries participate automatically in the SSM.

The SSM was established as a response to lessons learnt in Europe during the financial crisis and is responsible for the prudential supervision of all credit institutions in the participating Member States, based on commonly agreed principles and standards. The SSM Regulation provides the legal basis for the operational arrangements related to the prudential tasks of the SSM. The SSM's three main objectives are to: i) ensure the safety and soundness of the European banking system; ii) increase financial integration and stability; and, iii) ensure consistent supervision.

The ECB is responsible for the effective and consistent functioning of the SSM and exercises oversight over the functioning of the system, based on the distribution of responsibilities between the ECB and NCAs. The SSM work is based on a set of principles, which guide the ECB and the NCAs in performing their tasks.

To ensure efficient supervision, credit institutions of participating Member States are categorised as "significant" or "less significant". The ECB directly supervises significant banks, whereas the NCAs are in charge of supervising less significant banks, under the general oversight of the ECB. The ECB directly supervises the 123 significant banks which collective hold approximately 82% of banking assets in the euro area. All G-SIBs from participating Member States are now supervised directly by the ECB. The ECB has the authority to: i) conduct supervisory reviews, onsite inspections and investigations; ii) grant or withdraw banking licences; iii) assess banks' acquisition and disposal of qualifying holdings; iv) ensure compliance with EU prudential rules; and, v) set higher capital requirements ("buffers") in order to counter any financial risks.

Ongoing supervision of the significant banks is carried out by Joint Supervisory Teams (JSTs). Each significant bank has a dedicated JST, comprising staff of the ECB and the NCAs.

To maintain the monetary policy tasks of the ECB operationally separate from banking supervision, decision-making within the SSM is prepared by a separate Supervisory Board within the ECB. The SSM Supervisory Board proposes complete draft decisions to the ECB's Governing Council, the ECB's main decision-making body, which adopts or objects to complete draft decisions proposed by the Supervisory Board on a non-objection procedure.

1.2 Supervisory strategy

The peer review revealed that strategy in the context of supervision has different meanings for national authorities. The review looked for examples of supervisory strategy where priorities are well defined, crystallising what is important and applying those priorities into the tactical decisions that supervisory teams are making in their work plans. An effective supervisory strategy enables clear communication of supervisory objectives and priorities that facilitates robust dialogue between the supervisor and the SIB. Public understanding of the role of supervisors is also aided when strategies are clearly articulated and communicated appropriately.

Some jurisdictions have made significant enhancements to their supervision strategies, in particular for SIBs, largely in response to weaknesses highlighted by the global financial crisis. In some cases public pronouncements and supervisory guidance have been issued that clearly articulate a new direction in strategy by an authority. Other jurisdictions indicated that their strategy is implicitly but clearly defined in a "risk-based approach" to supervision, under which the intensity of their supervisory action is guided by the risk assessment of an institution.

FINMA, for example, has explicitly set strategic goals for the prudential supervision of financial institutions and the way in which institutions are expected to conduct business. It has also formulated goals for national and international cooperation and regulation. Changes to FINMA's supervisory strategy have been made, driven by the objective to "focus on targets, act fast, and have a timely impact". Changes to FINMA's strategy and culture include: a greater focus on large and significant institutions, increasing the understanding of risks by being closer to the institutions; more experience in the core competencies of investment banking and capital markets supervision; more stringent enforcement practices; a more forward-looking approach to evaluation; a firmer, but less formal process to react more quickly to institutions' weaknesses; and a broader engagement on topical issues through increased knowledge sharing. The focus on supervisory impact is supported by a more transparent supervisory approach, whereby FINMA communicates its risk assessment and risk rating to individual banks in yearly assessment letters that also capture the essential supervisory findings and lay out expectations for addressing identified weaknesses, as well as tailor-made and specific measures to support remediation.

Other jurisdictions have implemented similar strategies. In Japan, the Financial Services Agency annually formulates a Financial Monitoring Policy for financial institutions according to the economic and financial situations as well as the current issues financial institutions face. Currently, there are two supervisory strategies in place: the first one is to conduct real-time fact-finding of developments within SIBs and the financial markets, emphasising macroprudential elements, and the second one is to extract cross-sectoral issues and best practices through the use of horizontal reviews. The strategies are reviewed, as needed, to reflect arising situations. Meanwhile, the UK PRA explicitly defines its supervisory strategy as forward-looking and judgment-based, focusing on the issues and institutions that pose the greatest risks to financial stability. The PRA conducts its assessment work in a "Continuous Assessment" cycle, as part of which supervisors must explicitly assess an institution's viability and resolvability.[18] And in the US, the supervisory strategy for SIBs was refocused to put greater emphasis on macroprudential supervision in order to complement institution-specific, microprudential supervision. The US supervisory strategy is spelled out in guidance letters available to the public.

1.3 Supervisory risk appetite and culture

Ideally, an effective supervisory strategy comprises clear objectives yet maintains sufficient flexibility to adapt to changing conditions. An important aspect of strategy is a well-defined supervisory risk appetite that forms part of the authority's own risk management framework. A well-defined risk appetite enables authorities to make more informed and consistent

[18] The *Continuous Assessment* rolling assurance programme provides the supporting framework for the PRA's judgements on the risks that an institution is running; the risks that it poses to the PRA's objective; whether the institution is likely to continue to meet the Threshold Conditions; and how to address any problems or shortcomings identified. *Continuous Assessment* also helps to identify new and emerging risks.

decisions by establishing specific tolerances for different types of supervisory activities and thereby making explicit the trade-offs required in pursuing the supervisory strategy.

Most authorities have not established a formal risk appetite framework and consider the adoption of a risk-based supervision approach an implicit indication of supervisory risk appetite. Under such an approach, the frequency and intensity of supervision is determined by the supervisory risk assessment, which is conducted 'bottom-up', rather than 'top down'. The risk appetite of the authority is therefore implied by resource allocations, with an increasing amount of resources allocated to institutions based on their systemic relevance (risk and impact of failure to the rest of the financial system). In a few cases, authorities indicate that their risk appetite, although not explicitly defined, is implicitly represented by the higher minimum thresholds required of SIBs, such as, for example, increased capital requirements above the Pillar 1 minimum via the use of Pillar 2 capital adjustments.

Most national authorities believe that a strong culture of challenge is a key element of effective supervision. Over the last few years, supervisory culture has generally become more direct, proactive, and engaging with institutions, together with adoption of an approach that is less "check-the-box" and more judgement-based. Expressions such as "tone at the top", "cooperation and collaboration", "greater accountability", "more transparency", and "greater ownership" are often used to describe how authorities have changed in their mind-set or culture, as part of their revised supervisory approach for SIBs. However, effective challenge, both within the supervisory organisation and directed towards SIBs, is still an aspiration for many national authorities.

Work underway in Canada towards developing a risk tolerance framework is an example of defining a supervisory risk appetite. In Canada, the Office of the Superintendent for Financial Institutions (OSFI) has developed a Risk Tolerance Framework that has enhanced the supervisory strategy for D-SIB supervision, as well as articulated the roles and responsibilities of various groups within the Supervision Sector in supporting the desired supervisory culture.

2. Organisational structure

Many national authorities have made changes to their organisational structure in order to support a more direct and intensive approach to supervision. These changes cover a range of areas to:

- provide decision-makers with a deeper knowledge of supervised institutions, leading to better risk identification, risk assessment, and supervisory action;
- increase the efficiency and flexibility of the supervisory process, tailored to the individual SIB's characteristics;
- develop a better link between micro- and macro-prudential supervision, with more forward-looking and up-to-date risk assessments for earlier identification of emerging risks;
- support better collaboration within the authority; and
- develop more effective interaction with regulated institutions.

Organisational changes include the establishment of separate divisions or new organisational structures dedicated to SIB supervision; the streamlining of reporting lines to allow for faster access to senior decision-makers; and the strengthening of specialised support functions (to conduct onsite reviews, model validation, stress testing, horizontal reviews, emerging risks identification, legal counselling, data collection and data analysis, among others).[19] Several authorities have established new units or functions for recovery and resolution planning (RRP) purposes, and for macroprudential and cross institutional analysis. Other changes noted were related to improvements in the supervisory processes to achieve more consistency across institutions and to reduce silo tendencies within the supervisory organisation. To strengthen internal decision-making processes, many authorities have established new quality assurance and control structures, as well as committees and panel review approaches for risk assessment and decision-making. A more detailed summary is provided in Annex E.

While there is no optimal organisational structure that promotes effective supervision, each reorganisation that national authorities described is intended to address both individual institution and systemic risk implications, and aid supervisors in the pursuit of more effective supervision. For instance, Germany addressed the coordination of macro- and micro-prudential supervision with the establishment under law of the Financial Stability Committee, in which the Federal Ministry of Finance, Deutsche Bundesbank and BaFin coordinate supervision on an overall, strategic level, while leaving the more tactical aspects of coordination to be considered by BaFin's Risk Committee. Other coordinating bodies for SIB supervision include the Risk-Oriented Supervision Working Group and the Forum for On-Going Supervision (the Forum); the former focuses on process-related issues, while the latter is focused on discussing risks at the micro-level that could have potential impacts at a system level. The Forum also aggregates, evaluates, and analyses risks of SIBs on a regular basis.

In the US, the Federal Reserve Board created a new supervisory framework (Large Institution Supervision Coordinating Committee, Operating Committee or LISCC OC) that oversees the supervision of financial institutions that pose an elevated risk to financial stability.[20] The LISCC OC includes senior officers with expertise from across the Federal Reserve System, including senior supervisors, economists, attorneys, policy experts and other risk specialists. The objective of the framework is to foster rigorous supervision of individual institutions while also promoting the evaluation of systemic risk. The LISCC OC focuses on understanding risks and taking steps to materially increase the financial and operational resiliency of institutions in order to reduce the probability of, and costs associated with, failure.

Restructuring of supervisory activities has also been undertaken to address the identification of emerging risks. For example, in Canada, OSFI established an Emerging Risk Committee (ERC) to assess the macroeconomic environment, the financial system, the industry (including cross-sector developments) and the institution-specific emerging risks on a regular basis. The ERC is composed of representatives from various divisions in the Supervision and Regulation Sectors and currently meets at least quarterly with OSFI Executive, including the

[19] Canada, Japan, Netherlands, Singapore, South Africa, Spain, Sweden, Switzerland, United Kingdom and United States proactively increased the number of supervisory resources devoted to SIB supervision.

[20] US-domiciled SIBs and certain non-US-domiciled SIBs with significant US operations,

Superintendent. The ERC includes a specific focus on the potential impact of emerging risks on D-SIBs.

Many authorities have established coordination bodies and enhanced other internal control processes while other authorities rely on third parties for an independent perspective and to provide external expertise where there might be internal talent or capacity gap. There remain, however, key organisational challenges identified by the authorities. These challenges include the following: (1) the resource pressures posed by needing to translate new regulation and standards into supervisory practice; (2) the efforts to avoid either internal inefficiencies or gaps in operational supervision; (3) the need to develop in-house expertise and to ensure the continuity of supervisory staff and expertise; and (4) the effective integration of macroprudential and microprudential supervision.

2.1 Quality assurance and internal control

Authorities increasingly consider quality assurance and internal control processes, including an internal challenge process, as critical practices to increase the effectiveness, consistency and comprehensiveness of supervision. Some jurisdictions rely on *ex ante* quality assurance, by utilising detailed internal manuals and guidance on supervisory methodologies, procedures, and templates. By contrast, some other jurisdictions highlight the importance of other functions within the authorities, such as policy departments, regulatory and risk specialists, and risk management, to provide challenge to the supervisory findings and to represent the cornerstone of quality assurance and high-quality supervision.[21]

In some cases formalised panels, often designed for SIBs and comprising the authority's top management, provide a challenge process for risk assessments, the proposed supervisory strategy, and the communication to institutions; they also provide an opportunity to review the supervisory methodology to ensure due process. In Canada and Singapore, for example, a formal panel comprising senior management debates the rationale and documentation for the SIB's risk assessments. A few other jurisdictions conduct reviews during the year to ensure that supervisory strategy remains on track.[22] Some jurisdictions also indicate that their internal audit function plays an important role, given its independence from internal and external influences; it confirms adherence to internal control processes and more generally reviews the consistency in the application of risk assessments, risk ratings, and supervisory actions.

Some jurisdictions indicated that they formalised their quality assurance approach within a three lines of defence framework. Under this framework, the first line of defence is provided within the formulation of the risk assessment and supervisory decision-making processes, accompanied in some cases by internal challenge through discussion with risk specialist functions. The second line is then provided by a formal review process, either through senior official panels reviewing both the supervisory process and the supervisory decisions, or by an

21 Some authorities (for example Italy, Switzerland) have established regular meetings bringing together management of line supervisors and specialists areas to discuss data and trends or assessment of institutions and effective handling of cross-sector matters.

22 This is particularly the case for Switzerland and United Kingdom.

independent control function. And finally, the third line relies upon the activities of the authority's internal audit function.

2.2 Use of third parties

Some authorities employ third parties (e.g. external auditors or expert consultants) in order to provide independent external expertise on specific issues or to carry out comprehensive and consistent analysis on selected topics. While there is a wide spectrum of practice in the frequency and intensity of the use of external auditors or other experts, all authorities stress that third parties must be independent.

Several authorities have the power to commission a skilled person to undertake a review on their behalf, but the final responsibility for decision-making and implementation of supervisory actions remains with the supervisory authority. For instance, Switzerland makes use of third parties for a wide range of activities, such as investigations, assessments of model implementation, independent checks of the effectiveness of measures taken by a bank, and the assessment of particular features of a bank's internal control system. A few authorities have assigned external consultants specific tasks related to the European-wide Asset Quality Review (AQR) exercise performed in 2014. Some authorities also use external auditors for the verification of regulatory returns and financial statements.

3. Supervisory approach, methods and tools

National authorities have developed an approach to supervision for SIBs that is continuous (with more frequent assessments) and more forward looking, so as to identify and anticipate problems that might develop, if left unchecked. Supervisors are using a broader and more sophisticated range of tools to garner a more accurate, and granular assessment of a SIB's risks, products, business activities and risk management practices. They have intensified their onsite presence or increased supervisory activities in areas with particular relevance to SIBs, and adopted a more engaging and direct approach, with more extensive communications with SIB senior management and boards.

These changes are viewed as having brought substantial benefits in terms of improved coverage of risks and a greater ability to benchmark and calibrate risk profiles. The changes have also resulted in other improvements including: a better understanding of institutions' risk management practices; the identification of best practices and outliers; and an earlier detection of emerging risks (allowing for earlier intervention).

In this enhanced supervisory toolkit, business model analysis, stress testing, and recovery and resolution planning have been identified by most jurisdictions as important tools in tailoring supervision for SIBs. Formal risk assessment systems also remain a very important tool, and have been revised and enhanced to provide a more accurate assessment of a SIB's activities and risks, as well as supplemented by new methods for identification of emerging risks. However, not all authorities place the same level of importance on different supervisory tools. Further, many of the tools remain under development as national authorities consider their relative effectiveness; resource constraints are also requiring supervisors to concentrate their efforts on the most useful tools.

Authorities have adopted more formal and forceful supervisory actions in response to supervisory findings, including an increased use of Pillar 2 adjustments, as well as formal enforcement and sanctioning powers. Supervisory communication is also more frequent, through both informal and formal channels. In several cases annual risk assessments and related findings are formally communicated to SIBs. In the majority of cases, a letter is sent to the board and/or to the compliance function and management; in other cases, it is communicated via regular meetings. In a few cases, the findings are discussed with the financial institutions before the letters are issued, providing an opportunity for institutions to provide their perspective before the formal supervisory view is finalised. In the US, specific guidance on the communication of supervisory findings has been issued to improve consistency and clarity.[23]

A summary of the various tools employed by national authorities is provided below, but it is not intended to be a complete list. Further, some individual jurisdictions are mentioned in relation to each tool, but this is not intended to convey the relative importance that each jurisdiction places on a given tool or its effectiveness. A more detailed summary of the key changes in supervisory methods and tools can be found in Annex F and G.

3.1 Enhanced risk assessments

Most jurisdictions have undertaken enhancements to their risk assessment system to include a wider range of risks that face SIBs and other large banking organisations. Many jurisdictions are aligning their systems to Basel Committee guidelines or, in the case of European supervisors, to the guidelines promulgated by the European Banking Authority (EBA). Risk assessments have been redesigned to incorporate stress testing results as they provide a more forward-looking perspective on risk. Identification of emerging risks is also now an important part of the supervisory framework in most jurisdictions. Emerging risks are captured in various ways, including through discussions with the senior management of financial institutions and the use of formal macro-financial indicator monitoring systems which support the analysis of system risks and vulnerabilities.

However, challenges remain in some areas. These include incorporating aspects of risk governance and risk culture into risk assessment systems, the assessment of liquidity risks (which requires significant amounts of data and at high frequency) and, for a few jurisdictions, building the IT infrastructure to support peer comparisons, benchmarking and trend analyses. Challenges also remain in effectively incorporating macroprudential surveillance into the overall risk assessment of SIBs, and in pulling together all elements of a risk assessment in order to inform a comprehensive supervisory strategy.

A range of approaches is adopted by authorities to inform their risk assessments. To illustrate, in Switzerland, FINMA prepares a semi-annual internal publication, called the Risk Barometer, which tracks macro-economic and regulatory risks, and developments relevant for all supervised financial institutions. This publication aids the understanding of emerging risks and assists in assessing banks' preparedness to respond to such risks. Both the risk analysis

[23] See Federal Reserve, *Supervisory Considerations for the Communication of Supervisory Findings*, June 2013 (http://www.federalreserve.gov/bankinforeg/srletters/sr1313.pdf).

and the impact analysis are shared with FINMA's executive board. The identification of emerging risks is coupled with regular stress testing activity to determine the resilience of a single institution to the realisation of an adverse macro-financial scenario. A key challenge noted by supervisors is in making the link between macro-economic scenarios and the underlying financial performance (portfolio loss) of the institution.

In the UK, the PRA's risk assessment includes a consideration of system-wide risks,[24] while sector analysis aims to better understand key market developments over the medium term, drawing upon both market intelligence and, where appropriate, standardised information from institutions. The PRA also draws on the views of the FPC on the macroprudential environment. Key challenges have been identified by the PRA, however, and include the following: the ability to develop a collective view of key risks; the need to focus on the primary emerging risks rather than a long list of potential issues; the monitoring and assessment on an ongoing basis in order to understand how risks are evolving and what the likely impact is expected to be; and, developing a proportionate supervisory response to concerns raised.

While the SSM has meant deep changes for the supervision of European banks, including SIBs, the SSM risk assessment methodology is still based on forward-looking, risk-based supervision that supports supervisory judgement and enables potential problems to be addressed in a timely manner. The SSM supervisory approach relies on a deep understanding of both risk factors and core business lines at individual banks and across the banking sector as well as understanding the linkages between banks and the rest of the financial system. Engagement at the board and executive management levels will continue and include both quantitative analysis and qualitative judgement. Continuous supervision will be conducted by joint supervisory teams, while onsite missions will be organised by the ECB, in coordination with national competent authorities.

3.2 Understanding SIB business models

Business model analysis (BMA) is part of the supervisory framework for SIBs, and includes the analysis of revenue flows from various parts of the organisation (often referred to as "follow the money" analysis) in order to understand key drivers of risk. After the crisis, however, there was recognition of the need for a deeper understanding of the institution's business and strategy, as preconditions for a better understanding of risks.

There has been a shift by some authorities towards more in-depth BMA. There is a greater use of onsite reviews and more frequent and regular meetings with banks to discuss business line activities, strategies and goals, with the aim of identifying emerging risks and vulnerabilities that may warrant supervisory intervention. However, the depth to which BMA is undertaken varies across jurisdictions.

In a few jurisdictions, BMA has developed as a core part of the supervisory approach to SIBs. For example, the UK PRA examines the threats to the viability of an institution's business model, and the ways in which an institution could create adverse effects on other participants

[24] For example from low interest rates, excess credit growth or international imbalances, and sector risks (e.g. commercial real estate).

in the system because of the way it intends to carry on its business (sustainability and vulnerabilities to the business model). The analysis includes an assessment of where and how an institution makes money, the risks it takes in so doing, and how it funds itself. The analysis includes a review of the drivers of profitability, risk appetite, performance targets and underlying assumptions, and an institution's own forecasts and its plausibility. The PRA uses this analysis to form a view of the institution's ability to generate returns and the associated risk and funding profile over the medium term.[25] This view, together with the general picture supervisors have of the business, guide the PRA's work in assessing the adequacy of the measures the institution has in place to manage and mitigate risk.

Other authorities indicated that challenges remain in utilising BMA as a tool for effective supervision because of the high degree of granularity and specificity in its analysis, as well as the challenges in coordinating BMA with other supervisory processes, including the setting of supervisory priorities. The complexity of SIBs' business models potentially requires multi-level analysis of products and legal entities and to enable this, additional resources need to be allocated to enhance the MIS of both banks and supervisors.

3.3 Stress testing and capital planning

In most jurisdictions, stress testing has become an important tool to assess SIBs' resilience to various stress scenarios. Although there is a long history of supervisors employing stress tests, the emphasis on this tool has increased significantly in recent years, with an expanded coverage of stress scenarios (including the recent financial crisis) and increased frequency of using such tests. In addition, supervisory stress tests are increasingly used to determine the type and degree of supervisory intervention, for example, to quantify Pillar 2 capital requirements under the supervisory review and evaluation process (SREP). In a few jurisdictions, stress testing has become *the* key tool that supports forward-looking risk assessments and capital planning analysis, as well as being used to effectively challenging institutions' own risk estimates. Moreover, the outcomes of stress testing, when applied rigorously and transparently, are viewed in some jurisdictions as effective in supporting public confidence in the financial system.

While considered a very useful, if not key, supervisory tool for SIB supervision by almost all authorities, many authorities also noted significant challenges in relation to stress testing, including:

- designing appropriate stress scenarios;
- exploring quantitatively the implication of very adverse tail events and determining the appropriate supervisory response;
- keeping the framework dynamic by incorporating institutions' reaction functions and expected evolutions in balance sheet items;

[25] Vulnerabilities might include: unsustainable expectations of growth; heavy reliance on an inflexible structure of net interest income, with consequent exposure to a low interest rate environment; concentrated funding sources which may dry up in stressed circumstances; or significant consequences following a change in credit rating.

- identifying limits of models, including those models for both macroeconomic scenarios and specific risks, with appropriate modelling of feedback effects and meaningful aggregation of risks with lag impact effects; and
- maintaining the requisite level of skilled resources and providing appropriate staff training.

In its Comprehensive Capital Analysis and Review (CCAR), the US Federal Reserve assesses the capital adequacy of large bank holding companies under various stress scenarios and the practices these institutions use to support their capital planning processes, after which the Federal Reserve will either object or provide notice of non-objection to the submitted capital plan. An institution whose capital plan is objected to cannot make planned capital distributions that are not specifically approved. The Federal Reserve publishes its decisions regarding each institution's capital plan along with the results of its post-stress capital adequacy analysis. In addition to public disclosure of CCAR results, the Federal Reserve sends each participating institution a feedback letter that outlines any material deficiencies that should be remediated substantially before the following year's CCAR, and assesses throughout the year each institution's progress in remediation of deficiencies. Increasingly, ongoing supervisory assessments of SIBs are focused on practices that are integral to capital planning, including risk identification, risk measurement, risk management, internal controls, and, as well, leveraging horizontal perspectives developed as part of CCAR. The success of CCAR paved the way for other horizontal, simultaneous supervisory exercises, such as the Comprehensive Liquidity Analysis and Review (CLAR).

3.4 Horizontal reviews

Most jurisdictions have increased the use of horizontal reviews as a supervisory tool, covering wider areas of interest such as compensation practices, asset quality reviews, commercial real estate risks, liquidity risk management, and new products. These reviews have increased in number and frequency, and have become more focused and detailed. Some jurisdictions have created separate divisions with additional resources to carry out such reviews.

The main benefit of horizontal reviews is the ability to obtain a cross-sectoral perspective on the selected topics or risks, and to conduct more granular work on issues that are outside the scope of standard, periodic reporting requirements. This strength can also be a constraint on the effectiveness of horizontal reviews, however, given an absence of common data definition standards and templates, and the difficulty of obtaining comparable data. Some authorities also noted the challenges of seamlessly integrating the outcomes from horizontal reviews with on-going institution-specific supervision.

3.5 Supervisory data collection and analysis

A more intensive and engaged approach to supervision has resulted in a substantial increase in regulatory reporting and data requests. Supervisors have stepped up the number and frequency of ad-hoc reviews, in addition to the scheduled horizontal reviews noted above. Many authorities indicate that supervisory data collection and analysis is of significant importance for achieving effectiveness. However, it is unclear whether supervisors have the quantitative frameworks, including resources, in order to support a thorough analysis of all the data collected. Concern has been expressed by some authorities that excessive data granularity might deflect resources from strategic, long term supervision to more "tactical" supervision related to the more immediate demands of (granular) data validation and analysis.

Authorities note several challenges connected to supervisory data requests, namely: ensuring high data quality and consistency (and in particular maintaining the integrity and quality of historical information); the ability to perform data aggregation; and the ability to identify the data that is core or essential. It has been observed that a balanced approach is needed, under which comprehensive and intensive data requests are undertaken within a sound data governance framework. Some authorities also noted as a challenge the tension between the use of regular periodic reporting and the use of ad hoc data requests. To address this, in Japan data requests are subject to extensive consultation *ex ante* with financial institutions as appropriate, while their usefulness is reviewed *ex post* on a periodic basis. Data requests that are no longer considered useful are discontinued.

European authorities note the challenges of transitioning to the new reporting system being introduced by the SSM and its implications for the data that will ultimately be available to support analysis and risk assessment. The need for consistency in risk assessments might also create constraints on the potential use of more granular, but data-intensive analytical tools. This has been noted as a particular issue for Italy which has traditionally relied upon analytical tools that employ a substantial amount of quantitative information provided by financial institutions.[26]

3.6 Recovery and resolution planning

For many authorities, national implementation of regulatory initiatives has focused on recovery and resolution regimes, and also provided new powers to supervisors. Many jurisdictions have created new organisational structures and refocused parts of their on-going supervisory activities to deal with RRP. The work with the G-SIBs and other large banking organisations to develop effective recovery and resolution plans has had ancillary benefits by informing supervisors' risk assessments, and enhancing the analysis of specific areas, such as liquidity and capital adequacy, during stressed periods. In the UK, for example, recovery and resolution plans are now fully embedded in the "Continuous Assessment" approach. More generally, supervisors have garnered useful insights from RRP regarding an institution's corporate structure and internal group dependencies.

The Federal Reserve has recently published guidance that focuses on reducing uncertainty and increasing resiliency during stress to ensure institutions have actionable options to support recovery and resolution. RRP is not solely for home jurisdictions where G-SIBs reside. South Africa, for example, is not home to a G-SIB but has required its domestic banks, "to identify those countries where their operations are considered to be systemic and also to identify those countries where they have material operations in terms of their own operations." The

[26] Accounting, prudential and statistical information are collected both at the consolidated and solo level. Monthly data from the Credit Register tracks bank-client individual positions. The data collection is subject to strict quality assurance processes, carried out by a dedicated IT department. Also for ICAAP, a dedicated reporting structure asks banks to submit both qualitative and quantitative information, including internal capital estimates on the basis of benchmarks set by the Bank of Italy.

domestic banks will need to develop recovery plans for these applicable operations for inclusion in their overall group-wide recovery plan. Singapore has similarly required several SIBs to submit recovery plans and submit information as part of the resolution planning process.

National authorities also noted challenges in a number of specific areas related to RRP. These challenges include: the ability to allocate appropriate resources to manage and analyse the volume and complexity of information collected (including the ability to provide actionable feedback to the institutions); integrating RRP activities into on-going supervision; and improving international cooperation for cross-border groups (including defining information sharing criteria with host authorities). The potential tension between group (home authority) and local (host authority) views has been raised as a particular concern, and is discussed further in Section 4. Authorities (and G-SIBs) noted that there is an appropriate balance that needs to be struck between supervision of the institution as a going concern, and planning for a gone-concern (at both a group and local level).

3.7 Corporate governance

Supervisory focus on corporate governance has unambiguously increased since the global financial crisis. Some jurisdictions have revised regulations or supervisory guidelines to better articulate or clarify expectations for the responsibility and accountability of board members. For example, the US Office of the Comptroller of the Currency (OCC) issued in 2014 a detailed regulation that establishes minimum standards for the design and implementation of a risk governance framework for large banking organisations and, as part of this, establishes minimum standards for the board of directors to oversee the framework. In other jurisdictions, such as France and Italy, several rules were issued to strengthen risk management functions and compensation practices. In France, supervisors implemented new legislation ensuring the separation of executive (management) and non-executive (oversight) roles within a bank. Thus, a chairman of the board can no longer be designated as CEO. In Italy, the regulation on governance and on internal control frameworks was revised in 2014 to include more prescriptive provisions on the competencies, composition and functioning of boards.

After the crisis, Chinese authorities promulgated a series of guidelines to enhance banks' corporate governance with "Guidelines on Corporate Governance of Commercial Banks" and "Guidelines on Sound Compensation Practice of Commercial Banks". Together, these guidelines require banks to establish sound corporate governance with balanced incentive structures that discourage excessive short-term risk taking.

The Monetary Authority of Singapore (MAS) enhanced its corporate governance framework in December 2010, formally codifying requirements for locally-incorporated banks, including SIBs, to establish a dedicated risk management committee of the board in addition to the nominating, remuneration and audit committees. Besides the appointment of directors, chief executive officer (CEO), deputy CEO and chief financial officer (CFO), MAS' approval for the appointment of the chief risk officer (CRO) is also required.

In the UK, following the Walker Report (2009) that was commissioned to examine corporate governance and make recommendations for improvement, the FSA published guidance in 2010, "Effective Corporate Governance", and enhanced its approach to assessing major banks' governance arrangements. For example, UK supervisors often observe board and committee meetings as part of regular supervision practice. Currently, the UK PRA is developing tools, guidance and training for supervisors to enhance their ability to effectively challenge institutions' risk management practices and decision-making processes.

While most jurisdictions appear to have rating systems that include assessment of board and senior management oversight of the institution, authorities have yet to develop clear frameworks for assessing board effectiveness. Corporate governance assessments require a range of judgements that build upon careful evaluation by experienced individuals, which, in turn, can make it difficult to ensure consistency of treatment across institutions. Other challenges include the lack of objective benchmarks, and the difficulty of developing indicators or methods for assessing the collective competence of boards in supporting a complete picture of board effectiveness. These challenges highlight the importance of building a thorough, robust supervisory dialogue with institutions to gain a better understanding of these more difficult to assess aspects.

3.7.1 Risk management, appetite and culture

Other areas associated with corporate governance and the assessments of board effectiveness are risk governance and risk management, and especially the assessment of risk appetite and risk culture. In several jurisdictions, supervisory reviews now explicitly cover risk appetite frameworks, often in connection with the assessment of other organisation-wide topics such as strategic planning. Supervisory assessments of risk culture are, however, at an early stage of development for most supervisory authorities.

Some supervisors note the challenges in undertaking reviews of risk culture and effectively integrating culture assessments into the overall risk assessment of the SIB. One national authority noted that the challenge is, "changing supervisory mentality, as some qualitative aspects are sometimes seen as difficult to implement." In Canada, for example, authorities are reviewing their approaches to more explicitly incorporate risk culture into sustainable supervisory processes.

3.7.2 Fit and proper assessments

Some, but not all, supervisory authorities have taken a more proactive role in the selection process for board members and senior management.

Germany and the UK perform an *ex ante* assessment. In Germany, all senior managers who are potential candidates for the management board are assessed by supervisors even if not required by law, and any dissatisfaction with the candidates is communicated to the SIB. SIBs are also asked to have proactive succession planning in place for management board positions. In 2008, the UK issued guidance for Significant Influence Functions, which is an intensive approach to assessing applicants.

Specialised staff (such as industrial psychologists) has been hired by the De Nederlandsche Bank (DNB) to assist with the analysis of board effectiveness. There is a more active use of fit and proper assessments, with the scope of such assessments broadened to include all relevant staff that can materially influence the risk position of an institution.

4. Supervisory cooperation and coordination

Mechanisms for international cooperation and coordination have been significantly strengthened and formalised since the crisis. Exchanges between home and host authorities have intensified through both formal channels, such as supervisory colleges and CMGs, and informal channels, such as regular, ad hoc bilateral, or multilateral conference calls and meetings, and exchanges through emails.

The extent and breadth of information shared has also significantly increased. Underpinning these efforts are memoranda of understandings (MoUs) and cooperation agreements (CoAGs). For example, German supervisors noted they were signatory to more than 60 MoUs in 2012, which is up from 30 MoUs in 2005. Bilateral cooperation agreements, which in some jurisdictions are more formal than MoUs, are the preferred form of information exchange for some authorities. These various arrangements cover the sharing of confidential supervisory information and provide opportunities for onsite examinations by home authorities of cross-border operations in the host jurisdiction. Authorities report that MoUs and cooperation agreements have facilitated timelier cross-border information sharing. To further facilitate collaboration and information sharing, some authorities[27] have also established websites and web-based platforms.

National authorities noted that supervisory colleges play an important role in the exchange of meaningful information between supervisors. However, it was also indicated that supervisory colleges and mechanism for supervisory cooperation more broadly need to continue to evolve to keep pace with developments facing the supervision of G-SIBs. Home authorities in particular have a leading role to play in such developments.

One of the most significant enhancements in international cooperation noted by authorities has been the increased engagement in recovery and resolution planning through the fora of CMGs. CMGs have become platforms for sharing of information associated with G-SIBs' operations and activities, organisational structure (particularly with respect to legal entities), intra-group interdependencies, and critical functions.

Some national authorities have found participation in regional groupings to be very useful in discussing and coordinating supervisory activities. For example, Sweden participates in a Nordic-Baltic Cross-Border Stability Group, which covers financial stability, crisis management and resolution issues, and involves multiple jurisdictions. The MAS has, through the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)[28] Working Group on Banking Supervision, established a multilateral sharing arrangement amongst members on resolution planning information, while South Africa is a member of the South African Development Community (SADC)[29] which sets out a framework for cooperation and

[27] In France and Italy, for example, specific and regular supervisory reports, analyses, and minutes of various meetings are posted on a secure website to share with host authorities.

[28] The EMEAP is a cooperative organisation of central banks and monetary authorities (hereinafter simply referred to as central banks) in the East Asia and Pacific region. Its primary objective is to strengthen the cooperative relationship among its members. It comprises the central banks of eleven economies: Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, and Thailand.

[29] SADC member countries are Angola, Botswana, the Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

coordination in banking regulatory and supervisory matters. Importantly, the establishment of the SSM should help to reinforce and strengthen cooperation at the European level.

Post-crisis, the commitment to domestic cooperation has also strengthened and several jurisdictions have formalised or established frameworks for cooperation between domestic agencies. These include the supervisory authorities of other sectors, such as insurance and capital markets, market conduct regulators, consumer protection authorities, the applicable ministry of finance, and the deposit insurers or the deposit guarantee funds.

4.1 Supervisory colleges

All jurisdictions in the peer review have participated in supervisory colleges, either as a home or host authority, or sometimes as both. Colleges meet at least once a year, but there is also meaningful contact between supervisors outside of colleges throughout the year. Supervisory colleges provide an opportunity for authorities to hear directly from G-SIB senior management who prepare presentations on their organisations (both general overviews and on specific issues).

Since the global financial crisis, the focus of college discussions has moved from advancing the basic understanding of supervisory approaches in each country to sharing risk assessments and forward-looking supervisory plans, particularly around capital and liquidity supervision. National authorities report that in comparison to the less formal pre-crisis colleges, current colleges have significantly strengthened communication channels between authorities and consequently helped to enhance the detection of emerging risks. In Europe, EU directives mandate a process called the Joint Risk Assessment Decision (JRAD) that requires European supervisors to perform joint risk assessments on capital adequacy, liquidity, and recovery and resolution. This requirement is aimed at fostering greater cooperation by providing a common language, a consistent approach, and a harmonised view of capital and liquidity. Some authorities found the JRAD process helpful in facilitating a common understanding of the strengths and weaknesses of the SIB, planning of future interventions, and undertaking of common supervisory initiatives. Cooperation across relevant supervisory authorities is expected to deepen further under the SSM. Outside the EU, joint risk assessments are still rare, although there are examples of supervisors jointly participating in on-site examinations and reviews.

College structures vary across jurisdictions, reflecting the different nature of banking groups and the needs of supervisory counterparties. In Canada, for example, there are core colleges, universal colleges (one banking organisation has had up to 50 counterparts invited), regional colleges, and thematic colleges focused on risk themes such as anti-money laundering or operational risk. India, on the other hand, has adopted a uniform college structure in light of the small number of host supervisors.

Core college structures also vary depending on the business model and global reach of the G-SIB. The college for one G-SIB domiciled in Spain includes 19 host jurisdictions. Switzerland employs – in addition to universal colleges – trilateral colleges with the UK and the US for the Swiss G-SIBs, which they note have helped to strengthen mutual trust and understanding between these key host supervisors. National authorities also rely on bi-lateral meetings between home and individual host authorities in conjunction with the college meeting. Such meetings are typically requested by host supervisors and provide the opportunity to raise issues that are less relevant for the larger group or considered more relevant for discussion bi-laterally.

Determining the core college membership is a critical step towards a well-functioning college; however, striking the right balance between membership size and manageability is a challenge that requires careful relationship management in order to ensure that a college remains effective. Many home supervisors have been focusing more of their attention to membership criterion that is derived from whether or not a bank is systemically important in the host jurisdiction.

In relation to information sharing, frameworks are more clearly established within the EU.[30] However other authorities have also adopted significant information sharing practices. For example, it has been a long standing practice for the MAS to send copies of reports for their onsite examinations of foreign banks to the respective home supervisor to assist in their consolidated supervision of the SIB. The MAS also sends supervisory letters to local banking groups and their host supervisors after the conclusion of a college. In Sweden, all college members receive information that provides a holistic picture of the financial group, including information that is not only relevant to the entity for which they act as host supervisor. In the US, authorities have recently moved to college meetings that are dedicated to particular topics, such as internal audit. A focused discussion on particular topics enables supervisors to better prepare for the college and thereby make the meeting more fruitful with supervisors able to raise issues from a range of different perspectives.

While supervisory colleges are now seen by authorities as providing a good platform for information exchange in order to agree on the institutions' key risks, some challenges to the effective functioning of international supervisory cooperation remain. Almost all authorities highlight that colleges have been functioning more as a forum for discussion rather than as a forum for reaching agreement on priority issues or risk assessments. Authorities note the lack of a common supervisory language and approach to facilitate cooperation between international counterparts, which can lead to differing quality, coverage and outcomes, as well as the possibility of inconsistent messages to firms and conflicting supervisory actions by different supervisors. Authorities have also noted that there may be instances in which local decisions on capital and liquidity are made without regard to the institutions' central capital planning and what is appropriate for its business model. This has raised some concerns by some supervisors over the potentially suboptimal supervisory cooperation" as well as "the risk that the college is missing the big picture and focussing on the wrong issues". Authorities have also observed that colleges can "enhance their efforts in coordinating the key messages to the SIBs by improving their focus on key issues and priorities".

4.2 Crisis management groups

Prior to the crisis, formal approaches towards cross-border recovery and resolution planning were lacking. The FSB helped to shape standards for resolution frameworks and provided mechanisms for international cooperation through the establishment of CMGs, institution-

[30] See FSB, consultative document *Guidance on Cooperation and Information Sharing with Host Authorities of Jurisdictions Not Represented on CMGs where a G-SIFI has a Systemic Presence*, October 2014 (http://www.financialstabilityboard.org/2014/10/c_141017).

specific CoAGs, coordinated resolution strategies and resolvability assessments. The implementation of some of these mechanisms is at an early stage however they have already significantly enhanced the landscape for international cooperation from both a home and host perspective. CMGs are now in place for all G-SIBs, and most G-SIB home jurisdictions are developing and finalising CoAGs to set out the processes for information sharing before and during resolution, as well as cross-border implementation of resolution strategies and plans. Information sharing is expected to be further enhanced with the FSB's proposed guidelines on information-sharing with non-CMG hosts.[31]

Through CMGs, authorities have made progress on RRP with a view to making institutions more resolvable.[32] The composition of CMGs generally differs from supervisory colleges given their respective focus on gone concern and going concern supervision. As such, CMGs and colleges generally meet separately. In Japan, however, CMGs and colleges are held on a back to back basis, partly due to the overlap of meeting participants, and this seems to be a growing practice across jurisdictions.

In Europe, the EU Bank Recovery and Resolution Directive (BRRD) facilitates European processes for decision-making on the quality of institutions' recovery plans, the assessment of institutions' resolvability, and the agreement of credible, coordinated resolutions strategies, which will all need time to develop. In addition, under the BRRD, responsibility for recovery plans will shift from CMGs to supervisory colleges to be assessed as a going-concern issue, while the CMGs will continue to focus on gone-concern issues.

4.3 Supervisory cooperation

Authorities have noted the need to promote supervisory cooperation and reach appropriately balanced outcomes on the issues under discussion, taking into account the differences in supervisory approaches across jurisdictions. Enhanced cooperation can help to avoid duplication of supervisory activities and overlapping work that might lead to inconsistent communication to the banks. One authority noted that in some cases different administrative laws as well as different supervisory cultures might act as an obstacle to good cooperation, and that it is necessary to develop an understanding of one another background in order to enhance cooperation. Another noted that "international cooperation is an evolving process which is based on mutual trust among regulators".

Cooperation challenges are more compelling today, as authorities stressed that the need for supervisory cooperation has increased especially for global institutions. Economies and financial markets are moving faster and becoming more interconnected, which increases the transmission of problems across institutions and jurisdictions. One authority noted that "balance needs to be struck between strict confidentiality of market sensitive developments and the need for international coordinated action for effective intervention". Information-sharing needs have evolved, particular in relation to the planning and carrying out of

[31] See FSB, consultative document *Guidance on Cooperation and Information Sharing with Host Authorities of Jurisdictions Not Represented on CMGs where a G-SIFI has a Systemic Presence*, October 2014 (http://www.financialstabilityboard.org/2014/10/c_141017).

[32] CMGs have been or are in the process of being established in non-G-SIB home jurisdictions, including Canada and South Africa. In addition, South Africa is drafting a Resolution Bill which is expected to be promulgated in 2011.

resolution. Some authorities identify the need for improving the identification of the necessary information and calibrating information sharing early in order to develop a more structured and consistent approach towards home-host information sharing upfront. As one authority stated: “home-host cooperation should be a continuum from supervision (when a bank is a going concern) to resolution (when a bank is a gone concern), and resolution cooperation should be built on strong supervisory cooperation”. In addition, “national agencies with supervisory and resolution responsibilities should meet regularly. This means regular and frank dialogue in peacetime so as to build trust and understanding, and create the foundation for the more intense cooperation that would be necessary during a crisis”.

5. Operational independence and resources

To lead by example, FSB member jurisdictions have committed to, amongst others, implement international financial standards and undergo an FSAP every five years. FSAP findings reveal that significant weaknesses continue to exist, particularly in regard to operational independence and resources. The new regulatory environment (e.g. recovery and resolution planning, higher loss absorbency, structural changes) and more intensive supervision necessitate changes in supervisory approaches which require a different skill set, and for many supervisory agencies, more resources. However, the ability of supervisors to act rests on operational independence, which must be accompanied by an appropriate accountability framework for the supervisory authority. This requires a robust, effective and transparent framework to assess supervisory performance.

5.1 FSAP recommendations

The BCPs related to supervisory independence and resources provide an important foundation for achieving supervisory effectiveness. After the financial crisis, FSAP results revealed weaknesses in this area. The key findings for non-compliance with the BCPs related to supervisory independence and resources included:

- *Independence – prudential actions*: In some jurisdictions, ministerial approval is required prior to the supervisor taking certain prudential measures, while in others, supervisory rules or decisions can be overruled by the Minister or other governmental authorities, raising concerns about independence and influence.
- *Independence – dismissal of senior supervisory personnel*: Some countries lack clear details outlining the circumstances for the removal of senior supervisory personnel and the requirements for public disclosure of factors/reasons related to dismissal. Taken together, the ability to arbitrarily remove senior supervisory personnel without proper public explanations compromises independence.
- *Independence – resource levels*: Some supervisors are financed in a manner that undermines their operational independence, which, in turn, hinders the ability of supervisory authorities to obtain and allocate resources according to supervisory priorities.
- *Resources – Inadequacy*: In a number of countries, budgetary resources were judged to be low, particularly given the size of banking institutions, the increasing

complexity in the industry, and/or the extensive cross-border operations of major banks.

- *Resources – Specialty Skills*: For some countries "specialised skills" were inadequate and the importance of enhancing such skills was noted, given increasing complexity in the banking sector and the need to deepen and broaden the analysis of the risks, the quality of risk monitoring, and the risk management at major financial institutions.

To strengthen adherence to these core principles, which are considered minimum standards for effective supervision, FSAP assessors made several recommendations:

(i) consider revising existing funding models so that operational independence and sufficiency of resources are ensured;

(ii) develop plans to upgrade staff expertise and improve flexibility in budgeting to attract and retain specialised skills;

(iii) amend relevant legislation to ensure supervisory personnel are protected against arbitrary lawsuits for actions taken in good faith and ensure there is public disclosure of the reasons for any dismissals of the heads of the supervisory authority and members of its governing body;

(iv) amend relevant legislation to remove government interference in supervisory decisions and prudential rulemaking;

(v) develop a more forward-looking detailed resource plan that takes account of risk assessments, emerging risks, lessons learned, and new and existing priorities.

Most jurisdictions have implemented or plan to implement the FSAP recommendation(s). For example, in Switzerland, rules around independence and conflicts of interest (e.g. relationships with supervised institutions) have been revised and made public. Also, the need for additional resources is currently being reviewed. In Germany and the Netherlands, new measures have been put in place to limit the liability of supervisors and the supervisory authority.

Annex H provides a detailed summary of the relevant FSAP recommendations and actions taken or planned to be taken by national authorities.

5.2 Resources

Since the global financial crisis, the number of supervisory resources has significantly increased for most authorities. Supervisory skills and competencies have also been enhanced. Further, most supervisory authorities have allocated more resources to SIB supervision relative to other banks since the crisis, with some jurisdictions also placing more experienced supervisors on SIB teams. Many authorities have also increased resources for specialist risk functions and support groups – in particular in the areas of risk management, solvency and capital, and RRP – often drawing upon the industry for the source of this expertise. The increase in SIB supervisory resource levels has generally come from an overall increase in the level of resources for the authority as a whole, rather than from a shift away from supervisory teams of less systemically important banks. Several authorities also indicated their ability to move staff from non-G-SIB to G-SIB teams for specific projects or to meet exceptional contingencies.

While the total number of resources dedicated to G-SIB supervision has increased, most authorities were unable to specify exactly the number and type of resources that have been dedicated to the supervision of a given G-SIB. This was due in part to the difficulty in identifying the support function resources allocated to specific G-SIBs and the lack of information related to host authority resources. Such observations pose significant challenges to any future work on benchmarking supervisory resources, as part of the broader assessment of supervisory effectiveness for SIBs.

Some, though certainly not all, authorities are finding it difficult to attract and retain talented staff, particularly those individuals with industry expertise that cannot be readily developed through in-house training. High turnover in some jurisdictions is also making it difficult to build a cadre of experienced supervisors, which risks hindering the continuity of supervisory programmes and potentially undermines the effectiveness of supervision. While expertise in certain risk areas may be obtained from the private sector, deep supervisory experience must be acquired on the job (i.e. good supervisors are "home grown").

5.2.1 Change management initiatives

Change management programs have become an important tool for supervisors that are attempting to change supervisory practices in order to enhance the effectiveness of supervision. The survey responses indicated some common change management practices across jurisdictions, including the use of: brainstorming sessions, team building exercises, information seminars, and increased dialogue with key internal stakeholders. A few national authorities have instituted reviews of the revised supervision practices to ensure that implementation of the necessary changes is being effectively managed.

In the UK, a specialised team was created – the PRA Change Delivery Function – to maintain oversight across the whole portfolio of change initiatives, projects and programmes. In addition, the UK FCA works to embed the supervision model by designating experts in each department (known as 'model advocates') in addition to training, inter-departmental workshops, best practice sharing and ongoing design enhancements. Similarly, the Reserve Bank of India has held periodic brain storming sessions and information seminars, and meetings and training with key internal stakeholders (e.g. supervisors, quality assurance division, analytical division) to obtain buy-in so as to enable better integration of changes to supervisory methods.

Ex-post change management reviews are just as important. In Canada, the supervisory framework is being reviewed as part of a broader supervision technology tool renewal process. The first phase focuses on identifying enhancements to reflect new international developments and trends, and clarifying the application of certain practices, such as RRP, risk appetite frameworks, and risk culture, into the supervisory assessment. The second phase will review, streamline and document changes to supervisory processes, while the third phase will drive towards choosing and implementing new technology tools to support greater automation in supervisory processes. These changes will be accompanied by an internal training programme to align with the evolving expectations for supervisors.

5.2.2 Core supervisory competencies and staff development

The core competencies needed for SIB supervision have necessarily changed over time, reflecting the increasing complexity of the structure and activities of these institutions and the nature of supervisory engagement with them. Many supervisory teams are a mix of internal and external hires with a variety of backgrounds (e.g. banking, auditing, risk management, anti-money laundering). Newer skill sets sought over the last few years have also emphasised skills that support an ability to effectively interact with, and constructively challenge, boards and senior management rather than necessarily looking towards more traditional technical skills. Senior managers of the SIB supervision team generally have longstanding supervisory experience.

National authorities indicated that transparent career paths with career development opportunities are needed in order to attract, develop, and retain supervisory staff and establish a strong pipeline of future talent. In general, supervisory authorities are making some progress on this front and have increased their focus on career development, training and workshops, as well as better remuneration packages, where appropriate. However, in order to be effective these efforts must be complemented by other initiatives that create and maintain an attractive working environment.

The Deutsche Bundesbank and BaFin design and offer training courses not only for their employees, but also for supervisory staff across Europe. They are the founding members of the European Supervisory Education Initiative (ESE), which has the dual objectives of (1) offering European supervisors high-level training subject to uniform standards, and (2) combining the experiences of practitioners with the theoretical knowledge of academic research from across different sectors (banking, insurance, securities). The programme aims to strengthen cooperation between different supervisory authorities through an exchange of information and transfer of knowledge. The ESE also carries out joint seminars with the European Supervisory Authorities (EBA, ESMA, and EIOPA).

The MAS has a competency framework, the Professional Requisites and Outcomes Framework (PROF), to identify skill requirements and facilitate the structured development of professional financial supervisory skills. The MAS also has a dedicated in-house training arm, the MAS Academy, which runs regular training programs for all staff and offers programs that are tiered to meet the needs of different levels of staff.

In South Africa, a multiple career path strategy was put in place in 2013, which is directly linked to performance management, as well as an academy for staff development in specific risk areas. The UK PRA has also established more formal mechanisms for supporting and developing strong performers and providing them with new opportunities. This is combined with a more flexible remuneration structure and the creation of so-called technical career paths, which provides opportunities to improve salaries or positions without necessarily entering into a pure management role. The UK PRA emphasises talent management – including the delivery of a career development week – talent planning for senior roles, and a greater emphasis on diversity and inclusion initiatives within recruitment and career advancement initiatives. The UK FCA has developed and launched a three-year part-time Masters programme in financial regulation which is specifically tailored to FCA staff.

II. Summary of feedback from G-SIBs

The review surveyed a selected group of G-SIBs via a questionnaire and follow-up bilateral interviews to seek input on whether and how supervisory initiatives have affected banks' risk behaviour. This report includes a summary of the information obtained, as provided by the G-SIBs. Input from G-SIBs supplements the information from national authorities and provides an additional window into supervisory effectiveness, based on their observations of the supervision changes implemented to date. Feedback was sought on how these changes have influenced G-SIBs' overall approaches to risk governance, risk management, risk culture and their strategy and material operations, as well as some of the challenges experienced in meeting heightened supervisory expectations.

1. Supervisory mandate, strategy and culture

G-SIBs generally acknowledge the progress and improvements made to supervisory approaches. They confirmed the more intensive approach to supervision indicated by authorities and acknowledged supervisors' efforts to develop more forward-looking risk assessments that reflect a more holistic approach (which combines insights from both system-wide and institution-specific perspectives).

More intensive supervision has been effective in encouraging G-SIB senior management to maintain momentum on regulatory reform initiatives. Many institutions indicated that they undertook significant changes in anticipation of the post-crisis regulatory reform agenda, with the changes primarily driven by the need to regain market confidence. G-SIBs acknowledged that the increased level of engagement on risk management issues (through the use of various supervisory tools, such as stress testing, BMA, and peer comparisons) was helpful in enhancing a supervisor's understanding of their organisation and business, and hence was important in building supervisory credibility. Almost all G-SIBs have established new functions and other internal structures in order to better coordinate internally and respond to growing supervisory requests across a range of different areas.

Another area of change noted by G-SIBs was the increased focus of supervisors on RRP. G-SIBs indicated that this work provided them – and their supervisor – with greater insights into corporate structure design, including the need for greater rationalisation of legal entities, the vulnerabilities posed by intra-group dependencies (e.g., funding flows), the analysis of loss absorbing capacity, and the importance of booking practices. G-SIBs also noted that RRP provided significant and additional new insights into enterprise risk management and that this was an area that supervisors had been instrumental in impacting.

While supervisory techniques have significantly grown in number and use, G-SIBs indicated that in some instances the use of these techniques has been accompanied by a more "mechanistic approach" with a tendency of supervisors to adopt a more conservative approach in the supervisory response. Further, they observe that some supervisory authorities are now shifting towards a more "compliance-based" approach, often resulting in a greater number of enforcement investigations and increased regulatory fines, instead of focusing on what G-SIBs view as the more substantive issues. Some G-SIBs indicated that one implication of a compliance-based approach is that supervisors are now increasingly reluctant to engage in dialogue and to make important judgement calls on prospective challenges, which, in their view, will hamper supervisory effectiveness. G-SIBs attribute this reluctance, at least in part, to the high degree of staff turnover observed in some key supervisory positions. Such an observation highlights the importance of supervisory experience in supporting the development of informed, risk-based judgments.

Almost all participating G-SIBs acknowledged the difficulty in understanding supervisory priorities in practice, i.e., supervisory priorities and related expectations (about what matters most) are not sufficiently transparent to G-SIBs. G-SIBs suggested that the scale and pace of regulatory reforms, combined with evolving supervisory practices and increased supervisory activity, may have contributed to this.

Many G-SIBs are of the view that they are chasing too many moving goal posts, and that the use of different supervisory tools, data asks, and decisions appear to be increasingly disjointed. These institutions also suggest that greater clarity, transparency and consistency of supervisory priorities would also help the G-SIB to prioritise more effectively and to be better placed to address supervisory concerns and related information requests.

Some G-SIBs noted a significant increase in the number of meetings requested by supervisors to meet with senior management representatives and board members. The increased presence of senior supervisors and the respective heads of national authorities at board meetings is seen by G-SIBs as a useful development in that it raises the profile of supervisory concerns, increasing risk awareness by the board. Interaction between institutions and supervisors appears to be more open at more senior levels; institutions would favour a similar, more open approach at lower levels of the supervisory authority. More generally, however, G-SIBs would like supervisors to accompany increased dialogue with a greater willingness to exercise judgement, instead of necessarily reverting to rules or deferring to more senior parties.

G-SIBs perceive a more formal and firmer tone in supervisory communication. However, they also indicate that supervisory written communication is more regular and better framed to convey the critical points or concerns. Regular follow-up meetings to verify the status of G-SIB remediation efforts are also seen as effective in enhancing the understanding and responsiveness of institutions. In a few cases, G-SIBs indicated that earlier discussion (e.g. meetings) on supervisory findings and recommendations would reduce the likelihood of the "surprises" that sometimes occur when formal, written communication of the findings is received.

Stronger capital and liquidity requirements are seen by G-SIBs as an opportunity to provide supervisors with more room to focus on the big picture and, in particular, on risk governance, risk appetite and risk culture.

G-SIBs also emphasise the importance of face-to-face meetings for sharing risk intelligence and other critical information, including SIB perspectives on risk management concerns, to the mutual benefit of the institution and the supervisor. One G-SIB indicated that "in [person] meetings on private or sensitive information are the basis for the real value-add of supervision".

2. Supervisory approach, methods and tools

G-SIBs noted the more forward-looking approach to supervision, although some G-SIBS had difficulty in understanding the link between macro-prudential requirements and the specific supervisory expectations of their respective institution. However, the greater use and development of supervisory tools, such as capital and liquidity stress testing, are seen as helpful in promoting more meaningful dialogue between institutions and their supervisors and in supporting a better understanding of an individual institution's business activities, interdependencies, and overall complexity.

Some G-SIBs indicated that greater transparency regarding supervisory modelling assumptions for stress testing or capital planning analysis would be useful in interpreting published results, especially when such exercises result in capital management constraints (e.g., the imposition of a capital add-on). G-SIBs also indicated possible challenges in home-host coordination when multiple stress tests are applied to the same G-SIB by different authorities using a similar underlying scenario. Concerns were raised about the efficiency of such duplicative work, as well as about the overall consistency of different capital actions imposed at the local level based on different stress tests.

The supervisory work on RRP is seen by G-SIBs as one of the most useful recent developments in supervisory approaches and methods. Further, RRP is seen as a powerful tool for understanding a SIB's corporate structure and group dependencies. However, some G-SIBs noted that the more granular information provided on group dependencies might have also contributed to more 'standalone' tendencies by host supervisors. More generally, G-SIBs point to a possible trade-off between the resilience of the group and the resilience of individual entities when developing RRPs. In particular, they argue that there may be a possible inconsistency between how G-SIBs would want to organise themselves as a going concern (for life) and how they would need to be organised for gone concern or resolution (for death), and that such a tension should be explored further.

G-SIBs found horizontal reviews to be useful and informative. One G-SIB noted that thematic reviews that are coordinated across the subsidiaries of a group, and happen at the same time with the same (data) format and one lead regulator, would be particularly useful. Some G-SIBs believe that more timely feedback on the output of horizontal reviews, particularly with respect to peer group results, would be helpful for institutions in order for them to establish their position vis-à-vis their competitors and to take the necessary actions in a timely manner. One G-SIB thought that benchmarking with respect to international supervisory standards, and not competitor practices, would be more effective because institutions would be better able to understand the supervisory expectation. The same institution noted that horizontal reviews run the risk of managing G-SIBs to the lowest common denominator and may therefore stifle innovation: the outlier institution might have a better model, but the supervisor may seek comfort from promoting similar outcomes across institutions (and at the cost of diversity). Several G-SIBs suggested it would make sense to conduct horizontal reviews across all G-SIBs; in Europe, a few G-SIBs noted that one of the benefits of the SSM would be that G-SIBs would be reviewed against European peers, rather than national peers (i.e., non-G-SIBs).

3. Supervisory cooperation and coordination

Most G-SIBs recognise the supervisory efforts to improve international cooperation and coordination. CMGs, in particular, are viewed by institutions as useful international coordination mechanisms, due to their clearer objectives and the smaller number of participating authorities. Institutions have also benefited from the use of joint supervisory reviews (and letters) as a means of promoting greater consistency and coordination. However, institutions seek opportunities to improve upon the level of coordination, especially in respect of the delivery of feedback from joint initiatives or reviews.[33] Institutions in some instances observed inefficiencies in college structures, such as the lack of senior representation, the inability to reach joint decisions on risk assessments, and the resource constraints that impede the finalisation of review work, the delivery of timely feedback, or the review of follow-up actions by G-SIBs.

Some G-SIBs perceive a lack of coordination among some of the supervisors which results in additional work for the institution and may provoke misunderstandings among the college of supervisors. In addition, some G-SIBs believe there to be duplication of reviews (overlapping scopes) from different supervisors. G-SIBs recommend that there should be a greater harmonisation of supervisory work plans, and would also urge supervisors to think more globally in order to better align the supervisory tools used by national authorities with the G-SIBs' strategies and business model. Most G-SIBs also observe a lack of transparency around the role and operation of the supervisory college and ask for greater clarity on the college objectives, the relative priorities between home and host authorities, the conclusions from the college, and where applicable, the joint decisions that are reached in respect of the G-SIB and its risk assessment. Finally, G-SIBs ask that the feedback from colleges be clearer, contain greater detail, and set more consistent supervisory expectations.

Almost all G-SIBs noted a significant increase in data requests – in scale, scope and frequency. One G-SIB noted that it responded to 18,000 data requests in 2014 by a host authority, which compared with 5,000-6,000 in 2011. Some G-SIBs complained about unrealistic turnaround times, accompanied sometimes by lengthy (if not incomplete) processes for supervisory feedback. G-SIBs almost uniformly indicated that they have had difficulty keeping up with the quantum and frequency of data requests and, as a consequence, they doubt the ability of supervisors to adequately process all of the requested data. G-SIBs from some jurisdictions noted that there was a lack of clarity on how supervisors intended to use the requested data, not only in respect of forming risk assessments (and thereby meeting supervisory objectives) but also in terms of understanding the G-SIB's business model and its drivers of risk.

Several G-SIBs indicated a desire for greater standardisation of data reporting requirements across agencies and jurisdictions in order to assist in the streamlining of reporting requests and in the promotion of data consistency to ensure supervisory needs are being met. To this end, some G-SIBs suggested that there should be more dialogue between supervisors and

[33] G-SIBs generally describe a one-way flow of information from the institution to the college, whereby senior management present on risk-related issues and then departs from the room with limited or no follow-up or feedback.

institutions up front, in order to better understand the nature of the need and to hone the data request itself.

More broadly, G-SIBs perceive that some host supervisors are increasingly acting as 'lead' regulator when it comes to supervision expectations, with local supervisory requirements requiring increased levels of local capital and liquidity irrespective of the overall group requirements. One G-SIB reported that the risk management approaches adopted at the group level are being increasingly questioned by host supervisors, resulting in G-SIBs having to adopt a different approach locally from the group.

4. Talent and resources

There is general recognition among G-SIBs that supervisory authorities have made significant strides in recruiting and developing talent and in identifying desired skill sets. However, G-SIBs note that significant challenges remain in talent management and this may affect effectiveness. Available expertise is still a concern even though secondments and greater recruitment from industry may have assisted some authorities. Further, G-SIBs highlight the significant levels of staff turnover at supervisory authorities and believe that this has hindered the quality of supervision because it takes time to build a supervisor's knowledge of the institution.

G-SIBs noted that authorities would need to continue working towards the recruitment and development of new talent as well as the development of an attractive workplace in order to support supervisory effectiveness. G-SIBs also perceive some authorities as highly bureaucratic and state that this may hinder their ability to attract and retain high-quality staff.

III. Assessing supervisory effectiveness

A structured assessment of supervisory effectiveness remains under development for most national authorities. Evaluating effectiveness requires authorities to establish some link or causality between supervisory actions and the response of the institution (for example, a response in terms of financial, risk management, or behavioural outcomes). However, authorities find it challenging to identify such links (or causality) and, therefore, to establish objective and reliable indicators of supervisory effectiveness. Common, shared practices around assessing supervisory effectiveness may facilitate this process and contribute to improved supervision. The BCBS is currently conducting work on impact and accountability, which will support improvements in the assessment of supervisory effectiveness.

While the 'science' of assessing supervisory effectiveness remains a work-in-progress, national authorities have acted in a number of areas to challenge themselves on effectiveness and to highlight the implications of specific supervisory activities. Some national authorities provided examples of specific changes that have come about through more direct supervisory engagement. In the US, for example, there is evidence of effective supervision in the form of changes realised in G-SIBs' internal forecasting capabilities for stress-testing and related capital planning initiatives, as data infrastructure and internal risk governance processes have evolved to address supervisory requirements. The US noted that G-SIB capabilities in these areas have advanced but continue to develop with experience.

1. Examples of measures used to assess supervisory effectiveness

One area of focus within national authorities' work on supervisory effectiveness relates to the review or challenge of supervisory opinions through qualitative assessments and the seeking of stakeholder feedback. Moreover, some authorities support the qualitative assessment of supervisory effectiveness with a formalised and robust quality assurance function (as a 'second-line' of defence) that provides constructive challenge to supervisory opinions and actions.

The UK PRA is one jurisdiction that has established a formal process for evaluating effectiveness. The PRA's Supervisory Oversight Function (SOF), established in 2008 after the collapse of Northern Rock, is an independent unit within the PRA with a direct reporting line to the PRA board. The SOF provides independent assurance to the PRA board and executive management on the quality and effectiveness of supervision (as defined below). The UK FCA has a similar oversight function. SOF employs a multi-pronged approach to report on the quality and effectiveness of supervision:

(i) "Supervisory effectiveness reviews" of firm supervision are the primary measure of effectiveness in the UK. The reviews focus on the appropriateness and delivery of the supervisory strategy and the supervisory judgments made. Each review results in a formal report, and as appropriate, will include recommendations for improvement and identification of good practices with the aim of promoting continuous improvement in supervision effectiveness.

(ii) Thematic and management information reviews to both assess the effectiveness of the application of the overall supervisory approach (and its various elements), and to identify any inconsistencies, outliers and anomalies.

(iii) Institution feedback is regularly sought via a questionnaire and interviews on the effectiveness of the supervisory approach. The purpose is to gauge institutions' views on the quality and effectiveness of the PRA staff, the supervisory framework, and the PRA culture and behaviour. Information gleaned from the feedback process is used to inform the PRA's supervisory approach and to help monitor the effectiveness and efficiency of co-ordination between the PRA and FCA. The high-level outcomes will be shared externally in the PRA Annual Report.

(iv) Supervisory feedback is sought through an annual survey of all PRA supervisors to gather views on the effectiveness of the supervisory approach and to seek suggestions for improvement. Initial results are discussed amongst focus groups of supervisors to confirm the reasonableness of the findings and the most appropriate actions to address any shortfalls. This process focuses on a mixture of outcomes and activities, and is a blend of qualitative and quantitative assessments.

The PRA is also currently undertaking a review of its overall risk and control framework to establish what actions are necessary to strengthen supervisory process and controls and to maintain consistency of approach.

The DNB also evaluates the overall effectiveness of supervision (not exclusively limited to G-SIB supervision) at three levels:

(i) On a strategic level, the DNB has renewed its mission statement and ambitions for supervision.

(ii) On a tactical level, the DNB regularly publishes a Vision on Supervision, in which it outlines the objectives and expectations for supervisory policy.

(iii) On an operational level, the DNB has strengthened its budget and management cycle.

These levels are all supported by a monitoring framework with a broad range of both hard and soft performance indicators. At the strategic level, this framework relies more upon a qualitative assessments of the effectiveness of supervision, whereas on the tactical and operational levels, the objectives are quantitative to the extent possible, including through the formulation of quantifiable target levels of performance. The monitoring framework is primarily used internally however DNB aims to provide a fuller report to external stakeholders in due course. Recent steps in this direction have already been taken in the DNB annual budget and accountability reports. A dedicated internal risk management department within DNB is responsible for this monitoring framework, as well as in-depth analysis of the effectiveness of supervision.

Other authorities have also instituted organisational changes to evaluate supervision effectiveness. In South Africa, the Banking Supervision Department has established a Supervisory Review and Evaluation Programme that is subject to periodic review/audit by the SARB. In Canada, OSFI is promoting the three lines of defence concept to support supervision effectiveness: the first line of defence is the line supervisor who is subject to several lines of quality control "to ensure that the risk profile and supervisory strategy is commensurate to the nature, size, and complexity of the business model"; the second line of defence is where risk assessments undergo a quality review and benchmarking process, including a review by a formal Quality Assurance Function that, on occasion, will assess whether core supervisory work meets "minimum defined expectations"; and, finally, the third line of defence is internal audit which provides independent assurance on internal controls, risk management and governance systems and processes.

As an alternative for measuring effectiveness, a number of countries have established evaluation and monitoring methods and techniques. Independent and external audits are commonly used by some national authorities to evaluate and monitor supervisory bodies. For example, in France, regular independent audits of the supervisory authority that oversees SIB supervision (ACPR) are undertaken.[34] Since the crisis, there have been notably several audits conducted by the French Supreme Audit Institution that have focused on efficiency. And in Singapore, the MAS has been participating in external perception surveys to measure stakeholders' perception of MAS' performance in its functions. The MAS is also studying approaches adopted by other regulators and suggests that measures to assess effectiveness could include the following components: assessments of key traits associated with being an 'effective supervisor' (i.e. being comprehensive in risk assessment and identification, ensuring early intervention and timely escalation of issues, and having effective engagement

[34] The French authorities note that an in-depth qualitative expert judgment, informed by the knowledge of and comparison with other supervisory practices in other jurisdictions, may be a pragmatic approach to assessing the effectiveness of SIB supervision.

with stakeholders). However, the key challenge noted previously is in developing objective measures of these characteristics in practice.

The most common technique noted by authorities in the context of evaluating effectiveness is the tracking of issues that have been identified by supervisors as needing attention by the regulated institution. New IT systems help supervisors monitor outstanding issues until remediated by the financial institution. Follow-up monitoring is also in place at a number of national authorities to ensure that institutions' initiatives do not weaken over time. Switzerland tracks supervisory findings more formally and challenges banks some period after it closes an issue, in order to ensure that requested changes in behaviour and processes are effective in practice and not only on paper.

2. What makes an effective supervisor?

In addition to seeking input from national authorities, during interviews, G-SIBs were asked to define the attributes of an effective supervisor ('the what'), including the manner in which a supervisor conducts his/herself ('the how'). This input has been useful in understanding the perception of an 'effective' supervisor. Feedback targets both technical and behavioural attributes of supervision, though comments tend to highlight those behavioural competencies related to leadership (priority-setting, and vision), communication (clarity therein, and continuous dialogue) and judgment-making (risk-based assessments), in order to provide for an effective supervisory challenge (credibility and trust). These behavioural attributes point to the importance of judgement, experience and ability to challenge, rather than an excessive focus on technical details.

G-SIBs consider that an effective supervisor adds value by providing an objective, independent, and informed view of risk emanating from an institution's business strategy and business model, as well as from its risk management practices. In addition, as supervisors have the advantage of seeing a range of practices across the financial system, they could also add value through the communication of best practices to institutions and thereby enhance industry standards of practice.

One CRO expressed a desire to have an open and honest discussion on key risk concerns without fear of these open discussions giving rise to a supervisory finding. Another CRO summed up opinions by describing the characteristics of an effective supervisor as someone with practical industry experience and understanding, who clearly sets out the 4-5 strategic issues that need to be addressed over a rolling 12-month basis, and effectively challenges management by asking controversial questions with a view toward understanding the issues.

These characteristics support a supervisor's ability to come to judgements that are sufficiently forward-looking, to anticipate risks that affect an institution's safety and soundness as well as stability of the financial system overall, and to effectively challenge the institution's business strategy and its effectiveness at managing risk. Collectively, these traits are likely to be developed over time and are most common among experienced supervisors. Such characteristics also make an effective supervisor attractive to industry in the search for talent, as these traits are highly transferable across different contexts and industries, thereby underscoring the need for supervisory authorities to accelerate efforts to develop and retain core talent.

IV. Conclusions and recommendations

In the aftermath of the financial crisis, supervisory practices have intensified and supported the broader objectives of regulatory reform and enhanced overall supervisory effectiveness. The review highlights a number of improvements that have been made in supervision practices, post-crisis. Overall, there are clear signs that authorities have acted on the FSB's recommendations for more intensive and effective supervision. There has been an increased focus on the safety and soundness of both individual institutions and the financial system overall, with a greater integration of micro- and macroprudential considerations within supervisory actions. Supervisory tools, such as business model analysis, horizontal reviews, and more frequent and comprehensive stress tests, are increasingly being used with a view to earlier identification of, and actions to address, emerging risks. Risk governance, risk management and risk culture at institutions have also become important areas of focus for supervisors. Dialogue with senior management and boards on key risk issues has been intensified and enriched by more comprehensive and forward looking analyses performed by supervisors. Strengthened internal processes and organisational structures (including greater use of specialist support units, onsite and third party reviews) help to support a more comprehensive approach to supervision.

Greater supervisory intensity, however, translates into more effective supervision when the activities undertaken by supervisors proactively influence the behaviour of financial institutions in key areas (such as governance, risk appetite, risk and financial management and, where appropriate, strategy), with a view towards enhancing an institution's safety and soundness and contributing to the overall stability of the financial system. Further, when institutions do not respond appropriately, effective supervisors take meaningful and timely action.

Assessing the effectiveness of supervision remains a challenging task due to the difficulties in establishing a clear causal link between supervisory actions and the response of institutions, as well as the impact on the financial system as a whole. This makes it difficult for supervisory authorities to define, measure, and monitor indicators of supervisory effectiveness. The work underway at the Basel Committee on impact and accountability will provide an important foundation for further progress in this area.[35]

With implementation of the regulatory reform agenda well underway, it is important that the focus on enhancing (and assessing) supervisory effectiveness is maintained. The achievement of the regulatory reform objectives must be sustained throughout the cycle, particularly as memory of the crisis begins to fade. It will therefore be critical for supervisors to satisfy themselves that institutions' approaches to risk governance, risk appetite, and risk culture encourage sound risk management and act as an adequate defence against excessive risk taking for the benefit and stability of the financial system. Supervisors must be prepared and empowered to act when this is not the case. For global institutions in particular, it will be important for supervisors to establish a shared sense of both the regulatory and supervisory priorities.

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[35] *Ibid*. 3.

More intense and effective supervision remains a core priority for supervisory authorities, as they seek to adopt practices that assist them to identify and address risks before they become serious problems at financial institutions. The review finds that there are remaining challenges that need to be addressed in order to maintain the momentum towards enhanced supervision effectiveness and ensure that increased supervision intensity is effectively achieving the intended outcome. To address these challenges the report sets out several recommendations, which are outlined below.

1. Supervisory effectiveness assessed against a clearly articulated supervisory strategy

Since the onset of the financial crisis there has been a marked increase in supervision activities and the range of tools used by supervisors; however, it is not necessarily clear how well these activities and tools fit together within a well-defined and coherent supervisory strategy, with distinct and transparent priorities. The scale and pace of regulatory reforms, combined with evolving supervisory practices and increased supervisory activity, have placed considerable pressure on the ability of front-line supervisors to keep pace with changing expectations and requirements. G-SIBs have also indicated that they feel like they are chasing moving targets and lack clarity on supervisory priorities; this "unpredictability" is felt to have led to material inefficiencies in their approach to responding to supervisory needs.

The review finds that greater supervisory effectiveness could be achieved through formulation of a supervisory strategy for the authority that clearly articulates how supervisory activities align with supervisory priorities and objectives, overall and for individual SIBs. Supervisory effectiveness is more objectively assessable when there is a well-defined supervisory strategy in place for the national authority. Clear communication of strategy, and related priorities, to all significant levels of the institution (board, senior management, and middle management) would also assist G-SIBs in prioritising their responses and addressing the weaknesses or areas of concern identified by supervisors.

The experience of some authorities in establishing a formal supervisory risk appetite framework that goes beyond the traditional risk-based approach to supervision indicates that there is merit in authorities exploring this further and in establishing specific supervisory risk tolerances for both quantitative and qualitative aspects of supervision.

***Recommendation 1**:* Each supervisory authority should clearly define its supervisory strategy and priorities, consistent with the authority's risk appetite, and establish a formal process for evaluating supervisory effectiveness against the stated strategy and priorities. Based on the outcomes of BCBS work on impact and accountability, the BCBS by end 2016 should propose ways to assist national supervisors in establishing supervisory strategies and risk appetite frameworks, with a view toward facilitating more objective assessment of supervisory effectiveness.

2. Enhanced supervisory dialogue maintained

Effective supervision requires supervisors to deliver clear messages on supervisory priorities to institutions. Building open and constructive dialogue with institutions facilitates more meaningful exchange of information on key risks and issues; supports risk, risk governance and risk culture assessments; and facilitates the exercise of supervisory judgement and timelier supervisory action.

G-SIBs also seek more clarity on the objectives or purpose of various supervisory activities and how these activities contribute to the achievement of supervisory objectives for the institution. More effective communication is also sought on the outcomes of horizontal reviews, including the range of industry practices and the relative position of the G-SIB within the range, and on decisions and outcomes from supervisory colleges and CMGs. Such guidance and feedback would enable G-SIBs to more effectively set priorities and address weaknesses or areas of concern that may be identified by authorities.

Recommendation 2: Supervisors should continue to strengthen their engagement with banks, particularly at the board level and with senior management, with the objective of informing supervisory risk assessments through enhanced understanding of G-SIBs' business strategy, capital and liquidity needs, governance, risk management and risk culture. This engagement should also include clear communication of supervisory objectives, priorities and desired outcomes, and enable more timely feedback on outcomes and key supervisory messages from horizontal reviews, data requests, supervisory colleges, CMGs and other supervisory activities.

3. Data requests with clear purpose, effectively targeted and communicated

Data-driven analysis remains a critical element of supervision, informing risk assessments and supervisory actions. There has been a significant increase in the scale, scope, and frequency of regulatory reporting and data requests in particular for G-SIBs. Although G-SIBs are adapting to this increase in demand, supervisors are generally not satisfied with turnaround times when specific requests are made. Going forward, it will be important for G-SIBs to continue to invest in their IT infrastructures, as well as the governance practices that surround them, and for supervisors to review and assess progress. The BCBS *Principles on Risk Data Aggregation and Risk Reporting*[36] provide a key foundation for ensuring the appropriate level of responsiveness by institutions to enhanced data collection and analysis needs, as well as for responding to supervisory data requests.

Authorities highlighted challenges related to the ability to effectively handle and analyse very detailed and granular data, both in terms of resources and in terms of the technical infrastructure and data analysis capabilities that are needed. Further, undue focus on granular data analysis might detract from the focus on longer term, more strategic supervisory issues and priorities. Other challenges highlighted related to the need to ensure data quality and consistency, and to identify and analyse the more relevant data for enhancing supervisory understanding of specific matters. A balanced approach is needed, under which comprehensive and intensive data requests are undertaken within a sound data governance framework. G-SIBs have indicated that data requests are not always sufficiently explained or well-coordinated between authorities. They also noted that focusing unduly on quantitative

[36] See BCBS, *Principles for effective risk data aggregation and risk reporting*, January 2013 (http://www.bis.org/publ/bcbs239.pdf).

analysis risks making supervision overly mechanistic if not also accompanied by meaningful dialogue between supervisors and G-SIBs. Further work is needed by authorities to more clearly communicate the purpose of data requests, and better target and coordinate data requests with other authorities where appropriate. This would assist the quality and timeliness of responses desired from G-SIBs. The FSB work on defining a common template for G-SIBs (endorsed by the G20)[37] provides a foundation for improving international consistency and reducing the reporting burden. In particular for G-SIBs, more effective coordination among authorities, for example by sharing the templates and coordinating the timing of data collection exercises, might help to minimise duplication and facilitate a more focused data collection and more timely feedback to the institutions on the outcomes of the analyses.

Recommendation 3: Supervisors should continue to press banks to improve their IT and MIS to provide robust and timely information on the institutions' risk on an enterprise-wide basis. This will support more timely and accurate data collection for supervisors, which in turn facilitates continuous, forward-looking supervision and recovery and resolution planning activities. The implementation of the *BCBS Principles for Risk Data Aggregation and Risk Reporting*, due in 2016 for G-SIBs, will be a key necessary step to achieve this outcome.

Recommendation 4: Supervisors should continue to ensure that data requests are evaluated for purpose and intent, and effectively targeted to provide more detailed supervisory understanding of risks and vulnerabilities and hence support more effective supervision. Supervisors should also engage early on with institutions on the purposes of data collection exercises so as to assist the quality and timeliness of responses. Home and host supervisors should coordinate and take steps to streamline data collection efforts where appropriate, to reduce unnecessary duplication.

4. Enhanced supervisory cooperation

Confidence in how the global financial system is supervised is essential. Home supervisors of global institutions increasingly share their priorities and objectives with host supervisors via bilateral meetings or supervisory colleges; however, more work is needed to improve upon the coordination and cooperation between supervisory authorities.

While the breadth of information-sharing has improved significantly post-crisis, the ability to share *substantive* information between home and host supervisors is a remaining challenge as highlighted by both national authorities and G-SIBs. Unintended disclosure of sensitive information remains a concern for some supervisors and also G-SIBs, and open information sharing is impeded where MOUs or equivalent arrangements are not in place. Some G-SIBs, while acknowledging the greater efforts by authorities to improve information sharing, have also expressed concerns over the lack of clarity on what types of information they themselves may be able to share with host authorities.

Other cooperation challenges recognised by both authorities and G-SIBs refer to the differences in national supervisory approaches and lack of a common supervisory language,

[37] See FSB, *FSB Data Gap Initiative – A Common Data Template for Global Systemically Important Banks: Phase 2*, May 2014 (http://www.financialstabilityboard.org/2014/05/r_140506/).

which could lead to college outputs differing in quality and coverage, as well as duplication of supervisory activities and potentially inconsistent communication to the banks. Removing legal impediments to information sharing and cooperation, working pre-emptively on information needs and calibrating information sharing early, as well as creating a continuum from supervision of going concern entities and resolution are seen as the remaining challenges for good cooperation in both good and bad times, which is built on a thorough understanding of the key aspects of an institution's strategy, risks and risk governance frameworks, capital and liquidity positions and plans, as well as a shared view of the supervisory priorities.

In this context, effective supervisory cooperation for global institutions relies on the effective functioning of key supervisory fora, such as supervisory colleges, as well as shared views on the ultimate objectives of such cooperation and coordination mechanisms, in terms of information sharing and beyond.

In particular for global institutions, faster moving economic and financial markets and deeper interconnections pose new supervisory challenges that require more effective supervisory cooperation in good times to ensure a strong foundation of mutual trust and understanding is in place to enable more effective resolution of issues as they arise.

The effectiveness of supervision of global institutions would be strengthened by having robust, open discussions on key issues, coming to ground on a common understanding of key risks and vulnerabilities, and collectively acting upon agreed priorities, while preserving the respective roles of home and host authorities. As set out in the FSB SIFI Framework and agreed by G20 Leaders at the 2010 Seoul Summit, "[f]or G-SIFIs, the quality of information exchanged in supervisory colleges should be adequate to enable a rigorous co-ordinated assessment of the risks facing the institution." The review finds that this is not a commonly understood objective of supervisory colleges (core and universal). More clarity is needed on whether this objective can be achieved and in particular whether the legal underpinnings currently in place are sufficient to support this. This would require moving beyond colleges serving as discussion fora towards becoming decisional hubs, where supervisory priorities and decisions are collectively formalised.

As the regulatory policy changes settle and the focus turns increasingly to application of these new rules, the importance of fostering strong supervisory cooperation and coordination upfront is increasingly coming to the fore. Important work has been undertaken at the international level on RRP and there are opportunities to enhance supervisory effectiveness through RPP, but challenges are also evident. An emerging concern that surfaced is the relationship between "going-concern" and "gone-concern" supervisory perspectives, in particular in regard to the location of capital and liquidity. The supervisory response must consider how to approach the key objectives of building resilience of a group on a going concern basis while most effectively planning for recovery and resolution as a gone concern. While regulatory and supervisory policy can benefit from several high-level discussions at both the FSB and the BCBS, there is currently no forum for heads of supervisory authorities to discuss supervisory issues for individual institutions such as the tensions that can arise between going concern supervision and gone concern, particularly across national boundaries, or to facilitate resolution of the other challenges identified by the review. Such discussions among heads of supervisory authorities need to take place in a format in which confidential supervisory information can be exchanged and protected. Increased supervisory interaction for global institutions, particularly at senior levels, would help to address the challenges and limitations of cooperation. Such discussions in good times will help to reduce the potential uncertainties during crises.

Recommendation 5: By end-2015, the FSB, in collaboration with the standard-setting bodies, will explore ways to promote its objective of achieving a "rigorous co-ordinated assessment of the risks facing the G-SIFIs through international supervisory colleges", including by developing additional guidance for G-SIFI core colleges as needed and by examining the legal underpinnings that may be necessary to support this. The BCBS should work further with national authorities, in particular those home to a G-SIB, to ensure full implementation of its Principles for effective supervisory colleges, and it should report on progress by end-2016.

Recommendation 6: The FSB and BCBS will cooperate to develop ways to foster greater cross-border supervisory cooperation and coordination through discussions amongst heads of supervisory authorities on institution-specific issues, in which confidential supervisory information can be exchanged and protected, and to facilitate resolution of some of the challenges identified by the review, such as how to approach the key objectives of building resilience of a group on a going concern basis while most effectively planning for resolution as a gone concern.

5. Attracting, retaining and developing high quality supervisory resources

Supervisory resources have increased in terms of their quantity and quality, reflecting the broadening of requirements for G-SIB supervision and the greater intensity and engagement of supervision more generally. However, these changes have often been accompanied by high turnover of experienced staff, which hinders continuity of supervisory programmes and undermines the effectiveness of supervision. While supervisors are regarded as more technically competent than before, there is general recognition that the capabilities of supervisors need to be further enhanced to support rigorous analysis and sound decision-making. In particular, there is a need to balance individuals with a depth of technical expertise with those who have adequate supervisory experience and understanding of the industry. In-depth knowledge of the industry and institutions' business models enables supervisors to exercise better judgement and to more effectively challenge senior management.

Supervisory authorities recognise that the scale and pace of regulatory reforms, combined with evolving supervisory practices and the growing complexity of G-SIBs, challenge supervisors' capacity to stay abreast of new developments and keep pace with changing conditions. Adequate training and development is therefore critical in appropriately equipping supervisors with the necessary skills and in fostering a common understanding of supervisory and regulatory changes; it is also necessary to ensure an understanding of the authority's supervisory strategy, priorities, and objectives. Talent management and the ability to recruit and retain high-quality expertise should remain a top priority for authorities.

Recommendation 7: National authorities should make further progress on establishing a talent management strategy that supports the attraction and retention of appropriately skilled supervisory resources. This strategy should clearly define the supervisory capabilities that are needed and include targets for supervisory experience and skills. Authorities should monitor outcomes against their strategy, and implement training programs and career development opportunities that promote supervisory capabilities that are consistent with strategic objectives.

Annex A: Relevant FSB SIE recommendations for enhanced supervision

2014 FSB progress report on enhanced supervision

- ***Implementation of the enhancements.*** Supervisors need to remain focused on ensuring that the changes identified above take root and are appropriately embedded for future use and application. In general, there is a perceived need to go back and refresh what is being done by supervisors in many areas identified above – supervisors believe it is time to take stock and ensure changes are appropriately integrated into 'steady state' practices.
- ***Strengthen risk management and measurement.*** Supervisors need to continue to impress upon institutions the importance of strengthening risk management and measurement. The effective implementation of the BCBS *Principles for effective risk data aggregation and risk reporting*[38] at the banking group-wide and legal entity levels will be an essential step to support better risk identification and management. This is a critical precondition to the effective risk management of the institution, namely for implementation of an effective risk appetite framework and recovery and resolution plans. At the same time, for many authorities, IT systems for using data collected should be enhanced.
- ***Strengthen resources.*** Supervisors need to continue to strengthen their resources. The need for talent at supervisory agencies is affected by greater interaction with boards on issues such as risk appetite and risk culture, more focus on stress testing, supervisory intervention in capital models and better oversight and analysis of data collected from financial institutions.
- ***Continue benchmarking.*** The SIE will continue to benchmark supervisory intensity and will review further the number of supervisory resources for global systemically important banks (G-SIBs) – three G-SIBs from three countries have recently been reviewed and the remaining G-SIB countries are to be reviewed in April. This will bring new perspective on types and allocation of resources for more effective supervision of G-SIBs.
- ***Assess supervisory effectiveness.*** Supervisors need to develop methods to judge supervisory effectiveness in light of the changes implemented within supervision so far. This includes the related assessment of whether all the supervisory focus on boards and risk governance is paying off and institutions are becoming more effective in their risk governance.
- ***Define supervisory risk appetite.*** Supervisory authorities will need to focus on the risk appetite of supervisors (how much risk supervisors are prepared to tolerate) and on ways of ensuring that supervisors have reliable mechanisms in place to understand and discuss acceptable versus unacceptable risks.

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[38] *Ibid*. 35.

2012 FSB progress report on enhanced supervision

- ***Recommendation 2***: Supervisory interactions with boards and senior management should be stepped up, in terms of frequency and level of seniority, as should the assessment of the effectiveness of boards and senior management. Supervisors should satisfy themselves that SIFIs have a robust process in place to assess applicants for board-level or senior management positions and should be informed of the rationale for board appointments in advance of such announcements.
- ***Recommendation 3:*** Supervisory authorities should continually re-assess their resource needs; for example, interacting with and assessing boards require particular skills, experience and adequate level of seniority. Multi-year resource plans, supervisory training programs, long-term career paths and development of "soft" skills, such as leadership and communication skills, are essential. The SIE will review supervisory approaches to and emphasis on training programs in the coming year.
- ***Recommendation 16***: The FSB, in collaboration with the standard setters, should intensify efforts to increase the effectiveness of supervisory colleges, particularly for G-SIFIs. Given the strong interest and expectation of colleges expressed through the G20 process, it is critical that the FSB further consider ways to ensure adequate exchange of information and cooperation within core supervisory colleges, as well as avenues to promote joint decision making processes in the future. The FSB should submit a report to the September 2013 G20 Summit which sets out policy recommendations to address the issues identified as hindering the effectiveness of core supervisory colleges.

2011 FSB progress report on enhanced supervision

- ***Recommendation 2***: The FSB will by end-2012 assess in more detail the adequacy of resources at supervisory agencies for the supervision of SIFIs, including the approaches supervisors are taking to intensify their supervision of SIFIs and the kinds of resources that are needed to do so. Governments should follow up on their November 2010 commitment to ensure supervisors have the capacity to resource themselves to effectively meet their mandate, which in some jurisdictions is expanding to include areas of consumer protection.

Annex B: List of Surveyed Jurisdictions and G-SIBs

Participating Jurisdictions	G-SIBs[39]
G-SIB home authorities	
1. China	• Bank of China
2. France	• Group Crédit Agricole
3. Germany	• Deutsche Bank
4. Italy	• Unicredit Group
5. Japan	• Mitsubishi UFJ FG
6. Netherlands	• ING Bank
7. Spain	• Santander
8. Sweden	• Nordea
9. Switzerland	• UBS
10. United Kingdom	• Barclays • HSBC
11. United States	• Bank of America • JP Morgan Chase
Other authorities	
12. Canada	
13. India	
14. Singapore	
15. South Africa	

[39] See FSB, *2013 Update of Group of Global Systemically Important Banks (G-SIBs)*, November 2013 (http://www.financialstabilityboard.org/2013/11/r_131111/).

Annex C: Principles, observations and recommendations for enhanced supervision

FSB publications

FSB *Progress Report on Enhanced Supervision* (April 2014)

FSB *Guidance on Supervisory Interaction with Financial Institutions on Risk Culture* (April 2014)

FSB *Progress and Next Steps Towards Ending "Too-Big-To-Fail" (TBTF)* (September 2013)

FSB *Thematic Review on Risk Governance* (February 2013)

FSB *Increasing the Intensity and Effectiveness of SIFI Supervision* (November 2012)

FSB *Progress Report on Implementing the Recommendations on Enhanced Supervision* (October 2011)

FSB *Intensity and Effectiveness of SIFI Supervision: Recommendations for Enhanced Supervision* (November 2010)

FSB *Report on Reducing the Moral Hazard Posed by Systemically Important Financial Institutions* (November 2010)

BCBS publications

BCBS *Core Principles for Effective Banking Supervision* (September 2012)

BCBS *Peer review of supervisory authorities' implementation of stress testing principles* (April 2012)

BCBS *Principles for enhancing corporate governance* (October 2010)

BCBS *Principles for sound stress testing practices and supervision* (May 2009)

BCBS *Principles for Effective Risk Data Aggregation and Risk Reporting* (January 2013)

BCBS *Revised good practice principles for supervisory colleges (consultative document)* (January 2014)

Other publications

Group of Thirty *A New Paradigm: Financial Institution Boards and Supervisors* (October 2013)

Group of Thirty *Toward Effective Governance of Financial Institutions* (April 2012)

IMF *The Making of Good Supervision: Learning to Say "No"* (SPN/10/08, May 2010)

Institute of International Finance (IIF) *Achieving Effective Supervision: An Industry Perspective* (July 2011)

Office of the Comptroller of the Currency (OCC) *An International Review of OCC's Supervision of Large and Midsize Institutions: Recommendations to Improve Supervisory Effectiveness* (December 2013)

Senior Supervisors Group (SSG) *Progress Report on Counterparty Data* (January 2014)

SSG *Risk Management Lessons from the Global Banking Crisis of 2008* (October 2009)

Annex D: Supervisory strategy and approach for SIBs

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Canada	• The Supervisory Framework explicitly states that the "*intensity of supervision will depend on the nature, size, complexity and risks* profile *of a Federally Regulated Financial Institution (FRFI), and the potential consequences of the FRFI's failure.*" • Key foundational elements of the supervisory framework are: o Focus on Material Risk o Forward-looking, early intervention o Sound predictive judgement o Understanding the drivers of risk o Differentiate between inherent risks and risk management o Dynamic adjustment o Assessment of the whole institution • Six largest Canadian banks identified as D-SIBs, subject to continued supervisory intensity (including RRP), enhanced disclosure and 1% capital surcharge by 1 January 2016. • A supervisory strategy is developed for each D-SIB annually and helps identify the supervisory work to keep the D-SIBs risk profile current. • OSFI's planning also includes a process to compare work effort across FRFIs.	• D-SIB teams are openly challenged on risk assessments and risk ratings in formal internal panel sessions. • OSFI established a Risk Tolerance Framework for D-SIBs, intended to complement OSFI's Supervisory Framework. Key principles of the Risk Tolerance Framework are: Accurate and timely risk assessment; Focussed supervisory action and communication; Leading risk management practices at D-SIBs; Strong supervision culture; Effective oversight and governance of D-SIB supervision; Sound supervision bench strength and talent management. • Environmental scanning and stress testing increased in importance post crisis. OSFI established the Emerging Risk Committee (ERM), to assess the macroeconomic environment, financial system, industry, and institution-specific emerging risks on a regular basis, with more formal links to supervisory strategies for D-SIBs. OSFI periodically requires FRFIs to perform specific stress tests. • High level of engagement between OSFI and each of the D-SIBs. Contact is frequent and at all levels of the institution (line, oversight functions, senior management and the board). Greater interaction of OSFI Executive, including at a minimum at an annual meeting with the CEO and full board, as well as semi-annually with the board Chairs. Annually, or as appropriate, the RM writes an Annual (Supervisory) Letter, addressed to the CEO copied to the board Chair, Audit and Risk Committees and members of Senior Management. Findings and recommendations are discussed with the D-SIB before the letter is issued. OSFI requests that a copy of the supervisory letter be provided to the external auditor. Upon completion of	**Key benefits** • Establishment of Risk Tolerance Framework for D-SIBs and the articulation of roles and responsibilities of supervisory groups enhanced the supervisory strategy, including making full use of thematic cross sector work, emerging risks as well as business model analysis. Greater ability to benchmark and calibrate risk profiles. • Increased use of horizontal reviews contributes to ability to challenge risk management practices. • Increased forward looking focus (risk appetite frameworks, long-term strategies, business model assessments). • More direct interactions with boards and senior management determine more holistic approach to supervisory assessments versus only significant activity approach. • Greater recognition of the amount of time and resources required for effective follow up work contributed to more formalised processes being established, with greater information sharing and internal coordination efforts. • Macro Stress Testing (in conjunction with Bank of Canada) provides valuable input into the assessment of the adequacy of capital levels at the D-SIBs. • Formalisation of mid-year meetings with board and committee chairs to enhance discussions and provide timelier communication and discussions of supervisory findings. • More proactive behaviour, especially given OSFI's general approach of holding the board and senior management accountable. • Enhanced discussions amongst domestic agencies. **Key challenges (Internal)** • Ability to manage significant amount of changes and increased expectations. • Ability to train individuals in a steady state environment.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
		supervisory reviews, Interim Supervisory Letters are issued under the signature of the Relationship Manager to the appropriate individual at the D-SIB.	• Increased supervisory focus in new areas (i.e. risk culture) requires new / different skill set.
China	• New strategy centred around the concept of "TBTF": • Intensified SIBs supervision. • Group-wide consolidated supervision of SIBs and their risk assessment emphasised; efforts to improve SIB's loss absorbing capacity and promote effective resolution regime. • Supervisory framework integrating both macro- and micro- prudential dimensions.	• Supervisory rating system revised to facilitate regular supervisory monitoring and assessment of a bank's risk profile. • Specific risk indicator system (CARPALs) for the 5 biggest banks (capital adequacy; asset quality, risk concentration, provisioning coverage; affiliated institutions liquidity, swindle prevention and control). • Risk appetite determined by the risk profile, management and systemic performance of an institution.	**Key benefits** • Supervision for SIBs in a more prudential, forward looking and professional manner. **Key challenges** • Increasing challenges of effective supervision, due to the growth of supervisory intensity and limited financial resources.
France	• Material changes in mandates and powers since 2010: establishment of the ACP, which in 2013 became ACPR. • Haut Conseil de Stabilité Financière created in 2013 as the French macroprudential authority, in charge of overseeing the financial system as a whole. • The French market situation (highly concentrated market, international activity, strong domestic presence and relative homogeneity of the SIBs) has traditionally placed a high strategic, organisational and cultural focus on the supervision of SIBs. Improvement of banking supervision focussed on improving handle of large and complex institutions. Without a formal risk appetite framework, in practice very low level of risk appetite expressed by the supervisory authority on all systemic institutions.	• Priorities of SIB supervision defined by the ACPR and adopted formally by its board on a yearly basis, in light of overall assessments of risks, both from a micro and macro-prudential standpoint. • Detailed Supervisory Review and Evaluation Process methodology implemented since 2007. The methodology provides for gradual intensity of the review depending on the risks and complexity of institutions, and is used to enforce mandatory Pillar 2 capital requirements. • Supervisory framework includes thresholds based on qualitative criteria and quantitative RAS results, at the breach of which corrective actions are triggered.	**Key benefits** • More coordinated and centralised approach to financial conglomerates. • Development of a more in-depth and regular assessment of potential risks borne by SIBs. • Closer and more intensive involvement with the banks led to a deeper understanding of SIBs' business lines and business models.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Germany	• Several material changes made to the German Banking Regulation, including for resolution purposes and enhanced powers to impose capital add-ons. A structural Banking Reforms has been enacted in 2014, requiring deposit-taking institutions to separate proprietary trading and other highly risky capital market activities. • Financial Stability Committee established in 2013 for the coordination of micro and macro prudential supervision. More tactical aspects addressed by BaFin's Risk Committee, which addresses risks arising from a cross-sectional perspective and is responsible for connecting micro- and macro prudential supervision. • Coordination between Bundesbank and Bafin through two specific bodies: a) working Group Risk-Oriented Supervision and b) Committee of Ongoing Supervision, which discusses issues concerning SIBs and meets quarterly. • Bafin in consultation with Bundesbank sets up a supervisory strategy on a yearly basis which defines the central risk areas for supervision. These are defined based on supervisory findings, recommendations of the relevant European institutions and of the FSC. Supervisory strategy now takes macroprudential aspects more precisely into account.	• No formal risk appetite but risk-oriented supervisory strategy, takes into consideration both risks and impact of failure. Risk based approach: most significant risks obtain the highest supervisory attention. SIBs subject to more rigorous on-going monitoring process and more extensive reporting requirements. Based on proportionality, additional SIBs supervisory requirements are introduced in form of "add-ons". • The institution-specific, risk based supervisory strategy is formed starting from the overall strategy and from the individual supervisory risk profiles of the institutions (combination of top down and bottom up view). The institution-specific strategy is agreed between the Bafin and Bundesbank and includes a planning for on- and off site supervisory activities. • Supervisory approach more forward looking, proactive and risk–oriented. Intensified by: greater resources for qualitative horizontal reviews and IT supervision; increased attention to bank business models; focus on SIB's risk management capacity; greater focus on governance issues and resolvability; improved and more intense onsite supervision.	**Key benefits** • More forward looking and proactive supervision led to deeper understanding of the risks and weaknesses of the banks. • Connecting the different levels of supervision (micro, macro; cross-sector) facilitates a holistic approach to SIBs' risks. • More frequent dialogue and more resolute tone towards banks. Supervisory expectations communicated less formally, more frequently in a more flexible and timely, i.e. more effective manner. **Key challenges** • Need to cover the various supervisory areas more broadly and systematically.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
India	• Amendments to RBI's mandate to include specificities on consolidated supervision in 2012. • Financial Stability and Development Council established in 2010 as apex forum for financial stability (macroprudential supervision including of large Financial Conglomerates, and inter-regulatory coordination). • Supervisory Strategy based on new Risk Based Supervision (RBS) Approach introduced in 2013 for significant institutions. • Changes in supervisory culture: risk awareness and focussed responsibility as new key dimensions. Other elements: Continuous engagement; move out of compliance oriented "tick the box" approach; ideal mix of qualitative and quantitative supervision.	• D-SIB methodology issued in 2014. • Under RBS, level of intrusive supervision is based on the risk of individual banks and the impact on the banking system. Each bank is assigned a *Risk of Failure Score*, factoring in aggregate risks and assessed capital. Banks above a particular score are brought under more intensive supervisory action including additional capital requirements. Intensity and intrusiveness of supervision based on both the *Risk of Failure score* and the *Impact Score* (based on the D-SIB methodology) using a risk/impact matrix. • Supervisory priorities further sharpened through horizontal analysis of large banks.	• Changes to RBS determined a change in supervisory culture in respect of large and complex banks, with more continuous engagement and more timely and more effective interventions. • Use of Risk/Impact matrix and definition of supervisory stance determined a more efficient allocation of supervisory resources. **Key challenges** • Developing pool of experts in specific risk areas, also hindered by mandated rotation of supervisory staff.

Italy	• Creation of IVASS in 2013 and better integration between the banking and insurance Supervisory Authority.
	• Main drivers of supervisory strategy described in a Guide to Supervisory Activities outlining the Supervisory Review and Evaluation process. Main drivers:
	  o consolidated, risk-based, net risk approach;
	  o absent a formal risk appetite framework, strong connection between RAS Score and supervisory action (particular set of supervisory controls/measures for each risk score);
	  o proportionality of the supervisory action based on size, systemic relevance, complexity. Additional layers of
		• After the crisis, more frequent and detailed reporting from G-SIBs, more frequent onsite inspections; more forward looking, fast and reactive activity to anticipate problems. Stricter continuous ongoing monitoring based on risk-based approach. More intense and frequent communication with the banks.
		• Supervisory activity performed through an intense, extensive and challenging dialogue with intermediaries, based on a massive request of objective and verifiable information that feeds in the supervisory RAS systems.
		• Strong relationship between off-site and onsite supervision in order to make the overall analysis complete, clear and exhaustive.
			Key benefits
			• Supervisory activity more proactive and faster in coping with emerging potential new threats arising from banking activities.
			• Deep and specific analysis of targeted issues added to traditional holistic view.
			• Increased effectiveness in resource allocation.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
	supervision applied based on systemic relevance (e.g. higher IT standards). • Supervisory culture historically characterised by strong, direct and intrusive approach, supported by: o long-life career of the workforce (deep knowledge of technical issues of the line managers; autonomy and thinking independence from industry); o cross checks and internal challenge embedded in the supervisory activity (e.g. on- and off- site).		
Japan	• No material changes to mandates under the Act for Establishment of the Financial Services Agency. Enhanced powers with respect to resolution. • In 2013, policies for on-site and off-site monitoring were combined into Financial Monitoring Policy, which is now formulated annually according to the economic and financial situation. This policy includes statements on supervisory strategy for SIBs such as: o Real-time fact finding of developments within SIBs to appropriately respond to changes in risk; o Extract cross sectorial issues and benchmarking through horizontal reviews.	• Integrating monitoring of onsite and off-site teams aimed at enhancing real-time monitoring and horizontal reviews. • Enhanced SIB supervision based on more forward looking approach.	**Key benefits** • Enhanced off-site monitoring improved information collecting ability. • Improvement of supervision by sharing and analysing collected information. **Key challenges** • Still difficult to identify risks facing the most advanced SIBs. • More emphasis should be placed on meetings with bank's representatives and external auditors, and analysis of banks' management documents on business trends and to deal with potential risks.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Netherlands	• Broadened DNB powers deriving from implementation of CRD IV, as well as broadened mandate to explicitly include responsibility for financial stability. Creation of a Financial Stability Committee. • DNB is also new resolution authority. • DNB regularly updates its supervisory strategy through the publication of a "Vision on supervision". In the 2010-2014 announced a shift in supervisory strategy to include more qualitative and forward looking elements and putting more emphasis on business models and strategy and behaviour, culture and governance. • Action plan announced in 2010 for a change in the conduct of supervision to make it more comprehensive and intrusive. • Mission statement made explicit that failures should be minimised and financial institutions should be able to meet their obligations (objective translated into key performance indicators with regards to number of failures and amount of money that is protected).	• Introduced in 2012 a new supervisory framework (Focus!), and a new approach to supervision. Key elements are: o Ex ante classification of institutions based on potential financial stability impact; o Top down approach on the risk drivers; o Strengthened macroprudential orientation; o More specific use of thematic supervision. • SIBs fall within highest classification of supervision and are subject to comprehensive risk analysis. • DNB introduced a SIB buffer of 1 to 3% and a minimum layer of bail-in capital. • For all SIBs, RRPs have been developed. • Supervisory scores applied to different risk categories are benchmarked throughout the sector and sent to Supervisory Council for discussion and final approval. Risk scores are supplemented with a list of top risks, determination of supervisory regime and a plan describing main risk mitigation activities.	**Key benefits** • Reorientation of supervisory strategy to include more strategic qualitative elements support a more forward looking supervision. • Changes to supervisory culture made supervision more comprehensive and intrusive. **Key challenges** • That more intrusive approach does not become too formalistic as this would undermine constructive dialogue. • Maintain room for expert supervisory judgement, including the will to act at an early stage.
Singapore	• No material changes to mandate. Enhanced powers with respect to resolution. • Risk based approach to supervision. Banks assessed annually under two aspects: a) Impact (relative systemic importance); and Risk (relative risk profile). From risk assessments, supervisory concerns are identified that guide the supervisory plan for each bank. Supervisory plan for each bank serves to systematically set out the key areas of supervisory work and corresponding	• Banks are assigned to supervisory buckets based on the Impact/Risk analysis. Supervisory buckets determine the supervisory intensity, such as frequency of inspections and off-site assessments, as well as resources accorded to the banks. SIBs with high impact on the financial system and risk profile are assigned higher supervisory buckets, with greater allocation of resources and focus, close and continuous supervision. • Consulted industry on D-SIB framework to formalise and update MAS' diagnostic toolkit for assessing systemically important banks in 2014.	**Key benefits** • Enhancements to supervision: a) enhancement to macro-prudential surveillance framework to support supervision; b) enhancements to impact assessment framework to better target supervisory policy measures at D-SIBs; c) strengthening recovery and resolution planning for SIBs; d) strengthening consolidated supervision of SIBs through hosting of supervisory colleges.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
	supervisory tools. • Supervisory culture defined as pre-emptive, focussing on resolving issues with the bank at an early stage and targeting supervisory action at the root of the problem. Close engagement with banks' board and senior managers. Refer to MAS' monograph on "Objectives and Principles of Financial Supervision in Singapore", which also states that MAS does not aim to prevent the failure of any financial institutions.		
South Africa	• In the process of implementing a "twin-peak model" of financial regulation: the approach entails creating a prudential regulator housed in the central bank and responsible for the regulation and supervision of banks and insurers. Other changes in power related to implementation of resolution-related reforms. • The Financial Sector regulation Bill would also establish a Financial Stability Oversight Committee and the Market Conduct Authority. • Risk based approach to supervision: frequency and intensity of the supervision of a SIB determined by the entity's risk assessment, with a structured forward looking approach to focus on potential risks. No formal risk appetite framework.	• The supervisory planning is carried out based on the Management Information Report and Risk Review, which takes into account the entity's sector relevance, the systemic importance, and assessment of key risk areas, key focus areas and issues of concern. Guides also number of allocated resources. • Additional information collected more frequently for SIBs, for timely identification of emerging risks. • Enhanced interaction with boards and banks' management at various level of seniority.	**Key benefits** • Enhanced interaction with chair of boards assisted with improvement of effectiveness of boards. • Forward looking approach assisted with early identification of potential risk and challenges. **Key challenges** • Full timely and consistent implementation of reforms is critical to ensure level playing field with international players. • Resources (recruitment and training: additional time and resources needed for implementation and training, in addition to normal workload).

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Spain	• Legislative changes to implement CRD IV and resolution related reforms. A number of licensing and sanctioning powers previously vested in the Ministry of the Economy now transferred to supervisory authority, Bank of Spain. Restructuring and reinforcement of Market Conduct supervision within Bank of Spain. • Strategy: annual program of supervision with particular attention to: 1) institutions whose results in the stress tests or process of supervisory review and evaluation indicate the existence of significant risks to their financial soundness or reveal possible non-compliance with solvency regulations; and 2) institutions that represent a systemic risk to the financial system. • Key features of supervisory model are proximity to the prevailing reality of supervised institutions and highly detailed periodic reporting on current accounting and financial situation, in order to allow an up-to-date and in-depth knowledge of the situation and progress of each supervised institution. The model is complemented by a risk-based, forward looking approach, which continuously updates the institutions' risk profile following the supervisory cycle and which guides the supervisory plan (SABER approach). This approach also considers the institutions' systemic importance. • Supervisory culture naturally evolved with the supervisory approach, highlighting material improvements in internal coordination in order to homogenise the supervisory criteria and methods.	• Supervisory priorities and the supervisory framework to be applied, including the supervisory objectives and intensity for each institution, are determined by the supervisory risk profile and the institution's systemic importance. • Supervisory approach for SIBs combines continuous surveillance and onsite inspections, including a permanent presence of supervisors in the bank that promotes a continuous interaction with its management. • Significant increase of the supervisory focus on qualitative matters (corporate governance, compensation policies, compliance and risk management), which require a judgement-based assessment.	**Key benefits** • Deeper knowledge of the supervised banks, including a better understanding of the business model and the sources and capacity to generate results and capital. • The possibility to identify problems at an early stage and test their resilience and resolvability. • Proximity to the bank promotes the contact with the entities' management, allowing a better communication, quicker flow of information and ongoing interaction and provides supervisors with a greater agility to act, with preventive and corrective actions.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Sweden	• Finansinspektionen (FI) assigned responsibility for macroprudential supervision in 2014, and resolution powers. Also increased sanctioning powers with implementation of CRDIV. Established a dedicated Division for consumer issues. • Risk based-approach to supervision, with different breadth, detail and frequency depending on risk profile and significance of each institution, market, function, and product area. Component of supervisory risk appetite determined by the "Swedish Finish" approach to BIII (which involves generally higher requirements, including a 5% surcharge for the four systemic banks). • Objective of FI supervision: systemic bank to have low risk appetite, sound strategy and strong financial buffers. • Since the crises, FI increased focus on large bank supervision. Efforts to make supervision more forward looking, proactive and analytical. Improved the application of supervisory judgement, also by recruiting more staff with industry background. Improved internal cooperation to move away from silo-based supervision. • Formal risk assessment process for system-wide risks established, including quantitative targets for risk based supervision by which supervisory directors are regularly assessed.	• The risk assessment process aims to produce a risk "portfolio" for each supervision division (Banks, Insurance, Markets) and a joint risk "portfolio" for the FI as a whole. The identified risks relate to consumers, financial stability or to both areas due to their effects on confidence/efficiency. • FI-wide risk assessment is consolidated by the Chief Economist and discussed by the FI's senior management. Once approved it forms the basis for supervisory activities targeting identified risks, feeding into the supervisory planning process. • Also annual individual institutions' risk assessment formalised in the Supervisory Review and Evaluation Process (SREP), and revised quarterly to allow for flexibility and adjusting priorities. Conclusion from SREP one of the sources for planning of supervisory activities. • Transparency of supervisory outcomes since September 2014. All standardised Pillar 2 add-ons are made public. • Macro-prudential tools are incorporated in the capital requirements framework, both Pillar 1 and Pillar 2. • Increased use of sanction if risk management practices are assessed as unacceptably poor. • Increased engagement and dialogue with banks.	**Key benefits** • The formalised system-wide risk assessment ensures that system-wide concerns have an immediate and material impact on supervisory priorities of SIFIs. • Supervision has become more pro-active, interactive and transparent, and is characterised by intensive interaction with senior management of banks (more supervisory dialogue and moral suasion). • Use of supervisory judgement allows interaction on a broad range of risk issues. • Increased coverage of relevant institutions and current risks. **Key challenges** • Banks not used to the increased level of interaction, especially when faced with requests for data. Need for experienced generalists who can engage in a dialogue with banks and apply supervisory judgement. • Coordination of front line supervisors and risk specialists. • Improved IT-tools for analysis. • Coping with conflicting priorities resulting from EU regulatory and supervisory initiatives. • Improving some aspects of Business Model Analysis. • Increasing the focus and quality of training staff.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
Switzerland	• Major changes in mandates and powers with creation of FINMA in 2009, including: ○ Full functional, institutional and financial independence from federal administration; ○ Enhanced sanctions regime; ○ Additional changes in regulation, including of systemically important banks. • FINMA strategy is intended to make an impact, in order to enhance the reputation of the financial centre. FINMA has set itself strategic goals in the following five areas: (see FINMA Strategic Goals 2013 to 2016) ○ prudential supervision ○ business conduct ○ national and international cooperation ○ regulation ○ FINMA as an authority • Supervisory culture elements to enhance effectiveness. • More direct and interactive approach; more forward looking approach; more expertise; more onsite presence; more intrusive / tough approach; formalised knowledge sharing. All in all, quicker, tougher and more direct approach to supervision: *"Focus on targets, act fast and have a timely impact"*. • Risk based approach to supervision: more resources are allocated to institutions whose failure would have a bigger impact on the financial system (drivers are size, interconnectedness and complexity).	• The specific supervisory strategy derived from the annual risk assessment, which takes into consideration macro-economic elements and bank-specific information. The risk assessment is updated on a monthly basis for G-SIBs and quarterly for D-SIBs. • The supervisory category allocation of the institution and its rating determine the supervisory intensity and use of supervisory instruments. • Overall changes to prudential supervision: ○ Changes made to the risk-based approach giving more emphasis to larger and significant institutions and increasing the understanding of risks by being closer to the institutions; ○ Large increase in investment banking and capital market competencies; ○ More stringent enforcement practice; ○ Enhancements in cooperation and recovery and resolution planning. • Technical functions more formally integrated into supervisory process to support supervisory judgement.	**Key benefits** • Close interaction between dedicated supervisory groups and cross-sectional functions allows to efficiently benchmark SIBs' practices and to address identified weaknesses swiftly. • Efficient use of resources by applying the risk-based approach (concentrate on risks for the largest institutions and systemic risk). • Close collaboration with audit firms further adds to FINMA's flexibility to increase resources in a very short period of time. • Forward-looking approach ensures a constant screening of potential new risks and threats. • Quicker reactions to new threats and shortcomings help to prevent adverse developments. • Direct approach increases FINMA's visibility as a supervisor and raises awareness of our expectations at banks. Enhanced visibility of measures and actions has an impact on behaviour / awareness of other market participants. • Development of tailor-made and specific measures increases the impact of supervision.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
United Kingdom	• The Financial Services Act 2012 (the Act) brought major reforms, separating prudential and conduct supervision and creating a new UK regulatory framework that is better equipped to deliver financial stability. The Act came into operation on 1 April 2013 and redesigned the UK's financial regulation system through the creation of an independent Financial Policy Committee (FPC) at the Bank and two new authorities, the Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA), replacing the FSA. The PRA and FCA have their own objectives and operate independently, co-operating closely where possible. • Broad restructuring in 2014 of BoE and PRA ("One Bank") to exploit complementarities between functions and maximise impact; structural changes to areas supporting front-line supervision. • Building on the lessons learned from the crisis, the PRA's supervisory strategy is forward looking, focused on those issues and firms that pose the greatest risk to financial stability, and based significantly on judgement. The frequency and intensity of the supervision experienced by firms thus increases in line with the risks they pose. • FCA announced a new strategy in December 2014 which is being implemented. • FCA also aims to be a forward looking, risk based judgement led regulator focusing on the risks that firms and markets pose to its objectives.	• The "Continuous Assessment" approach to supervision ensures firm risk assessments are based on and respond to the latest evidence gathered on changing risks. • The PRA's approach relies significantly on judgement. Supervisors reach judgements on the risks that a firm is running; the risks it poses to the PRA's objectives; whether the firm is likely to continue to meet the Threshold Conditions; and how to address any problems or shortcomings identified. Use of judgement is deemed necessary to adopt a forward looking approach, and in the context of a complex financial system where compliance with detailed rules is, on its own, unlikely to secure acceptable outcomes. • The PRA Risk Framework provides a structure for forming resource allocation judgements – which are weighted to the firms and issues that, in the PRA's judgement, pose the greatest risk to the financial stability of the UK. This risk framework captures three key elements: potential impact of the firm on financial stability; the risk context; and mitigating factors. • PRA supervisors also judge a firm's proximity to failure, derived from the collective view of the Risk Framework elements that reflect the risks faced by a firm and its ability to manage them. The Proactive Intervention Framework is not sensitive to a firm's potential impact or resolvability and is designed to ensure that the PRA puts into effect its aim to identify and respond to emerging risks at an early stage.	**Key benefits** • The Financial Policy Committee has been introduced to provide a crucial link between the macro-prudential regulation conducted by the Bank, the micro-prudential regulation conducted by the PRA and the FCA's conduct regulation. • The introduction of the PRA's Continuous Assessment programme has enabled deeper and more extensive interaction with firms' boards and senior management – particularly for Category 1 firms - enabling better dialogue and challenge on those firms' risk management and decision-making processes and further facilitating the use of supervisory judgement. • Following a thorough strategic review of the Bank of England, a new One Bank Strategy and culture was introduced in 2014, reflecting a commitment to working together. The Bank has made several changes to its organisational structure to better align it to the new Mission. • FCA's focus on conduct has generally led to better engagement of firms and senior managers on conduct issues. **Key challenges** • To fully embed a culture of "One Bank Strategy" personnel should move away from a mind-set of supporting one committee.

	Supervisory Mandate, Strategy, Culture	Supervisory Approach for SIBs	Key benefits and challenges
United States	• Establishment of Financial Stability Oversight Council (FSOC), an interagency coordinating committee created under DFA. • As directed by DFA, established enhanced prudential standards for bank holding companies (BHCs) and foreign banking organisations (FBOs) with more than $50 billion in total assets and non-bank financial companies designated by FSOC. • Increased emphasis on macroprudential supervision to complement institution-specific or micro prudential supervision.	• Created the Large Institution Supervision Coordinating Committee (LISCC) framework. • The mandate of the LISCC is to draw on the rich diversity of knowledge and financial services and economic expertise in the FED and use that breadth of perspectives in establishing the strategic direction and oversight/ coordination of the supervision of the firms in the LISCC portfolio. • The LISCC approach: ○ brings an interdisciplinary and cross-firm perspective to the supervision of G-SIBs and other SIFIs; ○ leverages the evaluation of systemic risks posed by SIFIs through the evaluation of macroeconomic and financial risks, and examines how those risks could affect individual firms and the financial system collectively.	**Key benefits** • Better understanding of how G-SIBs with common risk exposures react to macroeconomic changes. • Stress testing helps to ensure that BHCs currently have sufficient capitals so that they can continue to operate and remain sufficiently capitalised even if stressful conditions were realised in the future. • A multidisciplinary approach to supervision yields a broader view of where risks may emerge. • Integration of resolution planning into the supervisory strategy brings a better understanding of mechanics of firm failure. Has also forced firms to begin to streamline the number of legal entities, track risk by legal entity and important in-house IT systems, particularly for operational continuity. • The enhanced strategy allows supervisors to build and maintain institutional knowledge. • The combination of in-house examination teams alongside horizontal risk expertise provides an opportunity for collaboration and cross training. **Key challenges** • Resources • Balancing rigorous review with broader perspective.

Annex E: Key changes to organisational structures

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
Canada	**Organisation** • Senior Director, Deposit Taking Group Conglomerates (DTGC) is responsible for D-SIB supervision and reports to the Superintendent. • Each D-SIB has a designated Relationship Manager (RM). • Supervision support groups (Specialists such as credit risk, market risk, operational risk, models, corporate governance, AML-compliance) and other staff within OSFI support this work. **Responsibilities** • The RM is responsible for maintaining an up-to-date risk assessment, is the main point of contact for the DSIB, signs off all letters to the DSIB and is responsible for recommending a Composite Risk Rating to OSFI Executives based on the work undertaken, including that of Specialist groups. • Key documents are subject to sign-off protocols within OSFI.	**Onsite** • Yes **Use of third parties** • Relies on external auditors for the fairness of the financial statements. Meeting with the EA after the year-end audit is completed, followed by a review of the audit working paper files.	**Internal coordination/Holistic view** • A Supervision Work Agreement Plan outlines the expectations of relationship managers and supervision support groups. **Quality assurance** • Within the D-SIB group – Review of supervisory work by line management (general and formal review, and approval of standard supervisory documentation to ensure that judgements are reasonable). • Formal panel process to discuss risk assessments with selected senior representatives from supervision. • Quarterly Monitoring Process with all RMs, representatives from specialist groups, OSFI Senior and Executive Management. • Quality Assurance Function within supervision is responsible for assessing whether core supervisory work meets “minimum defined expectation” w.r.t. following supervisory process and providing sound rationale, judgements and decisions. • Audits by independent Internal audit Department that reports directly to the Superintendent.	**Key changes** • Stature of RM increased. • Additional resources allocated to D-SIBs. **Key benefits** • Timelier interventions. • Increased informal communication that facilitates a more proactive response. • Increased coordination between RM and specialists during onsite reviews. **Challenges and gaps** • Training of existing resources against increased expectations for SIBs, as well as on-boarding of new/additional resources. • Enhancing top-down/holistic view versus significant activity approach.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
China	**Organisation** • The SIB supervision structure is composed of the institutional supervision department (front line department, including teams for: market entry, off-site surveillance, onsite examination and capital supervision) and the functional supervision department. • The front line departments, with one specific supervision team for each G-SIB, are responsible for carrying out supervision projects and the overall supervision and risk assessments on SIBs. The chief supervisor is responsible for making supervisory decisions, which will be reviewed and approved depending on their importance by senior officials. • The functional departments (Banking Innovation Supervisory Department, Legal and Regulations Department, Policy Research Bureau and Statistics Department and IT supervision) are responsible for monitoring the overall risks of the whole banking industry of China, alerting the risks to the front line departments and providing relevant assistance. • Specialised teams are especially responsible for the supervision on credit card, wealth management, stress testing, etc.	**Onsite** • Yes **Use of third parties** • The CBRC generally does not rely on third parties for SIB supervision considering the information security. • CBRC has established "tri-party meeting" mechanism to hold meetings with banks' management and external auditors.	**Internal coordination/holistic view** • Various coordination mechanisms: ○ Information sharing ○ Consultation mechanism ○ Professional assistance ○ Joint examination **Quality assurance** • The quality of judgment-making is safeguarded by rules and guidance systems, such as the Risk Early Analysis Supporting System (REASS) and Examination Analysis System of Technology (EAST). • Biannually review of supervisory rules and guidance. • Specific teams responsible for quality assurance and internal control of SIB supervision.	**Key changes** • Establishing capital supervision teams within the front line supervision department to enhance capital supervision and push forward the implementation of Basel II and Basel III. • Establishing new functional supervisory teams. For instance, the Macro-prudential Policy Division and Micro-prudential Policy Division inside the Policy Research Bureau; the Consumer Protection Bureau. • Changing the Information Centre into Information Technology Supervisory Department, to strengthen IT risk prevention. **Key benefits** • These changes have further improved risk sensitivity and promoted a more rigorous approach to supervision. **Challenges and gaps** • Specialist teams should be further strengthened to support SIB supervision.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges

France	**Organisation**
	• Supervision of SIBs is a long-standing supervisory focus.
	• Specialised and centralised SIB supervisory units are responsible for every aspect of ongoing supervision.
	• Other units (risk specialists, regulatory experts, legal, research) are high-value service providers.
	Responsibilities
	• Specialised SIB unites are responsible for:
	  o Global relationship with the bank.
	  o Implementing ongoing supervisory work program and drafting on-site inspections annual program.
	  o Recipients of onsite inspection findings.
	  o Follow up actions.
	  o Board-level presentations on decision-making processes.
	  o International cooperation.
		Onsite
		• Yes
		Use of third parties
		• No
			Internal coordination/holistic view
			• Institutionalised monthly SIB-dedicated ACPR board meetings to examine all bank-specific and transversal issues for both information and decision purposes.
			• The SIB-dedicated ACPR board meetings heighten specialisation of board members. They deal with both SIBs and insurance companies and facilitates fully-informed decision-making on financial conglomerates.
			Quality assurance
			• Cross and peer review among SIBs supervisory units as first layer of quality assurance.
			• Short, concentrated, robust senior management ladder directly under a deputy Secretary General specifically responsible for all SIBs ensure hierarchical coordinated control.
			• ACPR board meetings ensure supervisory consistency.
				Key changes
				• Institutional changes.
				• Setting up of monthly SIB-dedicated ACPR board meetings.
				Key benefits
				• Consolidated approach to cross sectorial risks – bank and insurance – and supervision of financial conglomerates improved by merger of banking and insurance supervisor.
				• Designation of ACPR as resolution authority played a key role for strengthening SIB supervision, from use of business model analysis to international cooperation.
				Challenges and gaps
				• Convergence of different national approaches within SSM.

Germany	**Organisation** • Banking supervision shared responsibility between BaFin and Bundesbank. • Supervisory tasks and responsibilities reside with line supervisors at BaFin. • Special expertise provided by policy departments, horizontal functions and expert teams (e.g. model approval). **Responsibilities** • Risk profile compiled by the Bundesbank at least once a year is the	**Onsite** • Yes, to assess capital adequacy and risk management and control systems, which are the responsibility of Bundesbank. • Also to conduct deep dives on special activities. • The annual inspection plan is based on the supervisory strategy and takes into account individual risk profiles (proportionality of the intensity of onsite inspections).	**Internal coordination/holistic view** • Committee on Ongoing Supervision of BaFin and Bundesbank analyses and discusses risks within the banking sector. • Integrated Risk Committee of BaFin and Bundesbank analyses latest trends and developments on a cross-sectoral basis. • Yearly institution-specific supervisory conference between BaFin and Bundesbank to discuss the finalisation of the risk profile and the supervisory plan.	**Key changes** • Institutional reorganisation in 2008 at BaFin with inclusion of four Chief Executive Directors to support the President. • Other institutional changes following the reform of financial supervision in 2010, including the creation of a Financial Stability Committee. • Establishment of special resolution unit. • Rationalisation of the structure to

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	cornerstone for supervisory planning. It is passed on to BaFin for approval and supervisory decisions. • "Automatic" higher risk profile for SIBs translates into higher intensity as regards supervisory interviews, onsite inspections, reporting requirements. • Higher involvement of senior supervisory management; two heads of departments now responsible for the supervision of all German G-SIBs.	**Use of third parties** • In some instances unavoidable for lack of essential expertise in specific areas. • Contracts drawn up by BaFin and include clauses to avoid conflict of interest and preclude corruption.	**Quality assurance** • Four eyes principles and rigid hierarchical approval process of final supervisory decisions by senior management. • Involvement and sign off of horizontal functions (e.g. policy department). • QA at Bundesbank for onsite inspection long standing tradition, now reorganised to include a horizontal function for meeting ECB SSM expectations, to support an effective and efficient conduct of supervision within Bafin, Bundesbank, and ECB. • Q&A processes for institutions.	respond to the establishment of the SSM. • Enhancement of horizontal functions in the area of risk analysis at the Bundesbank to improve input into supervisory planning. **Key benefits** • Improved coordination and detection of systemically important trends. • New unit for RRP allows an independent and all–embracing view. **Challenges and gaps** • Convergence of different national approaches within SSM. • A lot of new reporting and coordination duties.
India	**Organisation** • Office of the Senior Supervisory Manager: The Senior Supervisory Manager is designated as a single point of contact for a bank in order to streamline supervisory processes and communication. The Senior Supervisory Manager and his team carry out the day-to-day supervisory process. He is responsible for off-site and onsite risk assessment and works in coordination with other Divisions. • The Senior Supervisory Manager's office is laterally linked to the following functions/Divisions: a) Analytics Division doing macro/industry/per group analyses; c) Policy and Implementation; d)	**Onsite** • Onsite engagement is based on a scoping exercise carried out during the off-site risk discovery. Onsite exercise called Inspection for Supervisory Evaluation (ISE) is risk focused and comprises capital assessment, among other things. **Use of third parties** • Yes. External auditors could be used for specific purposes.	**Internal coordination/holistic view** • Exchange of information between supervisory teams is formally arranged through Policy Planning Division. Thematic reviews also add to the process. **Quality assurance** • The Quality Assurance Division (QAD) reviews all bank risk assessments and ensures adherence to common principles of uniformity in application, consistency in methodology, robustness of evidence and appropriate exercise of supervisory judgment. • The risk assessment reports are finalised after having been shared with the bank at the draft stage. The Senior Supervisory Manager cannot conclude on important supervisory matters without eliciting sufficient discussion with the supervised entity.	**Key changes** • Organisational changes for Risk Based Supervision: ○ Identification of Senior Supervisory Managers as single points of contacts for both on- and off-site supervision. ○ Dedicated analytics function for banking system-wide and macro-economic analysis. ○ Establishment of a QAD function in order to promote standardisation of supervisory judgement. **Key benefits** • Better identification of risks at individual banks. • Effective planning and judgment to

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	Financial Conglomerate, structured as a college of domestic supervisors; e) Data Division: to track financials and risk profile of banks on a continuous basis through a set of statutory and other returns collected at frequent intervals. • There is no formal team of specialists (risk areas, legal matter, modelling and statistical techniques). **Responsibilities** • The Senior Supervisory Manager prepares the supervisory Risk Assessment Report at the end of a supervisory cycle and proposes Risk Mitigation Plan for the bank. The Senior Supervisory Manager reports to the head of the Department. Any exceptional matter is raised to the Executive Director or the Deputy Governor. • Challenges to the Senior Supervisory Manager's findings from the bank management and from the QAD are placed before the Committee of Chief General Managers and the final view is placed before the Board for Financial Supervision for directions, the apex body responsible for consolidated supervision of the RBI-regulated financial sector, which may issue directions, as necessary. • Any finding relating to non-compliance is accompanied by a Monitorable Action Plan communicated to the bank.			direct supervisory resources to those banks that pose greater material risk. • Forward looking approach to risks. • Continuous supervisory engagement. **Challenges and gaps** • Institutionalisation of the office of Senior Supervisory Manager and continuity of key supervisory staff and experts is the key for effectiveness of the supervision process. • Developing a pool of in-house experts and supplementing supervisory pool of resources with hired external experts is a key challenge.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
Italy	**Organisation** • Re-organisation of the previous supervisory area into a new Supervisory Directorate, whose head is now entitled with specific powers in term of staffing, budgeting and organisation. • Dedicated supervision departments for all Italian banks and banking groups, with a distinction between those classified as significant institutions (subject to direct supervision of the ECB) and those considered less significant. Dedicated department dealing with financial intermediaries. • Dedicated team of analysts for each SIB, responsible for entire on-going supervisory process. • Other specialised units integrate analysis for specific responsibilities (e.g. licensing; model validation; legal; research). • More specialised and experienced workforce for SIBs.	**Onsite** • Yes, responsible for the planning, execution, review, management and conservation of inspection reports. For significant institutions, such tasks are performed in co-operation with ECB. • Together with the massive ongoing request of objective and verifiable information (including, *inter alia*, data quality, IT system, adequacy of corporate governance/risk management arrangements), key pillar of the traditionally strong, direct and intrusive approach to supervision. **Use of third parties** • No	**Internal coordination** • Intra-functional meeting for ordinary or extraordinary supervisory actions post evaluation. • Committee for assessment of irregularities for establishing financial and administrative sanctions. • Specifically for significant institutions (G-SIFIs and D SIFIs): weekly meeting, involving the head of departments and all the head of division. **Quality assurance** • Four eyes principles and rigid hierarchical approval process of final supervisory decisions by senior management.	**Key changes** • Reorganisation in 2008 to increase focus on the supervision of most relevant banks and in 2014 to comply with new SSM framework and to foster supervisory intensity/better specialisation of off-site structure to their core areas of responsibility (e.g. risk assessment, SREP). • Increased frequency and intensity of onsite and off-site assessments. **Key benefits** • Increased attention on SIBs. • More holistic and integrated risk supervision. **Challenges and gaps** • Convergence of different national approaches within SSM.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
Japan	**Organisation** • The Inspection Bureau mainly conducts onsite monitoring and has teams for SIBs and teams by risk category, which cooperates with each other. • An Examiner in Charge is responsible for the communication with each SIB. • The Supervisory Bureau conducts off-site monitoring and takes administrative measures against financial institutions. • The Supervisory Policy Office, which covers a specific area for SIBs, conducts risk monitoring.	**Onsite** • Yes **Use of third parties** • Use of results from external audits and exchange of opinions with external auditors as necessary.	**Internal coordination/holistic view** • Regular weekly meetings among major bank teams and risk category teams. **Quality assurance** • Internal challenge processes are in place to prevent errors in important judgement-making.	**Key changes** • Establishment and expansion of the sections in charge of SIB risk management. • Strengthening of on- and off-site integrated monitoring and promoting horizontal reviews of SIBs. **Key benefits** • Improvements in off-site monitoring and information collecting ability. • Enhanced coordination between related sections for SIBs. **Challenges and gaps** • Still rooms for strengthening of on- and off- site integrated monitoring.
Netherlands	**Organisation** • One Executive Board member explicitly appointed as Head of Supervision. • A Supervisory Council has been created, including all relevant Division Directors, which acts as management team for supervision. • For each SIB, a dedicated team has prime responsibility for supervisory activities towards that SIB; more experienced team members and specialists. • Other supporting expertise centres (including supervision of culture and integrity, etc.). • Authorisation matrix which provides granularity in reporting and decision making depending on the importance of	**Onsite** • In the context of the SSM, a new division for onsite supervision has been created. **Use of third parties** • Used for specific projects and required expertise; only used for a supporting, executing role within the project.	**Internal coordination/holistic view** • Structured processes for risk identification and risk mitigation plans (*Focus!*) contribute to a more structured approach to supervision, including the use of specific risk registers. **Quality assurance** • Important risk mitigation projects for the larger institutions (including SIBs) are summarised in a monthly report, which is challenged and evaluated by experienced supervisors and subsequently discussed within the Supervisory Council. The progress, success and project lead time are monitored within the report. • A risk management department has the responsibility to strengthen internal control and executes deep dives to challenge supervisory actions.	**Key changes** • Appointment of a Chairman of Supervision within the Executive Board. • Creation of a Supervisory Council. • New Supervisory Expertise Division created to increase effectiveness (including separate intervention department and internal risk management department). • Expert centre for conduct and culture. • A Macroprudential Committee created. • Under the SSM a separate division will be created for significant institutions, including SIBs. **Key benefits** • Clearer responsibilities and enhanced decision making.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	the supervisory action and classification of institution. • A separate intervention department has the responsibility to intervene timely and effectively; it advises on the use of formal measures. • A separate risk management department has been created for internal quality control. **Responsibilities** • The *Focus!* methodology incorporates input from all relevant divisions for a comprehensive risk assessment. The observations are challenged and benchmarked and – specifically for all SIBs –discussed within the Supervisory Council. • All activities and decisions for SIBs (and not for other entities) are taken at the board level, reflecting the higher intensity of SIB supervision.			• More internal checks and balances. **Challenges and gaps** • Integration of macroprudential policy with microprudential supervision. • Continuous loop to translate new regulation and standards into supervisory practice. • Start of SSM.
Singapore	**Organisation** • Dedicated supervisory teams for the consolidated and integrated supervision of local financial groups. • The Banking Department is the lead supervisor (for example, in the case of groups with insurance activities, the Banking Department performs risk assessment of the group as a whole, including the insurance subsidiary, the latter of which is subject to review by a Panel of supervisors in the Insurance Department).	**Onsite** • Yes **Use of third parties** • Supervisors may direct the bank to appoint external audit firms or independent consultants to undertake specific work, for example, to perform special reviews of internal controls where it is assessed that an independent party is better placed to do this compared to the bank. • Supervisors make a preliminary	**Internal coordination/holistic view** • Close collaboration with macroeconomic surveillance department for identification of emerging risks and others such as legal and policy departments for review of prudential policies and legal framework. • Various committees at the management level (e.g. the weekly Management Financial Supervision Committee) to ensure that MAS takes a consistent and coordinated policy and supervisory approach towards issues common to the banking, insurance and capital market sector.	**Key changes** • No major changes. • Since the crisis, greater emphasis and attention on analytics to enhance the identification and assessment of emerging concerns, build-up of risks, trends, concentrations, and hotspots in the banking system. **Key benefits** • Not applicable **Challenges and gaps** • Not applicable

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	• Support provided by functional specialists. • For local banks, a dedicated Banking Capital and Liquidity Steering Committee deliberate on bank specific issues relating to capital and liquidity standards and their application to SIBs. **Responsibilities** • Risk assessment prepared by the SIB supervisory team with input from functional specialists (market, liquidity, credit etc.). • Issues on SIBs are escalated to more senior authority. • Risk assessments of SIBs approved by a panel comprising Deputy Managing Director for Financial Supervision Group and other Department and Division heads. The risk assessments of the local banking groups are further tabled to the Managing Director and key members of the MAS board.	assessment of whether the third party is sufficiently independent and has the necessary expertise to perform the work.	**Quality assurance** • A panel of experienced supervisors review, discuss, and approve the banks' risk ratings and the accompanying supervisory plans. For SIB, the panel consists of the senior management of MAS who are not involved in the day-to-day supervision of SIB and are able to provide effective independent challenge.	
South Africa	**Organisation** • Direct supervision responsibilities are allocated to frontline analysts teams. Frontline analysts also manage relationships with banks. • Support of risk specialists. • More resources, time focus and supervisory interaction for SIB supervision. **Responsibilities** • The annual planning process commences with a discussion between	**Onsite** • Yes **Use of third parties** • Yes. Third parties may be appointed to conduct inspections on behalf of the Registrar. • The Registrar may direct a bank or any other appropriately skilled person to perform a review and to submit a report in respect of any matter that is reasonably necessary to enable BSD to perform its	**Internal coordination/holistic view** • Owing to the collaborative nature of on- and off-site activities, effective coordination and information sharing are ensured through ongoing interaction and communication between frontline analysts and the relevant risk specialist support teams, in line with the Principles of Engagement guidelines. **Quality assurance** • Supervisory reports submitted quarterly to the board of directors to ensure an independent view. • Stage 5 of the SREP consists of the panel review	**Key changes** • Expanded the frontline teams working on SIBs. • It also moved from a model relying substantially on external auditors for onsite work to one where the BSD's own staff conducts a number of onsite reviews to complement the work of external auditors. It has also doubled the number of risk specialists who conduct onsite reviews on particular risk areas including model validation

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	frontline analysis teams and the various risk specialist support teams to determine among other things onsite interventions required in respect of each bank during a supervisory cycle and a discussion of the allocation of responsibilities pertaining to each intervention. • Day-to-day decisions are taken by the frontline analysis team in conjunction with the specialist support team. • Decisions of prudential requirements, capital adequacy (capital add-ons) or model approvals and changes are presented to the executive management and risk panels (quorum required) where decisions will be made including on the communication to D-SIBs.	supervisory functions and duties. Such a request will be subject to specified terms or reference. • Annual discussions are held between the auditors and the Registrar to discuss matters pertaining to the audit of the banks (i.e. the quality of reporting, financial condition of the bank, major risk areas and management). • Very detailed legislative provisions describe the function of the auditors in relation to the Registrar, the reporting of the auditors to the Registrars, independence of the auditors.	process, which entails a review of the procedural and substantive correctness of the SREP, as well as of the conclusions reached and recommendations made. The review panel consists of senior members of the Bank Supervision Department.	and other risk areas. **Key benefits** • The increase in supervisory staff has allowed the BSD to form specialised teams to review the major risk categories, for an enhanced understanding of the risks faced by South African banks. **Challenges and gaps** • The Twin peak model (see Annex C) would require more staff than currently available in the banking and insurance supervisory function.
Spain	**Organisation** • SIBs' ongoing supervisory model is based on the combination of surveillance (permanent presence) and inspection activities and its respective teams. • Higher number of resources for SIBs. • Horizontal support by specialised units for specific tasks (model approval). **Responsibilities** • Based on the conclusions of the supervisory teams and their judgment, the senior management remits to the Executive Committee of the Banco de España the supervisory findings and actions to be required. The Executive	**Onsite** • Yes **Use of third parties** • No • Exception: independent valuation of the solvency of the Spanish banking sector in the context of its restructuring process.	**Internal coordination/holistic view:** • Meeting once a year to discuss the risk profile of the two Spanish G-SIBs, with attendance of senior management and supervisory teams involved. Objective is to define the final risk profile of the G-SIBs that will be elaborated in the SREP report and could determine Pillar 2 requirements. **Quality Assurance** • Performed in a hierarchical procedure within the responsible supervisory teams and senior management. Also meetings between responsible teams for relevant institutions are performed and a horizontal analysis is developed assuring a similar assessments.	**Key changes** • The G-SIBs supervisory model has been implemented for D-SIBs. • Significant increase of resources devoted to G-SIBs. **Key benefits** • The ongoing supervisory model promotes a deeper and better knowledge of the institutions and the possibility to identify the root of the problems and the immediate adoption of measures. **Challenges and Gaps** • Implementation of the SSM and the functioning of the joint supervision. • Rebalancing supervisory resources

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	Committee takes the final decision on the measures and actions.			after the impact of the start-up of SSM, in order to maintain supervisory intensity.
Sweden	**Organisation** • SIBs' on-going supervisory model is based on the combination of surveillance (permanent presence) and inspection activities and its respective teams. • Higher number of resources for SIBs. • Horizontal support by specialised units for specific tasks (model approval). **Responsibilities** • Based on the conclusions of the supervisory teams and their judgment, the senior management remits to the Executive Committee of the Banco de España the supervisory findings and actions to be required. The Executive Committee takes the final decision on the measures and actions.	**Use of third parties** • FI has the legal power to use third parties in SIB supervision but has very seldom used it. • Swedish external auditors have broader responsibilities with respect to the review of accounts of financial sector institutions. These requirements include provisions for a "trialogue" between the FI, the bank and its external auditors. Auditors also have a statutory obligation to report to FI on identified breaches of legislation and secondary regulatory acts.	**Internal coordination/holistic view** • Supervisory Coordination Committee ensuring exchange of supervisory best-practice across divisions. • Three different committees related to coordinating FI's policy and the drafting of regulation (Policy Committee, Consultation Committee and Regulation Committee). **Quality assurance** • The Head of the bank Supervision department assesses the quality of the SREP process. • Discussion of preliminary findings with the legal team, on the significance of findings and whether they constitute a breach of law.	**Key changes** • Establishment of a dedicated Large Banks Supervision Unit and the appointment of Group supervisors, with industry background, for each of the SIBs. • Establishment of cross border colleges. • Strengthened risk supervision and legal department. **Key benefits** • Enable a more pro-active and analytical approach to supervision, as well as to intensify interaction between each SIB and the supervisory authority. • Better quality analysis of the risks of each bank (SREP process). Enhanced risk assessment as a result of the joint supervisory work conducted by all college members. **Challenges and gaps** • Ensure efficient, risk-based allocation of resources despite many potentially conflicting demands from host supervisors and EU authorities. • Avoid internal over- and underlaps in operational supervision.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
Switzerland	**Organisation** • Supervisory groups for the two G-SIBs reporting directly to the Head of Banks Division; flat hierarchies enable timely escalation of irregularities. • Cross sectional specialised functions (Market and credit risk including model approval; Aggregate risk (incl. liquidity) and scenario analysis; Capital markets; Solvency and Capital including RRPs; others) play a key part in the integrated approach to supervision. **Responsibilities** • Data handling and aggregation performed by a specialist group as a basis for the creation of a monthly G-SIB Risk Report (continuous assessment). • Supervisory review findings are tracked, each with a clearly assigned supervisor responsible for monitoring developments and deciding on any further action.	**Onsite** • Via external auditors. **Use of third parties** • Yes – Substantial amount of regulatory audit under FINMA's guidance; beneficial as it helps to challenge the institution, provides for additional resources and expertise and also challenges the banks' external auditor. • Other covered aspects (e.g. independent check of effectiveness of measures taken). • Selection based on beauty contest and formal "conflict of interest" check, to provide assurance that third party is truly independent and objective. • FINMA has a team dedicated to performing quality controls of third parties examinations.	**Internal coordination/holistic view** • Institutionalised meetings in a variety of forms, attended by supervisory and cross sectional functions (risk management; solvency and capital). In-depth discussion among supervisors and cross sectional specialists to prepare the annual assessment letters, serves to reach a common assessment and supervisory action. • Use of benchmarking reviews. • Quarterly meetings with external audit firms to discuss: key regulatory matters, capital and liquidity issues, litigation matters, compensation issues and financial statements. • Regular interaction with host regulators. **Quality assurance** • Formal guidance on the use of supervisory tools. • Internal quality assurance (separate team ensure compliance with formal guidance and checks the viability of the supervisory judgement). • Internal audit periodic control on risk procedures.	**Key changes** • More effective organisational set-up: all banking-related supervisory activities housed in one department; differentiation between dedicated supervisory team and supporting expert functions. • All supervisory teams reporting directly to Head of Banks Division. • Clear commitment to the risk based approach, more resources allocated to G-SIBs and D-SIBs. **Key benefits** • Better interaction between supervisory and cross-sectional functions. • Flat hierarchies enable timely escalation of issues and involve all relevant decision makers. • Specialised supervisory teams for more complex institutions allow more accurate supervision and facilitate cross-sector comparison.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges

United Kingdom	**Organisation**
	• SIBs supervised in "Major UK Deposit takers directorate" ("Category 1 firms"); deeper intensity of assessment and more resources including senior management dedicated to these institutions.
	• Specialist resources used to understand markets in which the firm operates and compare it to peers (understanding of both idiosyncratic and common risks), including:
	  ○ Supervisory Risk Specialist;
	  ○ Supervisory Oversight Function provides independent assurance on quality and effectiveness of supervision.
	Responsibilities
	• The PRA's structured approach is based on the PRA's Risk and Proactive Intervention Framework and supervised through the "Continuous Assessment".
	• The Continuous Assessment (CA) rolling assurance programme provides the supporting framework for the PRA's judgements on the risks that a firm is running; the risks that it poses to the PRA's objective; whether the firm is likely to continue to meet the Threshold Conditions; and how to address any problems or shortcomings identified. CA also helps to identify new and emerging risks. Within the CA framework, supervisors decide which risks are the most material and must be
		Onsite
		• Yes
		Use of third parties
		• PRA may use its statutory powers — in particular its information-gathering power and its powers to commission reports by Skilled Persons (independent expert who can provide a view of aspects of a firm's activities) on specific areas of interest. Such reports might cover verifications of regulatory returns or the forensic analysis required to verify resolution plans. The FCA also has these powers and would use them for matters relevant to its own objectives.
		• The PRA requires skilled persons to submit an independence statement, and considers any professional difficulty, potential conflict of interest, or insufficient detachment.
		• Firms will usually receive draft and final copies of the report at the same time as the PRA, and will be allowed the opportunity to respond.
			Quality assurance
			• PSM (Firm evaluations for FCA) and mid-point reviews provide the key forums for internal challenge and review of supervisory activities. For Cat. 1 firms, summary of PSM, outcome and follow up discussion sent to PRA board for review.
			• Formal PSM (FE) assessments subject to rigorous review and challenge processes by those not involved in day-to-day supervision – risk specialists, independent advisers, relevant participants from resolution directorate. (For the FCA the independent challenge comes from sector teams, specialists, senior advisors etc.).
			• Other internal QA processes in the Supervisory Risk Specialists division, following completion of technical thematic reviews.
			• The Supervisory Oversight Function (SOF) provides assurance about quality and effectiveness of supervision.
			• Internal Audit reviews adherence to internal control processes.
				Key changes
				• Broad restructuring in 2014 of BoE and PRA ("One Bank") to exploit complementarities between functions and maximise impact; structural changes to areas supporting front-line supervision.
				• Very material increase in resources devoted to supervision of the most significant firms.
				• Higher level of engagement in supervisory activity by senior management.
				• The FCA announced a new strategy in December 2014 which it is implementing.
				Key benefits
				• For Category 1 firms, deeper and more extensive interaction with firms' boards and senior management, enabling better dialogue and challenge on those firms' risk management and decision-making processes.
				• The PSM/FE provides a process framework to ensure that panels are focussed, forward looking and of the appropriate frequency depending on the firms' specific risks.
				• The respective SOF functions promote and support the PRA's and FCA's objectives to deliver high-quality, forward looking, and judgement-based supervision.

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	pursued. • The PRA's Periodic Summary Meetings (PSM) provide an annual internal stocktake of the key risks posed by individual firms, progress against already identified risks, mitigation being taken and endorses the proposed supervisory strategy, with strong senior level involvement. Mid-point review after 6 months to check the agreed supervisory strategy is still on track. • Supervisors expected to apply their judgement and take responsibility for routine decisions; decisions which could have a material impact on PRA's objectives and or firm's safety and soundness escalated, with seniority of the committee dependent on potential impact of the firm and materiality of the decision, based on the PRA regulatory Decision-Making Framework guide. • FCA's approach is similar to PRA's though focused on its own objectives.			
United States	**Organisation** • All of the U.S. G-SIBs, those foreign G-SIBs whose U.S. operations are deemed to present similar risks and non-bank financial companies designated for Federal Reserve supervision by the FSOC, grouped together under the supervision of the FED. • OCC and FDIC supervisory portfolios reflect the systemic importance of the largest banking organisations: OCC's	**Onsite** • Yes **Use of third parties** • No	**Internal coordination/holistic view** • Holistic approach ensured by the portfolio approach to LISCC supervision. • Overall coordination and facilitation of information flow of G-SIB supervision handled by the LISCC Operating Committee (OC). The OC serves as the operational arm of the LISCC and ensures the consistency and quality in the supervision of firms in the portfolio. • Key coordination processes are the supervisory planning and prioritisation process (formally at least twice per year) and determining the vetting	**Key changes** • In 2010, the Federal Reserve established the LISCC framework and governance bodies in an attempt to incorporate multi-disciplinary perspectives into LISCC supervision, to incorporate more of a data-driven element to enhance LISCC supervision and facilitate more forward-looking analysis, and to ensure that firm-specific supervision was complemented with

	(a) Organisation and responsibilities	(b) Use/Role of onsite and third parties	(b) Internal coordination / Holistic view and Quality assurance	(d) Key changes, benefits and challenges
	Large Bank Supervision Department and FDIC's Complex Financial Institutions Group. • Dedicated team of supervisors for each G-SIB composed of generalists and risk specialists. More resources and more specialised skill sets for the supervision of G-SIBs. • Other groups provide input into supervisory planning and execution efforts and the preparation of examination and horizontal scope and conclusion documents. These include horizontal risk specialist teams, business line specialist teams and teams that are focused on G-SIBs' capital and performance. • In addition to firm-specific supervisory responsibilities, the onsite teams within the Large Institution Supervision Coordinating Committee (LISCC) framework are expected to ensure strong portfolio supervision as well as appropriately consider and include financial stability elements in ongoing supervision efforts. In case of disagreement within LISSC governance bodies, matter is elevated to the head of supervision at the Federal Reserve Board.		schedule throughout the year. This latter mechanism helps to ensure that ratings, OC-committed priorities/horizontal reviews and any other key supervisory work is vetted before conclusions and key messages to the supervised firms are finalised. • LISCC OC discuss with the teams the key developments and issues identified to prioritise the issues and develop supervisory strategies for addressing them. A risk secretariat reviews the risk assessments to ensure a consistent standard and identifies key supervisory themes across the portfolio. • The risk secretariat produces a semi-annual risk report which lists top risks in the portfolio, supervisory work underway and the status of follow-up items. The report is discussed with various governance bodies comprising the LISCC. **Quality assurance** • The vetting process used for the supervision of G-SIBs within the LISCC portfolio is the key quality assurance and internal control process in place to support judgement making. All letters for G-SIBs are subject to a governance group review to ensure that the messages are on point and reflective of what was discussed. • The OCC has an independent national Quality Assurance (QA) program; OCC's Large Bank unit has a QA program to provide an independent evaluation of documented compliance with policies and procedures, to promote consistent application of OCC supervision policies, to make recommendations for business process improvements, and to encourage dissemination of best practices.	macroprudential work. **Key benefits** • Incorporation of multidisciplinary perspectives in G-SIB supervision. • Greater use of data to enhance supervision of G-SIBs. • Greater consistency in supervisory ratings, messages and key communications going to the G-SIBs. **Challenges and gaps** • Coordinating the many components of the G-SIB framework. • Ensure that there is not overreliance on decision making based purely on data. Avoid reliance on any lens or component of the supervisory framework. • Update of IT systems to enhance exchange of information.

Annex F: Enhancements to supervisory methods and tools

Response to question 3.4: Using the table in Annex A as a guide, describe the key methods and tools that support your approach to SIB supervision. In particular, please outline: (a) the key changes to these tools and methods that have been made to support development of a forward-looking supervisory view and more effective challenge of G-SIBs' risk management practices and decision-making processes; (b) the key implementation challenges encountered; (c) any remaining gaps in tools or methods and any further changes that are planned; and (d) how important this method and tool has been for enhancing SIB supervision, using a scale from 1 (very important) to 5 (not very important).

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
Canada	**Key changes** • Specific references to Basel and IAIS core principles. • Assessment of liquidity for entire firm. • Increased integration of ERC and macroprudential matters. • Explicit articulation of board role in approval of overall risk appetite and oversight of compensation systems and practices. • Increased focus on business model analysis / strategic plans. • Advisory regarding. Changes to board and senior management with explicit expectation for meetings with new directors of D-SIBs. **Challenges and gaps** • RRP. • Risk appetite frameworks. • Risk culture. **Importance: 3**	**Key changes** • Pilot program testing. **Challenges and gaps** • Mapping the level of granularity and process specificity within given resources. • Improve coordination with other supervisory processes, such as strategic reviews. **Importance: 2**	**Key changes** • Macro stress testing annually since 2009. • Results provide additional input into views on overall capital management, planning and adequacy. **Challenges and gaps** • Updating for new regulatory expectations. • Exploring tail events far in the scenario horizon (3-5 yrs.). • Exploring management options in a stressed scenario. **Importance: 2**	**Key changes** • No key changes. • Risk-based approach. • Material and complex models subject to deeper and more intense assessments. **Importance: 2**	**Key changes** • In supervisory framework since 1999. • No key changes – continue to provide Range of Practices. **Importance: 2**	**Key changes** • Information for SIB recovery plans used in assessments of liquidity and capital adequacy and for overall knowledge of the firm. • Explicit identification of a "recoverability" rating on the Risk Matrix for D-SIBs. **Challenges and gaps** • Extracting relevant information due to large volumes contained in plans. • Developing Framework/Criteria for "recoverability" rating. **Importance: 3**	**Key changes** • During crisis, an Emerging Risk Committee was established and continues to meet. **Challenges and gaps** • Ongoing ability to link where necessary ERC issues to ongoing/planned supervisory work. **Importance: 2**	**Key changes** • More frequent scrutiny of new non-Pillar 1 models. • Capital impact by risk type and asset class. • Consolidation and enhancement of the minimum supervisory expectations re: governance and controls. **Importance: 2-3**	**Key changes** • Additional data collection and analysis, esp. complex products. • A number of reporting changes to better track capital and liquidity and forward looking credit in some products. **Challenges and gaps** • Data aggregation legacy systems. • Trends due to new products; international operations. **Importance: 1**	

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China	**Key changes** • Revised rating system (CAMELs) with information technology added. • CARPALs risk indicator system since 2010. **Challenges and gaps** • Improvement of sound supervisory judgement. **Importance: 1**	**Key changes** • Supervisory requirement on bank's internal procedure of product development. • Close attention to arising risks. • In 2013, new registration system for wealth management product. **Challenges and gaps** • Regulatory arbitrage by imprudent innovation. • Continually monitoring the changes in business models. **Importance: 2**	**Key changes** • New rules on stress testing introduced. • Both bottom-up and top-down stress testing conducted. **Challenges and gaps** • More expertise needed. **Importance: 2**	**Key changes** • Models validation and review mechanism is established. • Continuous monitoring the performance of models. **Challenges and gaps** • Reliability of models needs further improvement. • More expertise needed. **Importance: 2**	**Key changes** • Peer group analysis supported by IT system. **Challenges and gaps** • Analysing the depth and results of applications should be enhanced. **Importance: 3**	**Key changes** • Working intensively to develop market-oriented exit mechanism. **Challenges and gaps** • Program made in drafting rules on bank resolution. • COAG has not been finalised. **Importance: 3**	**Key changes** • Early warning system has been developed and updated annually. • Improvement coordination with other regulatory authorities on cross-sector business and risks. **Challenges and gaps** • Identification of emerging risk from the systemic views. **Importance: 2**	**Key changes** • Assessment covers data quality, IT systems, policies, corporate governance, models methodology, and daily management on all the IRB banks. **Challenges and gaps** • More expertise needed. **Importance: 3**	**Key changes** • In 2011 released standards on sound data quality. • Onsite examination on risk data quality. **Challenges and gaps** • Availability of more granular data. • Collection of data on new products. **Importance: 1**	
France	**Key changes** • Onsite visits. • Intensified use of high-level periodic meetings. • New risk-monitoring tools and methods. **Challenges and gaps** • SSM-new harmonised RAS. **Importance: 1**	**Key changes** • Intensified recovery and resolution plan dialogue. **Challenges and gaps** • SSM establishing a new methodology to deepen and harmonise BMA. **Importance: 2**	**Key changes** • Dedicated division launched in 2011. **Importance: 2**	**Key changes** • Reinforcement of an existing division after 2008. **Importance: 2**	**Key changes** • Better use of thematic and transversal studies. • Research. • Macro-analysis. • SSM will provide real cross-border analysis. **Importance: 3**	**Key changes** • Intensified dialogue. **Challenges and gaps** • SRM in place in 2015. **Importance: 2**	**Key changes** • Experimentation and implementation of new close-up risk monitoring tools. **Challenges and gaps** • Data gaps initiative. • New data base launched by SSM. **Importance: 3**	**Importance: 3**	**Key changes** • Experimentation and implementation of new close-up risk monitoring tools. **Challenges and gaps** • Data gaps initiative. • New data base launched by SSM. **Importance: 3**	
Germany	**Key changes** • Minimum Requirements on Risk Management. • Implementation of EBA GL 39 (Joint Assessment and decision re: capital adequacy of cross-border groups).	**Key changes** • Strengthening of analysis under SREP. • On-going improvements to guidance (project team).	**Key changes** • Basel interest rate shocks. • Macroeconomic portfolio tests have improved. • Stress scenarios; dependence modelling; integration of income stress.	**Key changes** • Market risk, especially Basel 2.5. • IRB parameters: benchmarking of PD; comparative study of LGD. • More forward-looking IRB.	**Key changes** • More frequently used. • 100+ ad hoc surveys since 2008. • Non-standard, frequent reporting requirements.	**Key changes** • Identification of potentially systemically important institutions.	**Key changes** • Bundesbank established a financial stability dept. • "Risk list" developed by BaFin and Bundesbank. • Financial Stability Committee (2013): Ministry of Finance-Bundesbank-BaFin.	**Key changes** • Stronger focus, particularly for onsite exam teams. • Amendments to Minimum Requirements for Risk Management were necessary.	**Key changes** • New reporting requirements for non-IFRS reporters in parallel with IFRS on consolidated basis. • Enhancements of harmonised measures.	

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
	Challenges and gaps • Risk level and risk management scores reflecting college discussions. • Alignment of risk categories to GL39.	**Challenges and gaps** • Complexity requires many levels of analysis. • Take into account international and European fora. • Final guidance pending in parts: need to maintain flexibility.	**Challenges and gaps** • Heavy workload. • Dynamic frameworks. • Macro term structure models. • Liquidity stress. • Simultaneous stress for different risks. • Macro and contagion. • Stressing securitisation.	**Challenges and gaps** • Data availability. • Data quality. • Interpretative issues.	**Challenges and gaps** • Definition of most meaningful dataset. • Sample of banks. • Weighing costs and benefits.	**Challenges and gaps** • Development of identification method: indicators for scoring model; calibration of the model. • Assessment of the plan with limited resources. • Complex institutions. • Amendments and elaboration.	**Challenges and gaps** • Due to SSM, organisational changes could be necessary.	**Challenges and gaps** • Complex models require additional resources.	**Challenges and gaps** • Planned profit and loss. • Additional information on specified derivatives, asset quality, value adjustments.	
	Importance: 2	**Importance: 1**	**Importance: 2**	**Importance: 2**	**Importance: 2**	**Importance: 1**	**Importance: 2**	**Importance: 2**	**Importance: 2**	
India	**Key changes** • Adopted a risk-based approach with continuous risk assessment of banks using dedicated teams.	**Key changes** • BMA is part of the risk score.	**Key changes** • Stress testing was mandated in 2014. • Banks' stress testing capabilities and results are assessed in the Risk Governance and Capital components of the IRISc model.	**Key changes** • Control environment around development and validation of models is part of risk assessment.	**Key changes** • Planned for, but a framework not yet finalised.	**Key changes** • May 2014 out for public consultation.	**Key changes** • Entire approach changed to be risk based and forward looking for identification of emerging risks. • Analytical Division is tasked with identification of stress areas.	**Key changes** • Set to take off in a couple of years as banks are expected to stabilise the use of models.	**Key changes** • Information from banks feeds risk templates through different platforms.	
	Challenges and gaps • Not all supervisory activities assimilated into electronic workflow environment. • Banks face difficulty in collating data requirements.	**Challenges and gaps** • Requires enhanced MIS on part of bank as well of supervisor.	**Challenges and gaps** • Banks are at different stages of maturity. • Resources and expertise. • Working with World Bank to develop training modules.	**Challenges and gaps** • Requisite skills to review the quantitative validation process. • Hiring and training specialists.	**Challenges and gaps** • Identification of suitable themes through a robust analytical framework. • Need to finalise the framework.	**Challenges and gaps** • A work-in-progress.	**Challenges and gaps** • Skilled manpower and availability of information. • Developing an early warning framework.	**Challenges and gaps** • Requisite skills to review models. • Hiring specialists and imparting necessary training to the supervisory teams.	**Challenges and gaps** • Enabling disparate platforms used for data collection and storage to communicate to each other. • Integration is underway and implemented in phases.	
	Importance: 1	**Importance: 2**	**Importance: 3**	**Importance: 4**	**Importance: 3**	**Importance: 5**	**Importance: 2**	**Importance: 4**	**Importance: 1**	
Italy	**Key changes** • Models for analysis completely redefined in 2007 and subject to annual revision. • Include a wider range of risk. • Risk assessments integrated.	**Key changes** • Several changes made recently, including attention to profitability.	**Key changes** • Developed ancillary model that is managed by macro-prudential analysis division. • Outcome included in SREP analysis for Pillar II capital.	**Key changes** • Monitoring enhanced. • Since 2014, based on common technical standards of EBA. • Wide use of quantitative information and in-house tools for backtesting/ benchmarking.	**Key changes** • Over the last few years, numerous thematic inspections.	**Key changes** • Basic resolution strategy drafted. • CMG established.	**Key changes** • Establishment of an ad hoc division "Macro-prudential Analysis. • Carries out macroeconomic analysis for early identification of emerging risk.	**Key changes** • Developed ad hoc methodologies and Risk metrics about geo-sectoral concentration/single name and liquidity risk. • Whole balance sheet, including strict monitoring of market risk in banking book.	**Key changes** • Statistical information is a crucial instrument for risk analysis. • Credit risk data available allow for thorough review up to single entity-counterparty level. • Managerial data requests integrate the supervisory data repository.	

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	Challenges and gaps • Liquidity risk, due to massive amount of high frequency data. **Importance: 1**	**Challenges and gaps** • Along-term business model sustainability analysis. **Importance: 1**	**Challenges and gaps** • Aligning with SSM. **Importance: 1**	**Challenges and gaps** • Lack of comparability of monitoring process. • Lack of common standards for model performance across time. **Importance: 1**	**Challenges and gaps** • Peer definition. • Acquisition of data from host. • Common definitional standards. **Importance: 1**	**Challenges and gaps** • Hurdles in aligning Group and Local views. • BRRD implementation. **Importance: 1**	**Challenges and gaps** • Macro-prudential risk factors identification. **Importance: 1**	**Challenges and gaps** • Reliability of managerial data on liquidity risk. • Lack of robustness. • Data quality. **Importance: 2**	**Challenges and gaps** • Trade-off between continuous and ad hoc requests (quality vs. speed). **Importance: 1**	
Japan	**Key changes** • Responding appropriately to changes in economic and financial situations. • Addressing appropriately issues common to SIBs. • Encouraging SIBs to aim at best practices. **Challenges and gaps** • More emphasis on off-site monitoring. • More dialogue with external directors, company auditors, and internal audit. **Importance: 1**	**Key changes** • Conducting fact finding work, analysis, problem identification and studying improvement measures. **Challenges and gaps** • Fact-finding on institutions and systems on a real-time basis. • Analysing management documents and conducting interviews in divisions. **Importance: 1**	**Key changes** • Stress tests based on common scenarios. **Challenges and gaps** • Still room for improvement. **Importance: 1**	**Key changes** • Developed several risk calculation models by replicating SIBs' models. • Providing a verification of limitations and weaknesses. **Challenges and gaps** • Strengthen and maintain quality of staff. **Importance: 2**	**Key changes** • In use since 2013. • Identification of best practices among SIBs and assessments of how each SIB differs from them. **Challenges and gaps** • Fact-finding on institutions and systems on a real-time basis. • Analysing management documents and conducting interviews in divisions. **Importance: 1**	**Key changes** • Recovery and resolution plans have been adopted. • Revised RRPs are formulated annually. • RRPs are reviewed in CMGs. **Challenges and gaps** • Recovery plans: responding to issues identified with host supervisors at CMGs. • Resolution plans: evaluating the feasibility and reliability with host supervisors through Resolvability Assessment Process. **Importance: 1**	**Key changes** • Enhanced timely fact-finding monitoring about SIBs and financial systems to address potential risks. **Challenges and gaps** • Increasing our knowledge of global best practices that constantly change with time. **Importance: 1**	**Key changes** • Changing parameters of risk calculation models helps to conduct simulations and analyse portfolios from various angles. **Challenges and gaps** • Strengthen and maintain quality of staff. **Importance: 2**	**Key changes** • Strengthened the information collecting ability and risk sensitivity of the Financial Services Agency through establishment and expansion of related sections. **Challenges and gaps** • Still rooms for improvement to identify risks for SIBs. **Importance: 1**	
Netherlands	**Key changes** • Introduction of a revised risk assessment methodology. **Challenges and gaps** • Changes in organisation and culture. • Need to strengthen the macro-micro link. **Importance: 1**	**Key changes** • Recognised as specific element in the new Supervisory Strategy. **Challenges and gaps** • Standards need to be developed. **Importance: 1**	**Key changes** • Yearly exercise by EBA. **Challenges and gaps** • Market credibility could be enhanced. • SSM tests will be full-fledged, in-depth and comprehensive. **Importance: 1**	**Key changes** • Part of existing and on-going supervisory activities. **Importance: 2**	**Key changes** • More resources devoted. • Separate division created. • Targeted asset quality review for commercial real estate. **Challenges and gaps** • With SSM, onsite supervision will be focus. **Importance: 2**	**Key changes** • Recovery and resolution plans have been adopted. **Challenges and gaps** • Develop ex-ante resolvability. • Clarity on legal basis. • Organisational changes called for. **Importance: 1**	**Key changes** • On-going, but not specific to SIBs. **Importance: 2**	**Key changes** • On-going, but not specific to SIBs. **Importance: 2**	**Key changes** • Data management has been strengthened. • More legal possibilities to collect and share data from a macro-prudential perspective. **Challenges and gaps** • Changes due to SSM. **Importance: 2**	**Key changes** • Fit and proper tests for board members. **Challenges and gaps** • Institutional acceptance. • Will be broadened. **Importance: 2**

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
Singapore	**Key changes** • Enhanced peer comparison of banks at Panel meetings where risk assessments are discussed. • Refined risk assessment methodology to provide better guidance to supervisors. **Challenges and gaps** • Introduce IT systems and Business Intelligence capabilities to enhance risk, assessment, benchmarking and peer comparison processes. **Importance: 1**	**Key changes** • Greater focus on bank's business strategy, model, revenue, profitability drivers in risk assessment. **Challenges and gaps** • Continually exploring further enhancements to the current supervisory process in terms of business model analysis. **Importance: 2**	**Key changes** • Group-wide stress test involving non-bank financial subsidiaries, top-down stress test (to complement bottom-up), domestic and cross-border interbank contagion stress tests (based on interbank network analysis) and reverse stress test. • Inclusion of a larger number of banks (including non-SIBs) in the stress tests. **Challenges and gaps** • Availability of certain data, especially for foreign bank branches. • Designing meaningful stress scenarios in line with the economic environment. • Ways to meaningfully aggregate risks where there are inherent differences in the time taken by different risks to materialise e.g. credit risk (longer) versus market risk (shorter). • To further enhance macro stress tests by taking into account feedback loops and linkages within the banking sector, between banks and other types of financial institutions, between banks and financial markets, between the financial sector and the broader economy, as well as between Singapore and the rest of the world. **Importance: 2**	**Key changes** • More frequent thematic reviews and benchmarking of banks' models. • Comparison of model risk drivers across SIBs. • The threshold for SIBs to report significant changes to Internal Rating Based ("IRB") models has been reduced, and scope became more encompassing especially on non-model areas such as credit IT system changes, etc. **Challenges and gaps** • Benchmarking comparisons can be challenging as SIBs often have widely varying practices. More analysis is required to identify risk-based versus practice-based differences. • Resource constraints to conduct more thematic benchmarking. **Importance: 1**	**Key changes** • Greater use of horizontal reviews for SIBs to focus on specific areas of interests. **Challenges and gaps** • Resource planning and availability of right expertise to perform horizontal reviews. • Maintaining consistency across reviews performed on each bank. **Importance: 2**	**Key changes** • Legislative changes to expand resolution powers. • SIBs required to establish a recovery planning process, submit recovery plans, and information relating to resolution planning. • Established a multilateral sharing arrangement amongst the Executives Meeting of East Asia Pacific Central Banks' Working Group on Banking Supervision ("EMEAP-WGBS") members on resolution planning. **Challenges and gaps** • A resource-intensive and iterative process. • Work is in progress to implement FSB's Key Attributes, in particular, implementing statutory powers for bail-in and stays on termination rights, taking into account the local context. **Importance: 2**	**Key changes** • Enhanced indicators under the Monitoring and Intervention Framework, and formalised triggers and corresponding corrective actions to provide clearer guidance to supervisors. **Challenges and gaps** • N.A. **Importance: 1**	**Key changes** • More frequent thematic reviews and benchmarking of banks' models. • Comparison of model risk drivers across SIBs. **Challenges and gaps** • Benchmarking comparisons can be challenging as SIBs often have widely varying practices. More analysis is required to identify risk-based versus practice-based differences. • Resource constraints to conduct more thematic benchmarking. **Importance: 1**	**Key changes** • Enhanced data collection on areas such as credit concentration risks, credit portfolio analysis, industry exposures, model rating downgrades and housing loans. **Challenges and gaps** • Increased reporting burden on industry. • Greater need for internal coordination of data requests from different departments. **Importance: 2**	

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
South Africa	**Key changes** • Monthly and semi-annual risk reports in support of risk-based approach. • Guidelines improved risk ratings by identifying inconsistencies. • Eliminated unnecessary detail. **Challenges and gaps** • Continuous refinement. **Importance: 1**	**Key changes** • More focus on the business strategies of banks. • Aligned to risk appetite and capital planning. • More detailed focus on ICAAP process. **Importance: 1**	**Key changes** • Guidelines issued in 2008. • Forward-looking covering 3 to 5 years. • Common scenario stress test; factors provided to bank by supervisor. **Challenges and gaps** • Complexity. • Differs from bank to bank. • In-house training. **Importance: 2**	**Key changes** • Standard template of minimum requirements. • Material changes must be reviewed before implementation. • Model technical forum. **Challenges and gaps** • Attest template by external auditors. • Resource constraint. • Guidance and streamlining. **Importance: 1**	**Key changes** • Op risk (2010-2013). • Credit risk (2014). • Economic capital models; confidence intervals; overall capital planning and management. **Challenges and gaps** • Resource and capacity constraints. • Narrowing the scope if appropriate. **Importance: 2**	**Key changes** • Required from 2012 for all D-SIBs. • Guidance notes issued. • Workshops held with banks and supervisory staff. **Challenges and gaps** • Developing a policy document that will follow final Resolution Bill. • Needs regulation. • Buy-in initially limited. **Importance: 5**	**Key changes** • Banks required to assess themselves against top-ten op risks. • Analysis of international trends. • Bi-annual review of local losses. • Dialogue with boards. **Challenges and gaps** • More frequent data collection. • Op risk needs more in-depth analysis. **Importance: 3**	**Key changes** • More detailed review via ICAAP. • Onsite visits. • Additional resources. **Challenges and gaps** • Relevant expertise. • Guidance needed. **Importance: 2**	**Key changes** • Enhancements made for Basel II and III. • BCBS semi-annual QIS. • Collecting economic data and regulatory capital forecasts. **Challenges and gaps** • Bank understanding. • Inconsistency in interpretation. • Supervisory resources. **Importance: 1**	**Key changes** • Focus on operational risk. • Assessments against Basel papers. • Long-form AMA introduced in 2014. **Challenges and gaps** • Continuous monitoring. • Implementing long-form AMA. **Importance: 2**
Spain	**Key changes** • Risk assessment modified in 2011 to introduce a more forward-looking approach, risk mapping, refinements to methodology and establish assessment criteria. **Importance: 1**	**Key changes** • Benchmark analysis. • Systematisation of reports. • SWOT analysis. • Analysis of results sustainability. • Visits to subsidiaries abroad. • Quarterly conference calls with main subsidiaries' management to deal with financial and risk performance. **Challenges and gaps** • Definition of the peer group. • Collection of data. • Acquiring local market knowledge. • Establishing a periodic report. • Constant evolution of the reports to deal with new demands for information. **Importance: 1**	**Key changes** • Internal tool developed to regularly assess solvency positions under different macroeconomic scenarios. **Challenges and gaps** • Data collection. • Learning by experience. • Evolution towards improvement. **Importance: 2**	**Key changes** • Unchanged since approval in 2008. • Supervisory focus, however, is toward effectiveness of internal controls. **Challenges and gaps** • Specific skill set requires expensive training. • Difficult to recruit. • Rebalancing supervisory resources after the impact of the start-up of SSM. **Importance: 3**		**Key changes** • Focus is on assessing the general coherence and rationale of the plan, assumptions and feasibility of actions proposed. **Challenges and gaps** • Information sharing. • Enhancement of cooperation among international supervisors. • Even implementation of the FSB framework. **Importance: 2**	**Key changes** • On-going surveillance allows for identification of emerging risks. • Constant interaction with the banks promotes early and prompt answer. • Cooperation with other supervisors is helpful. **Importance: 1**	**Key changes** • Carried out in context of review of ICAAP of a firm. **Importance: 2**	**Key changes** • Significant increase in both quantitative and qualitative information. • Standardised and periodic. • Data integrity validation. • Risk Data Aggregation projects. **Challenges and gaps** • Data integrity, quality of historical info and aggregation. • RDA principles implementation. • Constant evolution of the reports to deal with new demands for information. **Importance: 1**	

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
Sweden	**Key changes** • Risk assessment process aims to produce a risk "portfolio" for each supervision division and ultimately a joint risk portfolio for FI. • Aim is to create a tool for prioritisation, not an exact risk score. • The other risk assessment is at the individual institution level (SREP). **Challenges and gaps** • Continue to increase the stringency in factoring SREP outputs to the supervisory planning process **Importance: 2**	**Key changes** • An increasingly applied concept, which is part of SREP. **Challenges and gaps** • BMA needs further improvement • Was applied on a fairly high level • Going forward, will aim to increase the granularity to explore profitability in more detail, enabling deeper discussions on strategies • Requires enhanced tools for quantitative data analysis **Importance: 1**	**Key changes** • Standardised and relatively simple "one-size-fits-all" approach. • Focus is on the portfolio level exposures. • Results made public at individual SIB-level. • Stress tests are used as a control factor—comparing outcomes with ICAAP outcome. • Main tool for supporting dialogue with banks and moral suasion to increase capital. **Importance: 1**	**Key changes** • Separate unit for model validation and review. • Target frequency is annual review of each SIB's IRB model. • Gradual improvements in working methods and increased experience and understanding results in a more integrated approach where risk weight considerations influence a broader spectra of supervisory actions and decisions—including systemic risk. **Challenges and gaps** • Retaining risk model supervisors. • Going forward—increase the extent of assessments of predictive powers. **Importance: 2**	**Key changes** • Thematic reviews are called for because the four large banks are similar in business models and features. • Reviews are efficient supervisory tools. • Most frequent reviews: residential mortgages, AML, market risk and AQR. **Challenges and gaps** • There is no fixed proportion of thematic reviews. **Importance: 3**	**Key changes** • Commenced in 2013. • RRP has benefitted from colleges and expertise of EBA. • Division of responsibilities for resolution between FI and the Swedish National Debt Office. • Exact allocation of responsibilities to be determined when BRRD is implemented. **Challenges and gaps** • Further work will likely indicate areas with supervisory priorities and expectations may need to change. **Importance: 1**	**Key changes** • Supervision more focused on emerging risks. • FI introduced quarterly risk review meetings to receive risk information not captured by regular reporting—prior information requests from risk specialist units. • Most effective tool is supervisory dialogue and moral suasion. **Importance: 1**	**Key changes** • 2013: Revised risk weights for residential mortgages to compensate for modelling shortcomings. • 2014: further increased due to systemic risk and associated household indebtedness. **Challenges and gaps** • Deciding on an approach that does not discriminate individual firms. • Communication strategy. **Importance: 1**	**Key changes** • FI analyses the SIBs' key performance metrics and ratios on a quarterly basis. • Data used for analysis consist of regulatory returns (COREP and from end-2014 also FINREP) and public financial data. **Importance: 2**	
Switzerland	**Key changes** • Harmonisation of approach. • More formal governance. **Challenges and gaps** • Overhaul of CAMELs system planned for 2015. **Importance: 2**	**Key changes** • More intense supervision by reviews allows for efficient challenge of business models. **Challenges and gaps** • With 2 G-SIBs, domestic benchmarking is limited. • Rely on external research as well. **Importance: 2**	**Key changes** • Regular stress testing introduced. • Provides a tool to effectively challenge banks' own risk estimates and capital planning. **Challenges and gaps** • Integration into banks' processes. • On-going improvement. • Stressing leverage ratio. **Importance: 1**	**Key changes** • Changes triggered by both crisis and regulatory reform. • Resources increased. **Challenges and gaps** • Resources. • Skills build-up. **Importance: 2**	**Key changes** • Increased use: both horizontal and thematic. **Challenges and gaps** • Issue tracking. • Ensuring issues are closed in permanent and effective manner. **Importance: 1**	**Key changes** • Introduction since the crisis. • Development of concept; roll-out. **Challenges and gaps** • Resistance of bank to plan its own failure. • Implementation for D-SIBs. **Importance: 1**	**Key changes** • Roll-out of Risk Barometer. • Formalisation of process. • Expectations that identification translates into supervisory actions. **Challenges and gaps** • Link between macro-economic scenarios and concrete portfolio loss potential (transmission). **Importance: 2**	**Key changes** • Pillar 2 supervision of models introduced. • Challenge of RWAs and capital requirements. **Challenges and gaps** • Banks' strategic IT solutions. • Coverage is in process of improvement. **Importance: 2**	**Key changes** • Increased general and specific business and risk data collection and analysis. • Increased use of specific templates for comparability. **Challenges and gaps** • Data collection and data comparability. • What data is really needed. • Interpretation. **Importance: 2**	

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
United Kingdom	**Key changes** • PRA's Risk Framework overlaid with "continuous assessment" replaced FSA's ARROW. • PRA: Approach to Banking Supervision (2014). • FCA: New supervision approach replacing Arrow. **Challenges and gaps** • Training large numbers of staff. • Building IT. • Prioritisation of workload moving to forward-looking approach. • Ensuring understanding of new system. • Measuring performance. **Importance: 1**	**Key changes** • Now an important part of supervisory approach. • Examines the threats to a firm's viability and ways a firm can create externalities. • Includes an assessment of where and how a firm makes money, the risk it takes, and how it funds itself. **Challenges and gaps** • Developing a robust framework/set of principles. • Tailoring the framework. • Training. **Importance: 1**	**Key changes** • Annual and concurrent stress testing. • Several additional layers added to the EBA stress test. • Uses a dynamic balance sheet definition. • Uses a suite of models. • Results will be published. **Challenges and gaps** • Channels and processes for synthesising macro and micro views in formative stage. • Lessons learned. **Importance: 1**	**Key changes** • Resources significantly increased in number and technical expertise. • Models must be approved before use. • Withdrawal if model is not meaningfully measuring risk. **Challenges and gaps** • Generally sceptical of models. • Number of models in use by a firm can be large, requiring significant, highly skilled resources. **Importance: 2**	**Key changes** • Reviews have become more focused, detailed and in-depth. • Supports business model analysis, asset quality and risk management competence. • Peer comparisons based on insights from technical reviews. • Greater focus at the FCA on supervision of markets as opposed to just firms. **Challenges and gaps** • Recruiting appropriately trained risk professionals. • Accessing external data. **Importance: 2**	**Key changes** • Many significant changes. • Recovery plan and resolvability assessments now embedded in PRA's Continuous Assessment. **Challenges and gaps** • Standards still evolving. • Resource intensive. • May need to refine requirements for BRRD. • Implications of Bank Structural Reform. • International cooperation. **Importance: 1**	**Key changes** • PRA's assessment includes consideration of system-wide risks. • Sectoral analysis to understand key market developments. • PRA draws on many parts of BOE. • Development of FCA common view of risks for markets and sectors. **Challenges and gaps** • Focus on main risks rather than long list. • Monitoring and assessing evolving risks. • Developing a proportionate response. • Need to streamline processes. **Importance: 1**	**Key changes** • Since the crisis, level of resources has increased both in number and technical expertise. • Incorporating liquidity regime reform. **Challenges and gaps** • Developing consistency across business models. • Difficulty in firms to estimate liquidity impacts to stresses they had not been exposed to. **Importance: 1**	**Key changes** • Changed significantly to address gaps identified during the crisis. • Efficiencies achieved through speed of data translation, validation and reconciliation. **Challenges and gaps** • Data quality issues. • Designing effective business intelligence (BI) systems. • Training on new data sets. • Achieving analytical excellence. **Importance: 2**	

	(a) Risk assessment system	(b) Business model analysis	(c) Stress testing	(d) Model validation and review	(e) Horizontal or thematic reviews	(f) Recovery and resolution planning	(g) Identification and response to emerging risks	(h) Assessment of quantitative models outside of Pillar 1	(i) Supervisory data collection and analysis	(j) Other
United States	**Key changes** • FRB: Guidance published in 2012 sets forth the consolidated supervisory framework for large financial institutions. • OCC: guidance sets forth a newly revised risk assessment system. **Challenges and gaps** • Integrating specialty resources into the supervisory process. • Releasing more detailed guidance (e.g., capital planning and position). **Importance: 1**	**Key changes** • Establishment of supervisory program focused on monitoring and analysing business models, performance and strategy. **Challenges and gaps** • Linking business model analysis to supervisory priorities and perspectives. • Developing supervisory work on the management of business lines. **Importance: 2**	**Key changes** • The initial SCAP exercise (2009) has evolved into annual comprehensive capital adequacy and planning review (CCAR). • Annual liquidity risk stress test (CLAR). • Stress testing is now a key tool for FRB supervision. **Challenges and gaps** • Maximizing the complementarity between stress testing and on-going supervision. • Requires dedicated year-round staff. **Importance: 1**	**Key changes** • Interagency guidance on Model Risk Management issued in 2011. **Challenges and gaps** • Resources. • Balancing rigorous review with broader perspective. **Importance: 3**	**Key changes** • Strong emphasis. • More centralised governance of key horizontals. • Intense focus on capital, capital planning and liquidity. **Challenges and gaps** • Ensuring consistency efficiently. • Integrating horizontals more seamlessly with on-going specific work. **Importance: 2**	**Key changes** • Title I resolution plans required by DFA. • Recovery plans also submitted. **Challenges and gaps** • Managing and analysing the volume and complexity of information to provide actionable feedback to firms. • Supervisory guidance. • Establishing a supervisory program to complement RRP reviews (Q4 '14 start). **Importance: 2**	**Key changes** • Multi-disciplinary approach through the creation of the LISCC group with a number of groups providing different perspectives. **Challenges and gaps** • Sifting signals from noise. **Importance: 2**	**Key changes** • Accomplished through stress testing exercises. **Importance: 2**	**Key changes** • Host of new regulatory reporting requirements, most notably relating to capital stress testing and liquidity. • Enhanced reporting of country exposures. **Challenges and gaps** • Ensuring high data quality and consistency. • Ensuring new reports are completed accurately. **Importance: 2**	

Annex G: Changes in supervisory practices in certain key areas

Response to question 3.5: Using the table in Annex B as a guide, describe how your supervisory practices in certain key areas have changed since the crisis in order to more effectively challenge G-SIBs' risk management practices and decision making processes. In particular, please outline (a) the key changes to these practices that have been made to support development of a forward-looking supervisory view and more effective challenge of G-SIBs' risk management practices and decision-making processes; (b) the key implementation challenges encountered; (c) any remaining gaps in practices and any further changes that are planned; and (d) how important this supervisor practice has been for enhancing SIB supervision, using a scale from 1 (very important) to 5 (not very important).

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
Canada	**Key changes** • Established a dedicated Corporate Governance Division in January 2010 whose mandate includes Corporate and Risk Governance (including Risk Appetite Frameworks), Strategic Governance, and Risk Culture. • Systematically reviews and assesses corporate governance practices. • Updated Corporate Governance Guidelines in January 2013 and articulated expectations, including those with respect to Risk Appetite Frameworks, separation of board chair and CEO, etc.	**Key changes** • Supervisory framework in place since 1999. • Supervisors look to the board and senior management to be proactive in providing timely notification of important issues. • Revised Corporate Governance Guidelines (2013) articulated expectations of board and their respective roles respecting engagement with senior management and the regulator. • Advisory – Changes to the Membership of Board and Senior Management articulates expectations with respect to new D-SIB board members and introductory meetings with OSFI.	**Key changes** • Ability to assess board effectiveness and link results of supervisory work has improved since the crisis in part due to increased interactions with boards/chairs of D-SIBs. • Increased focus on board/committees and the ability to gain insights through direct interactions and discussions.	**Key changes** • Corporate governance division has been systematically undertaking risk governance work including risk appetite frameworks (since 2010). • Current review of Supervisory Framework in assessing how to explicitly incorporate risk appetite into sustainable supervisory processes. • 2014: work on culture and behaviour at a D-SIB. • 2014: horizontal review - assessment of internal audit functions across D-SIBs against increased expectations (IIA, BCBS) including opining on risk management and governance systems and processes. May impact OSFI's Assessment Criteria once completed.	**Key changes** • Increased intensity and focus by conducting cross-system reviews in 2008, 2009, 2010-2011 and 2014 comparing stress testing and ICAAP. • On-going/quarterly monitoring. • Integration of identification of emerging risks. • Economic capital. • Greater transparency.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Areas of review post-crisis required the development of new supervisory approaches and building internal resources and expertise. **Importance: 1**	**Importance: 2**	**Challenges and gaps** • Ability to have timely discussions with Directors (for example immediately following board/committee meetings). **Importance: 1**	**Challenges and gaps** • Developing and articulating expectations externally that reflect work internally. • How risk appetite is operationalised and how it impacts the risk profile/assessment of the D-SIB. • Developing a framework that aligns with FSB expectations on risk culture. • Integrating risk culture assessments into the overall risk profile. • Ensuring a balanced focus, including with respect to expectations of the lines of business as the first line of defence/risk takers. **Importance: 2**	**Challenges and gaps** • Integrating risk appetite, economic capital and stress testing into capital planning and management. • Validation and effective challenge. • Internal audit methodologies require development. • Easy and quick access to bank data. **Importance: 2**
China	**Key changes** • CBRC updated "Guidelines on Corporate Governance of Commercial Banks"**.**	**Key changes** • Board members are required to participate in the regular supervisory meetings. • Board chairmen are required to attend the high-level meeting with the CBRC chairman. • Meeting with individual independent directors. • Participate in board meetings as an observer.	**Key changes** • CBRC developed rules on fit & proper tests for board members. • CBRC developed guidance on evaluation of directors' performance of commercial banks. • CBRC requires banks to submit performance evaluation reports of the board members. • CBRC also conducts onsite examinations of the performance of the board.	**Key changes** • Supervisory requirements for risk appetite. • Urging banks to strengthen risk culture.	**Key changes** • Issuance of ICAAP requirements. • IRB banks required to improve ICAAP.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Fit & proper tests and performance evaluation for board members to be strengthened. **Importance: 1**	**Importance: 2**	**Importance: 3**	**Challenges and gaps** • Development of sound risk culture takes time. • Evaluation of risk culture to be improved. **Importance: 2**	**Challenges and gaps** • Application of ICAAP in day-to-day supervisory practice to be improved. **Importance: 2**
France	**Key changes** • In 2009 and 2010 several rules were issued to strengthen risk management function and compensation practices. • ACPR has capacity to order change of compensation policy at banks in order to align it with risk and sustainable growth. **Challenges and gaps** • SSM changes. **Importance: 2**	**Key changes** • Large banks (> 10 ban Euro to have a compensation committee. • 2009: reinforcement of the role of the risk committee. **Challenges and gaps** • Effectiveness of the documentation submitted to board of directors and the various board subcommittees. **Importance: 1**	**Key changes** • 2014: new rules regarding the separation of executive and non-executive functions and individual and collective capacity of board members. **Challenges and gaps** • Strong opposition by the industry. • One of the main remaining challenges is to find the best way to adequately and efficiently assess board members fitness and individual involvement as well as collective board functioning. **Importance: 2**	**Key changes** • Effectiveness of risk appetite defined by SIB board and the respect by business lines and risk management function. • Onsite analysis of the usefulness and consistency of risk dashboards sent by risk management function to senior management and board. **Challenges and gaps** • Assessment of consistency between top/down approach and the risk appetite translation in each business line. **Importance: 1**	**Key changes** **Challenges and gaps** • Risk of black box. **Importance: 3**

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
Germany	**Key changes** • BaFin and Bundesbank have articulated requirements regarding responsibility and accountability of board members. • The overall requirement aims at tackling evolving governance problems at different and also early stages.	**Key changes** • Management board: meetings and calls and other exchange of views take place regularly and on ad hoc basis. • Minutes of board meetings are checked on a regular basis. • Supervisory board: most meetings are attended by supervisory staff. • Information exchange is guaranteed via meetings, ad hoc calls and formal letters.	**Key changes** • More intense supervision of the board. • Board members have implemented special focused committee in key areas. • All senior managers who are potential candidates for the management board are assessed even if not required by law; dissatisfaction is communicated to the SIB. • SIBs are asked to have proactive succession planning for management board positions.	**Key changes** • Requirement of a consistent strategic planning process; more structured approach to setting, implementing, reviewing and amending strategic objectives. • Risk appetite must be defined in the strategy. • Banks are required to implement an appropriate limit system as well as early warning indicators for single and bank-wide risks. • Before the crisis, key aspects of culture were required. • Since then, a number of changes have been made: greater emphasis on inter-risk nature of concentrations (overcome “silo” problem in risk management); more detailed requirements for a risk control function; requirement to implement a compliance function; strengthening the interplay between management and the board; requirement to have an appropriate compensation system and whistle-blowing process.	**Key changes** • Amendments made in light of the crisis on concentration risk, stress testing, reverse stress testing, diversification effects, and capital planning. • More generally, stronger focus is on the group perspective. • 2011: “Supervisory assessment of bank internal capital adequacy concepts”. • Not “if” by “how” to do it and “how” conservative it should be.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • First line of defence needs improvement at the G-SIBs; the three lines are not always guaranteed. • Pressure by senior management is still required to motivate employees to follow the three lines of defence. • Three lines should be part of risk culture. • Personal responsibility should be mirrored in compensation practices. **Importance: 1**	**Challenges and gaps** • Management board: often unclear responsibilities; lack of accountability. • Supervisory board: the lack of critical involvement and behaviour towards the board of directors is striking. • Engagement of board members in key areas has to be strengthened. • The information flow from board members to supervisors has been improved. • Boards should meet more often. **Importance: 1**	**Challenges and gaps** • Not clear whether the involvement of board of directors has improved since the crisis. • There needs to be more updates of the special committees; this needs to take place more frequently and become a standard tool for the supervisory board. • Employment of senior management cannot always be prohibited by law: moral suasion is necessary. • SIBs do not always inform supervisors in advance of changes in senior management; additional tools and change in culture are required. **Importance: 1**	**Challenges and gaps** • Culture and tone-at the-top is very challenging supervisory aspect. • Plans to elevate the requirements for outsourcing. **Importance: 2**	**Challenges and gaps** • Key question: does a firm really "live" its ICAAP: the answers are mixed. • With heightened focus on Pillar I, interest of ICAAP at firms may fade. • ICAAP must be linked to the culture of the firm. • Important lesson of the crisis is that holistic view of risk is important. **Importance: 3**
India	**Key changes** • Assessed through the Governance & Oversight component.	**Key changes** • Assessed through the Governance & Oversight component.	**Key changes** • Assessed through the Governance & Oversight component.	**Key changes** • The risk appetite statement is assessed through the effectiveness of the board and senior management in setting up the risk view of the firm.	**Key changes** • Requirements of SREP outlined by BCBS are integrated in the process. • Based on the assessed capital of a bank, the model computes the add-on capital, if any.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Largely subjective judgement. • Challenge to bring about consistency. • Preparation and update of guidance notes. **Importance: 1**	**Challenges and gaps** • Largely subjective judgement. • Challenge to bring about consistency. • Preparation and update of guidance notes. **Importance: 1**	**Challenges and gaps** • Largely subjective judgement. • Challenge to bring about consistency. • Preparation and update of guidance notes. **Importance: 1**	**Challenges and gaps** • Ability of the banks to develop a well-articulated risk appetite statement, especially in quantitative terms. **Importance: 1**	**Challenges and gaps** • Varied preparedness of banks to put in place a suitable ICAAP. • Making ICAAP a central risk management theme. • Skill development of supervisory staff to assess ICAAP. **Importance: 3**
Italy	**Key changes** • New corporate governance guidelines in 2008, revised in 2014. • Main changes relate to composition and functioning of the board.	**Key changes** • Supervisory action aimed at increasing board engagement with regard to crucial aspects of the Risk Management Framework.	**Key changes** • To assess effectiveness, supervisor carries out a thorough examination, taking into account both qualitative and quantitative factors. • Stricter control than in the past: board self-assessment of internal skills, independence and integrity, individually and collectively.	**Key changes** • Increased engagement with the board with regard to risk issues. • Requiring the establishment of ad hoc committees within the board. • Supervisory activity dedicated to enhance the challenging role of Risk Management and Compliance function. • Risk adjustment of performance indicators in compensation system. • Board is asked to approve the Risk Appetite Framework. • Risk culture: crucial role played by qualitative indicators.	**Key changes** • Definition of formal ICAAP report guidelines/content, to be followed by all Italian banks. • Supervisory proxy utilisation as alternative quantification to challenge banks. • In some cases, inspections are dedicated to ICAAP analysis as important instrument of risk governance and control.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Difficultly in evaluating the qualitative profile of the SIBs' corporate governance by ensuring level playing field. • Lack of onsite examination of new requirements. **Importance: 1**	**Challenges and gaps** • Professional competencies in order to thoroughly cope with the high degree of complexity of the prudential framework and market trends. • Need to streamline functioning of the board by focusing on key relevant issues. **Importance: 1**	**Challenges and gaps** • Professional competencies in order to thoroughly cope with the high degree of complexity of the prudential framework and market trends. • Need to streamline functioning of the board by focusing on key relevant issues. • Lack of benchmark and indicators. **Importance: 1**	**Challenges and gaps** • Increased complexity of metrics for the quantification of risk. • Lack of capital adequacy as risk mitigation factor (e.g., reputational risk). • Difficult to empower the veto power of internal control. • Risk culture difficult to apply across all banking levels. **Importance: 1**	**Challenges and gaps** • Heterogeneity of banks' practices jeopardise comparability. • Better definition of the connections between ICAAP and risk appetite framework. **Importance: 2**
Japan	**Key changes** • Horizontal reviews to find facts about corporate governance; forming a team of specialists (2014). **Challenges and gaps** • Developing view points for evaluating actual status and demonstration of functions. • Increasing knowledge about best practices. **Importance: 1**	**Key changes** • Horizontal reviews to find facts about corporate governance; forming a team of specialists (2014). **Challenges and gaps** • Developing view points for evaluating actual status and demonstration of functions. • Increasing knowledge about best practices. **Importance: 1**	**Key changes** • Horizontal reviews to find facts about corporate governance; forming a team of specialists (2014). **Challenges and gaps** • Developing view points for evaluating actual status and demonstration of functions. • Increasing knowledge about best practices. **Importance: 1**	**Key changes** • Encouraging SIBs to develop necessary IT systems in line with BCBS Principles for effective risk data aggregation and risk reporting. • Encouraging efforts to build a risk appetite framework as set out in our Financial Monitoring Policy. **Challenges and gaps** • SIBs' efforts are work in progress. **Importance: 1**	**Key changes** • Encouraging firms to increase their capital base. • SIBs have been strengthening their capital base through retained earnings. **Challenges and gaps** • Important to strengthen and maintain quality of staff in this complex area. • Further sophistication is required to our methods of supervisory review process for ICAAP. **Importance: 1**

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
Netherlands	**Key changes** • Recognised as a specific area in the new supervisory strategy. • A separate (horizontal) department is responsible for implementation. **Importance: 2**	**Key changes** • Regular discussions with board members are part of the new supervisory approach and are also conducted in the context of recovery planning. **Importance: 1**	**Key changes** • Specialised staff (e.g. psychologists) have been hired to analyse board effectiveness. • More active use of fit and proper and broadening of the scope to include all relevant staff that influence the risk position of a firm. **Challenges and gaps** • Board members may adapt behaviour when supervisor is present. • Full picture of board effectiveness requires thorough and in-depth research. • Fit and proper requires acceptance by firms of supervisory role. **Importance: 2**	**Key changes** • Recognised as a specific area in the new supervisory strategy. • A separate (horizontal) department is responsible for implementation. **Importance: 1**	**Key changes** • Part of existing and on-going supervisory activities. • Special attention is paid to Basel III monitoring and implementation of the SIB buffer. **Importance: 2**

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
Singapore	**Key changes** • MAS enhanced its corporate governance framework in December 2010 and formally codified the requirements for: (i) locally incorporated banks and significant insurers, including the SIBs, to establish a dedicated Board Risk Management Committee (in addition to the Nominating, Remuneration and Audit Committees). Besides the appointment of directors, CEO, Deputy CEO and CFO, MAS' approval for the appointment of the Chief Risk Officer is also required. (ii) additional guidelines on MAS' expectations on the role of the board in overseeing risk management and to ensure that the Chief Risk Officer has a direct reporting line to the board.	**No change** • MAS' practice is to meet the entire board of the SIBs at least annually to discuss our supervisory assessment. • Highlight our supervisory concerns and the areas which we felt the board and management of the SIB should pay greater attention to. • For the local banking groups, MAS meets the chairpersons of board committees (including the audit committee, risk committee and nominating committee) at least annually to obtain their views on specific issues (such as internal and external audit function, risk areas, control issues, etc.) and to share our supervisory concerns.	**No change** • Supervisory teams assess board effectiveness as part of the institution's risk assessment under the component "Board, Senior Management, and Head Office Oversight". • Teams will assess the quality and effectiveness of the board, senior management, and head office in providing strategic direction and oversight of an institution's operations. • For SIBs which are foreign-owned, the assessment also considers the intensity and quality of head office oversight. • Locally-incorporated banks are currently required to obtain MAS' prior approval for the appointment of their directors and C-Suite. A key factor that MAS takes into consideration is whether they are fit and proper to hold office.	**Key changes** • For the local banking groups, implementation of their risk appetite frameworks (RAFs) is assessed against the best practices articulated in the SSG report as well as the extent to which their RAFs are entrenched in their day-to-day operations. **Challenges and gaps** • SIBs' efforts to operationalise their RAF are still work-in-progress. • Risk data aggregation can be operationally challenging.	**Key changes** • No major changes. • Annual process where supervisors review and assess the ICAAP of SIBs, compliance with MAS' requirements, and the adequacy of capital maintained by the SIBs. Focus on specific themes and perform horizontal review across major SIBs each year such as capital planning, risk appetite and bank-wide stress testing. • If MAS is not satisfied with the outcomes from its review of a SIB's ICAAP, MAS may take certain supervisory actions such as requiring the SIB to maintain additional capital, restrict payment of dividends, require the SIB to implement a satisfactory capital adequacy restoration plan, or apply other supervisory measures to address the heightened risk or risk management deficiencies of the SIB.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Importance: 1	**Importance**: 1	**Importance: 1**	• Risk culture is not easy to assess. It is evolving, and may require new supervisory approaches. • While the assessment of risk culture is implicit in our risk assessment and incorporated under the assessment of "Board & Senior Management", MAS will work to further entrench the assessment of risk culture in our risk assessments and supervisory interaction with the banks by adapting good practices shared among regulators and FSB such as the "Guidance on Supervisory Interaction with FIs on Risk Culture". **Importance: 1**	**Importance: 2**
South Africa	**Key changes** • New board members and executives are required by regulation to apply to supervisory authority. • Board members are expected to provide a time matrix setting out involvement on other boards.	**Key changes** • Implemented annual prudential meetings with board chairs to discuss and assess effectiveness. • Implemented a more forward-looking approach to annual engagement to obtain views on strategic objectives, risk profile, risk management and risk appetite among other views.	**Key changes** • See (b).	**Key changes** • During meetings with the board, supervisor obtains views on risk culture and risk appetite. • A large proportion of quarterly market risk onsite meetings are around business strategy and risk appetite.	**Key changes** • A diversity of resources is currently applied in ICAAP review. • Methodology for the calculation of internal capital with regards to use of models is also reviewed by quant division. • Themed ICAAPs held in SIBs during 2013 to concentrate on stress testing and scenario testing. • Board buffers are reviewed in conjunction with stress testing and macro-economic conditions.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Importance: 2	**Challenges and gaps** • Challenge is to find the right balance of issues to discuss. • This will develop over time. Importance: 1	Importance: 1	**Challenges and gaps** • Risk appetite varies across firms. • Challenge is to understand individual risk appetite in correlation with specific bank strategy. • It is always challenging to determine the extent of the risk culture with a SIB—to determine the true level of buy-in from business lines, management and boards. Importance: 3	**Challenges and gaps** • ICAAP reviews are time and resource intensive and therefore conducted once every two years. Importance: 2
Spain	**Key changes** • Increased focus. • More attention to review of the minutes of the board, its committees and other internal bodies. • Increase in the interaction with SIB (more meetings with senior management and at higher level). • Review of reporting lines, internal governance framework, policies and procedures.	**Key changes** • At least annual meetings with the secretary of the board to comment on general issues of corporate governance. • Engagement at the board level represents a change in supervisory approach.	**Key changes** • Supervisory practices to assess the internal function and effectiveness of the board are reviewing the minutes of board meetings and review and analysis of the annual self-assessment exercise of the board. • In 2013, new regulation regarding fit and proper was approved, increasing the assessment criteria and requiring internal procedures to be in place.	**Key changes** • In the last few years, paid more attention to the qualitative aspects of the risks to try to identify focus of concern or negative behaviours and avoid future problems. • We periodically review the risk appetite of G-SIBs and establish dialogue around this. • We also assess risk culture.	**Key changes** • The review of ICAAP is considered an important tool to contrast the supervisory assessment of the G-SIB.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Discussions with SIBs about qualitative issues are to some extent more difficult. • SIB has to become more used to interaction regarding corporate governance. **Importance: 1**	**Challenges and gaps** • To come: meetings between supervisors and individual members of the board. **Importance: 2**	**Challenges and gaps** • Reading minutes does not reflect the discussions that could be had with the board. • Formalisation for the fit and proper process and the harmonisation of the assessment criteria. **Importance: 3**	**Challenges and gaps** • Changing supervisory mentality, as some qualitative aspects are sometimes seen as ethereal and difficult to implement. **Importance: 1**	**Challenges and gaps** • The dialogue with the entity regarding the assessment of the different concepts of capital. **Importance: 2**
Sweden	**Key changes** • In April 2014, updated Swedish regulation for governance and risk management; covers organisational structure and the board's understanding of it, corporate and risk culture, responsibilities of the board, risk management, control functions and outsourcing requirements. • Internal SREP guidelines are aligned with EBA guidelines and include updated governance requirements.	**Key changes** • See (a).	**Key changes** • The Swedish Banking Act includes requirements for fit and proper assessments. • FI issued regulations for fit and proper in 2009. • The regulation targets fit and proper assessment upon appointment. • Regulation has recently been updated.	**Key changes** • See (a).	**Key changes** • "Swedish Finish" approach to Basel 3. FI requires all four Swedish systemic banks to hold 5 percentage points of extra CET1 capital for systemic risks. We would require banks to comply with a 25% floor for Swedish residential mortgages and comply with the Basel 1 floor on risk weights. • Pillar 2 requires banks to hold, on the top of Pillar 1, capital for concentration risk, IRRBB, and pension risk. • FI's approach to liquidity regulation includes a requirement to comply with frontloaded LCR requirements, including the requirement to comply with the LCR in two reserve currencies (USD, EUR).

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Division of internal responsibilities. • Available resources. • Validation of approaches for scoring banks' governance. • Procedures and methods for investigations and field work. • Improve connection between SREP outputs and supervisory activities. **Importance:**	**Challenges and gaps** • Increase the frequency of interaction with the board. • Continue to develop methods and approaches. **Importance: 1**	**Challenges and gaps** • A new routine has to be developed for assessing the collective competence of boards. **Importance: 2**	**Challenges and gaps** • Improve connection between SREP outputs and supervisory activities. • Procedures and methods for investigations and field work. **Importance: 1**	**Importance:**
Switzerland	**Key changes** • Much more focus and more intrusive approach. • Less "light touch" than before. • Involvement in corporate governance increases our impact on behaviour and awareness at the G-SIBs.	**Key changes** • Periodic formal exchanges with board and key committees (risk, compensation) based on specific agenda.	**Key changes** • No formal effectiveness assessment is done. • Indirectly, through assessment of strategy. • No formal fit and proper assessment is done unless there are specific replacements or changes. • The external auditor states the fit and properness of ultimate management.	**Key changes** • Increased and formalised activities in: Loss Potential Analysis; Building Block Analysis (responsibility of the SNB); Assessment of bank-internal "Capital-at-Risk" or "Earnings-at-Risk" models. • Much more focus to risk culture topics such as tone at the top and zero tolerance culture. • Discussions with top management about control functions.	**Key changes** • ICAAP process formalised considerably over the past few years. • Development of formal and periodic assessment. • Use of Pillar 2 charges. • Formal dialogues with bank and challenges. • Attempt to compare banks' ICAAP number in a more formal way (e.g., stress testing).

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • Overcoming board of directors' resistance. • Risk of being held accountable. **Importance: 1**	**Importance: 2**	**Importance: 2**	**Challenges and gaps** • Understanding the differences between banks' regulatory models vs. internal risk models as well as external models. • Risk culture is a difficult topic to make an ex-ante impact as it does not rely on quantitative analysis. **Importance: 2**	**Challenges and gaps** • How to derive concrete measures from ICAAP while remaining consistent across institutions. **Importance: 1**
United Kingdom	**Key changes** • Walker Report (Nov. 2009) was commissioned in the wake of the crisis to examine corporate governance and made recommendation for improvements. • FSA published guidance in 2010: "Effective Corporate Governance". • PRA assesses major banks' governance arrangements. • PRA periodically observes board and committee meetings. • FSA and PRA have introduced remuneration code requirements". • PRA publishes periodic Supervisory Approach documents which cover governance requirements. • FSA assessed major banks' governance	**Key changes** • See (a).	**Key changes** • See (a). • FSA built a more intensive approach to assessing applicants for Significant Influence Functions (begun in 2008).	**Key changes** • See (a). • A more intensive approach to assessing applicants for Significant Influence Functions is in operation and will be further developed by the introduction of a new Senior Managers Regime. • FCA increasing focus on culture and considering how firms' culture supports consumer protection and the integrity of the market.	**Key changes** • FSA published consultation papers and policy statements in 2009 and 2010 detailing new approaches to assessing firms' forward looking capital assessments. • For largest firms, ICAAP review has further evolved with recent developments in stress testing.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	arrangements. • FSA often observed board and committee meetings. • FSA in 2010 published "Revising the Remuneration Code". • Prudential Regulation Authority: "Management & Governance" and "Risk Management and Controls" which are key elements in PRA's continuous assessment program. • PRA Governance Forum is developing tools, guidance and training for supervisors to enhance their ability to effectively challenge firms' risk management practices and decision-making processes. • UK also implementing the senior managers' regime. **Challenges and gaps** • Full in-depth reviews are often very resource intensive. • Corporate governance assessments require a range of judgments and require careful evaluation by experienced individuals.				**Challenges and gaps** • Establishing the difference between going and gone concern capital. • Commonly accepted that there is no single right approach to assessing capital adequacy and there is no single right measure of the capital a bank requires.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	• Detailed reviews require supporting evidence. • Case studies are used to focus review and peer analysis is often used to aid measurement and evaluation. • Many firms are developing or enhancing risk frameworks, risk appetites and risk cultures—supervisors see work in progress rather than finished product. **Importance: 1**	**Importance: 1**	**Importance: 1**	**Importance: 1**	• Has consulted on new Pillar 2A and 2B approaches. • Stress testing must continue to play a central role to facilitate adequate risk and capital management with adequate idiosyncratic scenarios being investigated and tested. **Importance: 2**

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
United States	**Key changes** • FRB: Corporate governance is a key pillar of the framework for the consolidated supervision of large financial institutions issued in 2012 (SR 12-17). • The framework address the board's role in establishing and maintaining the firm's culture, incentives, structure and processes that promotes compliance with laws, regulations and supervisory guidance. • OCC: in 2014, issues final regulation that establishes minimum standards for the design and implementation of a risk governance framework for large banking organisations; also establishes minimum standards for an institution's board of directors in overseeing the framework.	**Key changes** • Supervisors meet regularly with board as a whole, individual members and subcommittee: dialogue is aimed at strategy, corporate and risk governance, and compensation. • Supervisors read board meeting minutes and follow-up with questions if appropriate. • Letters from supervisors regarding matters requiring attention are addressed to the chair of the board as well as to senior management, typically the CEO or CFO: recent supervisory guidance (SR 13-13) directs communication of examination findings to board of directors and holds the board accountable for the safety and soundness and assurance of compliance with applicable laws and regulations. • Recently, the FRB undertook a review of all SR letters requiring oversight of boards to consolidate and clarify supervisory messages.	**Key changes** • As part of the examination process, examiners review and assess whether the firm's board of directors is providing a clear framework of objectives and policies within which senior management can operate and administer the bank's affairs. • Examiners evaluate the adequacy and effectiveness of the board by assessing the frequency and effectiveness of board meetings, the effectiveness of board committees, the directors' role in establishing policy, the adequacy of policies and major inconsistencies therein, the quality of reports for directors, violations of laws and regulations, the composition of the board and the board's responsiveness to recommendations from auditors and supervisory authorities. • Supervisors have developed rating systems in which a banking organisation is rated, in part, based upon board and senior management oversight of the entire business. • US does not employ fit and proper tests but identify expectations of the roles of boards of directors and senior management; supervisors also	**Key changes** • Supervisory guidance set forth in SR 12-17 establishes expectations around board behaviour, including that the board, among other responsibilities: 1) maintain a clearly articulated corporate strategy and institutional risk appetite, 2) maintain a corporate culture that emphasises the importance of compliance with laws and regulations and consumer protection, as well as the avoidance of conflicts of interest and the management of reputational and legal risks, and 3) ensure the firm's internal audit, corporate compliance, and risk management and internal control functions are effective and independent.	**Key changes** • Assessment of firms' internal capital adequacy is evaluated under a rigorous stress testing and capital planning regime.

	(a) Corporate governance	(b) Board engagement	(c) Board effectiveness assessment, including fit and proper tests	(d) Risk governance and management, including risk appetite and culture	(e) Internal capital adequacy assessment (ICAAP)
	Challenges and gaps • The FRB plans to release more detailed guidance to make corporate governance component of SR 12-17 more concrete and actionable. **Importance: 3 and 1**	**Challenges and gaps** • U.S. board of directors are held to a number of standards that emanate from different sources. Avoiding duplicative messages to boards is a particular concern of banking supervisors. **Importance: 2**	identify expectations against which examiners should assess a firm's board with respect to selecting senior management, maintaining plans for succession, and actively and critically overseeing senior management's execution of board strategies. **Challenges and gaps** • Difficult to observe whether board collectively or individual members influence outcomes. **Importance: 2**	**Importance: 1**	**Importance: 1**

Annex H: FSAP recommendations

5.1 For jurisdictions that are home to a G-SIB, provide in Table 5.1 below a detailed description of the actions taken to address the relevant recommendations on operational independence and resources from the most recent FSAP for your jurisdiction, and any further actions that are planned and the expected timeframe for their completion. If no actions have been taken or are planned in some areas, please indicate the reasons and/or any obstacles encountered in addressing the relevant recommendations. Also describe any remaining impediments (legal or otherwise) in taking prudential measures or actions regarding a G-SIB.

Table 5.1: FSAP Recommendations

G-SIB Home Jurisdiction	Relevant FSAP Recommendations	Steps Taken to Date	Actions Planned and Timeframes
China (2012)	1. Give CBRC authority for staffing and budgeting within broadly-set targets. 2. Consider moving to model where industry fees directly fund CBRC to enhance independence. 3. Develop a State Council supported plan to upgrade CBRC staff expertise including more budget flexibility and allowing CBRC more flexibility in remuneration to better attract and retain specialist resources. 4. Address potential independence issues.	As for staffing, the CBRC assessed its status against the requirement of the changing regulatory environment and supervisory responsibilities, and will continue to communicate with the relevant administrative agencies to address the gap between the workload and staff numbers. Regarding the financial resources, with the growth of supervisory workload and limit of financial resources, the challenge of conducting effective supervision and oversight is increasing. CBRC will also continue to communicate with the relevant agencies to adopt a more flexible financial budgeting arrangement.	Those issues have to be addressed through legal reforms, which would take more time than we can expect. How and when to complete these changes remains uncertain at this stage.

G-SIB Home Jurisdiction	Relevant FSAP Recommendations	Steps Taken to Date	Actions Planned and Timeframes
France (2013)	1. Alter (but do not eliminate) participation of Ministry of Economics Finance and Industry (MINEFI) in Autorité de Contrôle Prudentiel (ACP) college, limit MINEFI right of reconsideration to systemically important issues. 2. Provide the ACP with a formal role in proposing prudential rules and issue more ACP guidance on prudential matters. 3. Allow the ACP college to set assessment within maximum to be set by legislation. 4. Provide for periodic formal and public review by the ACP of its resource needs.	While not legally in charge of issuing prudential regulations, the ACPR actively participated in efforts to enhance the regulatory framework, contributing in particular to the 2013 Banking and Regulation Act and the establishment of the framework for the banking union, for both supervision and resolution. Further, the ACPR issued instructions, guidelines, enforcement principles, notices (e.g. on calculating banks' solvency ratio), positions (e.g. positions issued in 2014 relating to the separation of executive (management) and non-executive (oversight) roles within a bank) and recommendations that complement existing legislation and regulations.	There are no plans to modify MoF participation in ACPR board. The ACPR reiterated its disagreement with the FSAP evaluation by noting that the role and powers of the representative of the MoF are fully set in the law, which gives no membership status in the ACPR Board and Enforcement Committee. The ACPR indicated that it has sufficient margin of manoeuvre to accommodate the higher resource needs related to additional responsibilities given to ACPR by the 2013 Banking and Regulation Act. The removal of headcount limits is not expected in the near-term given pressure not to expand budgets. Furthermore, the BdF can provide supplementary resources to ACPR if needed.
Germany (2011)	1. Re-evaluate the elaborate reporting requirements of BaFin vis-à-vis the BMF with a view to alleviating the reporting burden for both authorities. 2. Amend the relevant legislation to ensure BaFin's President and Executive Directors are protected against arbitrary and/or obligatory transfers to other functions within the Federal Public Service. 3. Amend the relevant legislation to ensure there is public disclosure of the	1. A working group has been established to evaluate established reporting agreements in regard to subjects, extent and interval and adapt them to current requirements. 2. The relationship between the members of the Executive Board and the Federal Administration is that of an official public-law relationship ("öffentlich-rechtliches Amtsverhältnis"). They are no longer civil servants and therefore protected against transfers. 3. A discharge of a member of the Executive Board is only possible by the Federal President upon his/her request or upon resolution of the Federal Government for good cause. The latter is subject to judicial review. 4. BaFin adopted in December 2013 a formal ladder of actions for banking supervision. The ladder of actions sets out a series of supervisory actions and measures which can be taken when deficiencies in any of three areas are identified:	1. The new reporting lines will be introduced probably by 2015. 2. n.a. 3. n.a. 4. As recommended by the FSB Peer Review Report for Germany (2014) BaFin will place a greater emphasis on forward-looking elements. It is conceivable to set out forward-looking elements in the note column of the lists of already existing supervisory

G-SIB Home Jurisdiction	Relevant FSAP Recommendations	Steps Taken to Date	Actions Planned and Timeframes
	reasons for dismissal of BaFin's President and Executive Directors. 4. Develop a consistent and well documented ladder of supervisory actions. 5. Clarify the liability protection for BaFin's staff members that are not designated as civil servants. 6. Review the legal position of the supervisory authorities themselves and provide them with explicit protection for their official actions as an institution, except in cases of gross negligence or wilful misconduct.	organisational matters (related to risk management practices and operational controls), capital adequacy or liquidity. An introduction which includes general explanations on taking supervisory actions and definitions in which cases deficiencies should be deemed as minor, medium or serious precedes the lists of possible supervisory measures. In addition, certain quantitative and qualitative triggers derive from the German Banking Act/CRR. The whole document is accessible to supervisors via BaFin Intranet. The list of possible supervisory measures is structured in several steps, beginning with routine actions and gradually moving into more severe supervisory interventions as the situation deteriorates. Qualitative guidance would be provided on choosing the appropriate measure and the use of supervisory discretion. The ladder already includes some forward-looking elements derived from minimum risk management requirements (under the German Banking Act), in particular regarding a bank's business and risk strategy. 5. According to § 3 (7) of the collective agreement for the public sector (TVöD) there are now equal liability standards for all staff members. 6. BaFin is subject to the general state liability standards that are laid down in the Constitution. There are no plans for exceptions for BaFin or other institutions.	measures to make supervisors more aware of the need of consideration of these elements. Nevertheless BaFin and Bundesbank can only act within the given legal framework. Taking additional supervisory measures because of deficiencies regarding forward-looking elements seems to be difficult. The introduction of triggers may be helpful in some cases. Nevertheless an additional incorporation of certain quantitative and qualitative triggers seems to be difficult under the current German supervisory and administrative law, as a case-by-case analysis should be conducted and the individual situation of the institute should be considered. But further guidelines, in particular for supervisory measures which have been introduced by the CRR/CRD IV, may be helpful. 5. NA.
Italy (2013)	1. Introduce legal changes to allow BI to withdraw banking licenses independently from the MEF.		• No actions have been asked to BoI.

G-SIB Home Jurisdiction	Relevant FSAP Recommendations	Steps Taken to Date	Actions Planned and Timeframes
Japan (2012)	1. Intensify monitoring and oversight of systemically relevant financial institutions, markets, and infrastructures. 2. Review the FSA's regulatory mandate and evaluate the adequacy of its supervisory skills and resources.	1. The FSA expanded sections for SIBs such as Supervisory Policy Office, which mainly conducts risk monitoring. In addition the FSA strengthened the on- and off- integrated monitoring to promote horizontal review of SIBs. As a result, our ability to monitor and collect information improved. By sharing and analysing the collected information, we can extract risks and best practices common to SIBs in a more in-depth and prompt manner, and this has led to improvement of supervision. 2. Although the FSA continually reviews the adequacy of supervisory resources and skills, there is still room for improvement. Therefore, the FSA has managed to increase the number of its staff and enhance the skills through adopting and training more specialists, while the increase of the total number of public officials in Japan has been strictly limited..	• The FSA will continue to action as set out left in order to intensify monitoring of SIBs and enhance the quantity and quality of its staff.
Netherlands (2011)	1. Provide the DNB and AFM greater discretion to put in place enforceable rules. The lack of sufficient rule making authority leads to ad hoc approaches that risk becoming arbitrary and subject to legal challenge. 2. Afford legal protection to DNB and the AFM as institutions, for their official actions, except in cases of gross negligence or wilful misconduct, in line with practice in many neighbouring countries. 3. To spell out more precisely under which circumstances the Ministry of Finance would use its legal powers to object DNB rule-making decisions to make the process more transparent.	1. DNB and AFM derive their rule making authority, from regulation that is determined by government (Parliament). Within their mandate, DNB and the AFM have operational independence to set rules to effectively fulfil their legal tasks. This is supported by different possibilities for enforcement on the basis of the Act on Financial Supervision. Increasingly, supervisory rules are determined by directly applicable European regulation (CRR or binding technical standards by EBA) based on maximum harmonisation. 2. Since 1 July 2012, new legislation is in force to limit the liability of DNB and the AFM. 3. There is a well-structured and transparent process if DNB or AFM are of the opinion that regulation is not sufficient and additional rules or powers are needed. In addition to regular, top-level discussions with the Ministry of Finance (as prime responsible legislator), DNB and AFM each year send a letter, which is made public, in which DNB and AFM express their proposals for legislative changes that are deemed necessary for the conduct of their supervision. The Minister responds to these requests in a letter to Parliament.	• No additional actions planned.

G-SIB Home Jurisdiction	Relevant FSAP Recommendations	Steps Taken to Date	Actions Planned and Timeframes
Spain (2012)	1. It is recommended that the LABE is amended to give BdE operational independence in its supervisory function in line with its independence as a Eurosystem central bank. 2. In addition, internal governance structures, such as selection, nomination and responsibility processes for supervision could be clear and publicly available, so that the independence of supervisory processes is assured and understood by external parties.	Among other measures, Law 9/2012, 14 November 2012, on bank restructuring and resolution transferred the sanctioning and licensing powers from the Ministry of Economy to the Banco de España.	• No additional actions planned.
Sweden (2011)	1. Ensure operational and legal independence of Finansinspektionen (FI) by removing duality of powers of FI and Government to determine licensing and revocation. 2. Increase scale of funding and consider whether there are alternative funding models for FI. 3. Regarding major acquisitions, laws and regulations should provide precise criteria by which to judge individual proposals. Prior notification requirement should be expanded. 4. Establish a formalised analytical framework for the risk assessment of firms, building on existing practices. Determine resource requirements to ensure minimum level of effective oversight.	1. Legal changes have been made, so that the government cannot any longer be involved in the licensing and revocation process. 2. FI resources have increased at a pace by SEK 33 million annually. This is expected to continue at least until 2017. 3. FI has started a regulation project in order to require credit institutions to notify FI of acquisitions of some size. 4. FI has taken several steps on this matter. EBA GL on SREP as well as the FI supervisory strategy has been adopted. Resources to supervision have been increased in both 2013 and 2014. A new Pillar 2-method has been consulted.	• The regulation project regarding notifications to FI of acquisitions is aimed to be finalised by 1 January 2016. • EBA GL on SREP will be implemented in 2015.

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Switzerland (2013)	1. Clarify and limit the cases in which the board can become involved in supervisory decisions and improve conflict code. Do not remove or limit FINMA Pillar 2 powers, or explicitly provide in legislation that any Federal Council decisions re Pillar 2 is to be on the formal recommendation of FINMA. 2. Increase FINMA's resources so it can carry out its agenda for supervisory enhancement. The resource pool for highly qualified staff could be expanded.	Independence: In response to the FSAP recommendation on independence, the Swiss Federal Council revised the in the past non-public rules for FINMA board of directors on 6th December 2013 and made them public. As overarching rules FINMA board of directors must have no conflicts of interests. In particular the now published and revised rules stipulate explicitly that all board members must not be in an operative function with supervised institutions and must not be a member of the board of these institutions or industry organisations (for existing board members a transition period applies until the end of their term). To further increase transparency the since 2010 existing qualification criteria for FINMA board members were published as well. For further details and to view the published documents in French, German or Italian, please consult the following WWW link: https://www.news.admin.ch/message/index.html?lang=de&msg-id=51313. Resources: FINMA is in the process of assessing the additional need for resources. Overall, as has been already mentioned in our response to the FSAP finding, FINMA does not see a general need for an increase in resources but acknowledges that in certain areas more capacity for supervising the Swiss banks would be beneficial. As a consequence, as part of the 2015 budgeting process the Banks Division will assess the immediate need for additional resources and will make a corresponding headcount request. Further, as part of the strategic considerations, an assessment was planned in 2014 how to optimise the resource allocation within the existing teams. This might result in additional headcount needs, which would then be factored into future budgeting processes.	• In the process of assessing supervisory resources and how to best allocate them within supervisory teams.
United Kingdom (2011)	1. Amend Financial Services and Markets Act (FSMA) to specify the conditions under which the FSA head could be removed and provide for explicit requirements to make these public.	Prudential Regulation Authority (PRA): The Financial Services Authority (FSA) ceased to exist as of 1 April 2013, and its powers and responsibilities with regards to prudential regulation were transferred to the Prudential Regulation Authority, an operationally independent subsidiary of the Bank of England. Under the Financial Services Act 2012, the Chief Executive of the PRA is also a Deputy Governor of the Bank of England ("Deputy Governor for Prudential Regulation"). Therefore, the legal framework for the removal of the Chief Executive of the PRA derives from the Bank's ability to remove a Deputy Governor under the terms of the Bank of England Act 1998. Under the Bank of England Act, Schedule 1, Section 8.1., "Court of Directors, Terms of Office", it is possible for the Bank, with the consent of the Chancellor of the Exchequer to "remove a person from office as	• No additional actions planned.

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		Governor, Deputy Governor or non-executive Director of the Bank if it is satisfied: a) that he has been absent from meetings of the court for more than 3 months without the consent of the court; b) that he has become bankrupt, that his estate has been sequestrated or that he has made an arrangement with or granted a trust deed for his creditors; or c) that he is unable of unfit to discharge his/her functions as a member". Financial Conduct Authority (FCA): The FCA's CEO is appointed by the Treasury; which also appoints the FCA chairman and three other members of the board, as set out in paragraph 2(2) of Schedule 1ZA to the Financial Services and Markets Act 2000 (FSMA). Provisions in relation to the appointment and removal of any "appointed member" are set out in Schedule 1ZA to the FSMA. Paragraph 4 of that Schedule concerns removal of appointed members (i.e. any of the appointed members) from office and reads as follows: 1) The Treasury may remove an appointed member from office: (a) On the grounds of incapacity or serious misconduct, or (b) On the grounds that in all the circumstances the member's financial or other interests are such as to have a material effect on the extent of the functions as member that it would be proper for the person to discharge. 2) Before removing from office a member appointed under paragraph 2 (2)(d), the Treasury must consult the Secretary of State.	
United States (2010)	1. Develop a more forward-looking detailed resource plan that takes account of risk assessments, lessons learned, and new and existing priorities. 2. Focus senior governance within and between agencies on improvements in supervisory process. 3. Improve public performance reporting. 4. Alter the governance rules at Reserve Banks to remove appearance of industry influence. 5. Raise threshold for triggering material loss reviews and consider the themes	1. In the aftermath of the financial crisis, supervisory management undertook an extensive program to reshape supervision for the largest, most complex U.S. banking organisations. The programs put in place was based on in-depth reviews of lessons learned as well as a thorough risk assessment of these banking organisations based on stress testing. Plans were put in place that reflected new priorities and which was supported by adequate resources in the near term with a view toward building resources to meet new challenges. 2. Senior governance at the U.S. federal banking agencies has devoted considerable time to coordinate their activities so as to improve the supervisory process, for example in the areas of stress testing and resolution planning. 3. Public performance reporting by the federal banking agencies are generally found in annual reports required by the U.S. Congress. 4. With respect to the appointment of the Reserve Bank president and first vice	1. The U.S. federal banking agencies review their overall approach to their supervisory framework of G-SIBs based on a number of factors, including annual risk assessment, changes to the macroeconomic environment, and core business line changes that affect overall strategy. 2. Ongoing. 3. The U.S federal banking agencies are in the planning stage of improving channels of

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	from those reviews (e.g., timeliness and forcefulness of intervention) to improve performance).	president, both the governing statute and the board's policies have been revised since the previous assessment. Specifically, the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act amended Section 4 of the Federal Reserve Act to provide that only Class B and Class C directors are authorised to appoint a reserve bank's president and first vice president. Class A directors, who are nominated and elected by the member banks in each Federal Reserve district to represent the stockholding banks, no longer have a role in the appointment of these bank officials. Recognizing that Congress excluded Class A directors from the appointment of Reserve Bank presidents and first vice presidents due to concerns about potential conflicts of interest that could arise from bankers participating in the selection of the leadership of their federal bank supervisor, the Board of Governors, by policy, has extended that prohibition to other stages of the appointment process so that Class A directors may not (a) be on the search committee for a president or first vice president or take part in its deliberations or the deliberations of the board of directors regarding candidates; or (b) vote for a president or first vice president, including voting on the periodic reappointment of president or first vice president. To fully comply with the spirit of the law, the Board of Governors further extended this policy to Class B directors who are affiliated with certain supervised institutions. Due to similar concerns about potential conflicts of interest, the Board of Governors has, by policy, also excluded all Class A directors and Class B directors who are affiliated with certain supervised financial institutions from being involved in the selection, appointment, and compensation of Reserve Bank officers whose primary duties involve supervisory matters. This policy took effect in 2011. 5. The DFA 987 amended the FDI Act to define a material loss to the Deposit Insurance Fund as an estimated loss in excess of $200 million.	communication beyond the disclosures of performance mentioned above. 4. n/a 5. No change is contemplated at this time.