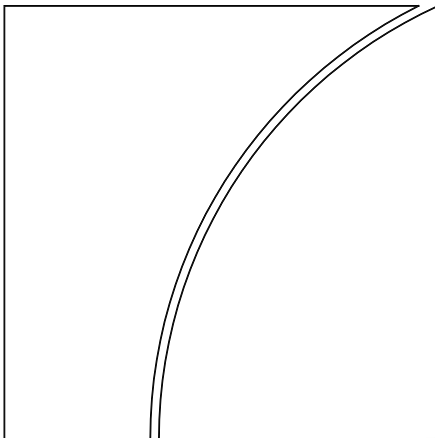
Financial Stability Institute

FSI Insights
on policy implementation
No 16



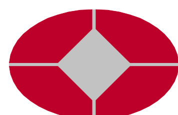
Proportionality under Pillar 2 of the Basel framework

by Vincent Duckwitz, Stefan Hohl, Katrin Weissenberg and Raihan Zamil

July 2019

JEL classification: G20, G21, G28

Keywords: Pillar 2, supervisory review process, capital adequacy, bank rating, bank rating system, Basel framework, proportionality, supervision, Basel III, risk-based supervision, ICAAP



BANK FOR INTERNATIONAL SETTLEMENTS

FSI Insights are written by members of the Financial Stability Institute (FSI) of the Bank for International Settlements (BIS), often in collaboration with staff from supervisory agencies and central banks. The papers aim to contribute to international discussions on a range of contemporary regulatory and supervisory policy issues and implementation challenges faced by financial sector authorities. The views expressed in them are solely those of the authors and do not necessarily reflect those of the BIS or the Basel-based committees.

Authorised by the Chairman of the FSI, Fernando Restoy.

This publication is available on the BIS website (www.bis.org). To contact the BIS Media and Public Relations team, please email press@bis.org. You can sign up for email alerts at www.bis.org/emailalerts.htm.

© *Bank for International Settlements 2019. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISSN 2522-2481 (print)
ISBN 978-92-9259-282-0 (print)

ISSN 2522-249X (online)
ISBN 978-92-9259-281-3 (online)

Contents

Proportionality under Pillar 2 of the Basel framework ... 1

Executive summary ... 1

Section 1 – Introduction ... 3

Section 2 – General considerations for the application of proportionality ... 5

Section 3 – Pillar 2 supervisory requirements and proportionality ... 8

- Links between Pillar 2 and the SRP ... 8
- Pillar 2 supervisory requirements and proportionality – an overview ... 8
- ICAAP and stress testing ... 10
- Recovery planning ... 11

Section 4 – Bank rating systems and the SRP ... 13

- Overview of bank rating systems ... 13
- Post-crisis evolution of bank rating systems ... 15
- Intensity of supervision ... 16
- Supervisory assessments of firm-wide governance ... 18
- Supervisory assessments of capital ... 19

Section 5 – Transparency and market disclosure ... 21

Section 6 – Concluding remarks ... 22

References ... 24

Annex 1 – Jurisdictions covered by the study ... 25

Annex 2 – Comparison of the US rating system for large financial institutions and the EU's Supervisory Review and Evaluation Process rating, as applied by the ECB's Single Supervisory Mechanism ... 25

Annex 3 – Pillar 2 add-on approaches in the EU, Hong Kong SAR and Switzerland ... 27

Proportionality under Pillar 2 of the Basel framework[1]

Executive summary

In 2006, the Basel Committee on Banking Supervision (BCBS) published Basel II, a three pillar approach to the oversight of internationally active banks. Pillar 1 prescribed risk-based capital (RBC) rules, which were subject to supervisory review under Pillar 2 and disclosure requirements in Pillar 3.

Following the Great Financial Crisis (GFC), the BCBS introduced the Basel III reforms, which significantly strengthened the minimum Pillar 1 regulatory requirements. These changes focused on strengthening existing RBC rules. In addition, it also introduced new requirements on leverage, liquidity and capital buffers for systemically important banks as well as for the macro-financial environment.

Although the Pillar 2 rules text was unaffected by Basel III and remains unchanged, its practical interpretation by supervisors has changed over time. Pillar 2 contains four principles that guide the responsibilities of banks and supervisors to ensure, among other objectives, that minimum Pillar 1 requirements are aligned with a bank's overall profile.

Pillar 2 is a principles-based standard that is premised on sound judgment. Principle 1 of Pillar 2 requires banks to assess their own risk profile; this is influenced by the cumulative set of risk management requirements imposed on banks, which typically varies with a bank's size, complexity and risk profile. The remaining principles are supervisory responsibilities, with an indirect effect on banks, and are driven by their implementation of risk-based supervision (RBS). The collective implementation of all four principles necessitates a proportionate approach and is reliant on supervisory judgment.

This paper surveys 16 jurisdictions (both BCBS and non-BCBS members) on their Pillar 2 implementation approaches, including their application of proportionality. A key aim of our study is to determine *whether* and, if so, *how* supervisory authorities apply proportionality in tailoring risk management expectations and supervisory practices according to the size, complexity and risk profile of regulated entities. We also review the construct and evolution of bank rating systems since the advent of Basel II, given its fundamental role in shaping supervisory assessments and outcomes under Pillar 2.

While all surveyed jurisdictions have a process that incorporates the four principles of Pillar 2, their application varies. For example, some jurisdictions require all banks to submit a self-assessment of their own risk profile and internal capital adequacy assessments, while other jurisdictions impose such requirements on only a subset of banks. In addition, there is limited consensus on what Pillar 2 capital add-ons, if imposed, should cover, including how these capital add-ons interact with the new Basel III buffer requirements. Finally, the process used to determine Pillar 2 capital add-ons, if warranted, also differs.

Another insight is that authorities apply proportionality in supervision through one (or a combination) of two methods. The first approach, which we label *"principles-based proportionality that hinges on supervisory judgment"*, entails the development of high-level principles that are subject to tailoring through the judgments of supervisory teams. The second method, which we classify as *"guided discretion"*, imposes a more prescriptive guidance that is supplemented with supervisory judgment.

The proportionality approaches used in supervision involve trade-offs. The principles-based proportionality methods allow supervisory teams flexibility in tailoring supervisory assessments to

[1] Stefan Hohl (stefan.hohl@bis.org) and Raihan Zamil (raihan.zamil@bis.org), Bank for International Settlements, Vincent Duckwitz, European Central Bank and Katrin Weissenberg, European Banking Authority.

The authors are grateful to the representatives of the 16 surveyed jurisdictions and to Stefan Blochwitz and Glenn Tasky for helpful comments. Cissy Mak provided valuable administrative support with this paper.

institution-specific circumstances. This approach relies on the judgment of supervisory teams. This has the potential to raise some level-playing-field concerns within a jurisdiction, as the decisions made could be difficult to objectively compare across a range of similar banks. The guided discretion approaches eliminate some of the judgment required from supervisory teams by hard-wiring certain proportionality elements into applicable guidance. Under this approach, an open question is whether the hard-wired guidance serves as a good proxy for the decisions that would otherwise be made by supervisors.

Most surveyed jurisdictions impose supervisory requirements on banks to facilitate the implementation of principle 1 of Pillar 2. Nearly all jurisdictions surveyed require at least a subset of banks to develop an ICAAP and to perform stress tests. While not a formal Pillar 2 requirement, recovery plans have also been introduced in most surveyed jurisdictions. Authorities apply proportionality by either exempting some banks from the requirements or tailoring rules when they are imposed.

When ICAAP, stress testing and recovery plans are required, most authorities tailor applicable rules using either principles-based or guided discretion methods. While principles-based proportionality approaches tend to be used for ICAAP and stress-testing requirements, most authorities apply guided discretion methods to facilitate a proportionate application of recovery plans.

In regard to supervisory responsibilities under Pillar 2, a mix of principles-based and guided discretion approaches is used to tailor supervisory intensity and supervisory risk assessments to a firm's size, risk profile and complexity. Guided discretion approaches are prevalent in the supervisory review of capital adequacy and in setting the supervisory intensity of a firm, with the latter typically combining a bank's systemic importance with its overall supervisory rating. With respect to the assessment of the "firm-wide governance/management" rating, nearly all authorities embed principles-based proportionality in supervisory expectations ("risk management must be commensurate with size, complexity and risk") but rely on supervisors to arrive at a proportionate risk assessment.

The design of bank rating systems, which influences supervisory risk assessments and the supervisory intensity applied to firms, has evolved post-GFC. Many jurisdictions now place more weight on "liquidity risk", "firm-wide governance" and "business model analysis" in their rating system architecture. At least one authority incorporates a bank's resolvability into its rating process; others consider ICAAP and recovery plans when rating a bank's "firm-wide governance". Lastly, a four-point rating scale is a common trend, perhaps to prompt supervisors to distinguish between "good" and "bad" banks, rather than defaulting to the "middle of the road" option under the five-point rating scale.

The appropriate balance between "rules versus discretion" in supervision is context-driven. Nevertheless, there are advantages in adopting guided discretion approaches with respect to tailoring ICAAP, stress-testing and recovery plan requirements imposed on banks; in determining the supervisory intensity of a firm; and in assessing capital adequacy. The primary benefits of this approach are to reduce level-playing-field concerns and to provide supervisors with structure and consistency in the Pillar 2 implementation process, while allowing room for judgment. A principles-based approach to proportionality seems well suited to the supervisory assessment of "firm-wide governance" given the difficulties in prescribing hard-wired risk management standards for small versus large banks.

With the post-crisis regulatory reforms now complete, there is value for the supervisory community to pay even more attention to Pillar 2. The expansion of Pillar 1 requirements under Basel III, including new global liquidity rules and the introduction of various capital buffers, has expanded the supervisory review process and its interactions with Pillar 1. In addition, new sources of risk such as cyber and climate-related risk, together with a greater focus on a firm's conduct and culture, pose fresh challenges for banks and supervisors. In this context, continued collaboration between jurisdictions, through the ongoing exchange of experience on the various methods used to implement Pillar 2, can facilitate a robust implementation of the post-crisis reforms while taking into account the evolution of bank risk management and supervisory practices.

Section 1 – Introduction

1. **The prudential oversight of banks includes a combination of regulation and supervision.** While the terms "regulation" and "supervision" are sometimes used interchangeably, they serve two distinct, but related functions. Prudential regulation involves the development of various rules under which banks are expected to operate. Supervision, which is carried out through a mix of on-site inspections and off-site monitoring, is needed to ensure that banks comply with prescribed rules, assess whether they have sufficient financial and managerial capacity in relation to the nature of risks being taken, and operate in a safe and sound manner.

2. **Basel I, introduced in 1988 by the Basel Committee on Banking Supervision (BCBS), established the overarching concept that regulatory capital should be linked to risk.** Basel I[2] focused on regulatory capital requirements for credit risk, which were based on broad, simplified risk buckets based solely on regulatory inputs.

3. **In 1996, the BCBS amended Basel I to incorporate a market risk capital charge, signalling a significant shift in its approach to formulating capital regulation.** As part of the enhancements made to Basel I, the BCBS for the first time allowed qualifying banks to use their internal risk measurement models to calculate their market risk capital requirements.

4. **These two developments – linking risk with capital and placing greater emphasis on risk management – have underpinned banking regulation in many jurisdictions around the world.** Over time, banking regulation has become less prescriptive and more principles-based, in order to accommodate product innovation and the evolution of risk management practices at banks.

5. **In response to these regulatory trends, some jurisdictions, starting with the United States in the late 1990s, began modifying their supervisory processes.** In particular, authorities shifted from the traditional compliance-oriented supervisory approach, which emphasised the extent to which banks comply with various laws and regulations, to a more forward-looking framework that has become known as risk-based supervision (RBS).

6. **RBS focuses on allocating scarce supervisory resources to activities that pose the greatest risks to the safety and soundness of individual banks and the banking system.** Its primary objective is to identify and address both current and prospective risks *before* the identified weaknesses affect a bank's financial buffers, including earnings, regulatory capital and liquidity.

7. **As numerous supervisory authorities began adopting RBS, the BCBS introduced its three pillar approach to Basel II in 2006.** Under Basel II[3], Pillar 1 comprised the minimum regulatory capital requirements that are subject to review by both banks and supervisors through Pillar 2 and by the markets through public disclosures under Pillar 3.

8. **Pillar 2 and the supervisory review process (SRP) builds upon the changes that many supervisory authorities had already initiated under RBS.** At its core, Pillar 2 seeks to enhance the risk management practices of banks and to better align capital with risk, including risks not covered under Pillar 1. To facilitate its implementation, the BCBS introduced four key principles to provide a more structured approach to Pillar 2.

9. **Of the four Pillar 2 principles, the first principle is intended for banks while the remaining three are for supervisors.** Principle 1 requires applicable banks to develop an internal capital adequacy assessment process (ICAAP), taking into consideration their material risk exposures. Principle 2 requires supervisors to assess a bank's overall risk profile through a review of the ICAAP, while Principle 3 imposes a supervisory expectation that all banks should operate above the minimum regulatory capital ratios.

[2] Basel Committee on Banking Supervision (1988).

[3] Basel Committee on Banking Supervision (2006).

Principle 4 requires supervisors to intervene at an early stage to prevent capital from falling below the minimum required to support a bank's overall risk profile.

10. **The Basel III reforms, finalised in 2017, led to significant enhancements to Pillar 1 of Basel II, but did not change the four principles of Pillar 2.** Nevertheless, the GFC revealed weaknesses in both supervision[4] and the risk management practices of banks.[5] In response, the BCBS developed supplementary Pillar 2 guidance[6] to address a number of these weaknesses, but the revised guidance did not alter the original four principles of Pillar 2. This is mainly because Pillar 2 is designed to be sufficiently flexible to apply to a wide range of banks, banking systems and supervisory models.

11. **Supervisory review practices evolved following the GFC.** Many supervisory authorities now have a stronger focus on liquidity management as well as recovery plans, both of which feed into the supervisory assessment of a firm's overall risk profile. In addition, many supervisors have placed greater emphasis on developing forward-looking criteria in their risk assessment frameworks, including reviews of bank's business models and evaluations of their culture and behaviour. Collectively, the expanded scope of supervisory activities poses significant implementation challenges, particularly related to the integration of these new areas of focus within their risk assessment frameworks.

12. **Another important focus for supervisors, post-GFC, has become the enhanced oversight of systemically important banks (SIBs), given the potential impact of their failure on the financial system.** In this regard, more intensive and effective supervision of SIBs has been one of the most important policy measures agreed by the global regulatory community.[7] Among other items, this entails allocating greater supervisory resources, increasing the scope and frequency of supervisory activities and setting higher supervisory expectations for risk management, data aggregation capabilities, risk governance and internal controls at SIBs.

13. **The implementation of Pillar 2 requires the exercise of sound judgment[8] and the application of proportionality.** The Pillar 2 standard is intended for internationally active banks. As such, decisions on *whether*, and if so, *which* non-internationally active banks should be subject to ICAAP and related stress-testing requirements are not clear-cut. In addition, varying the intensity of supervision to a bank's systemic importance and risk profile necessarily requires a proportionate approach; and this is premised on the ability of supervisors to accurately assess an institution's overall risk profile, including assessments on the quality of risk management, capital adequacy and liquidity, all of which involve expert judgment.

14. **This paper provides insights on how various countries have implemented the first three principles of Pillar 2, including their application of proportionality.** The findings are based on a survey of 16 BCBS[9] and non-BCBS jurisdictions, covering their Pillar 2 implementation approaches including on supervisory transparency and market disclosures related to the outcomes of their SRP. A key objective of the stock-take is to ascertain whether, and if so, how supervisory requirements and practices regarding the application of Pillar 2 and SRP are differentiated based on a bank's size, risk profile and complexity.[10] The scope of our study also includes the evolution of bank rating systems since the introduction of Basel II, given its critical role in supporting the implementation of supervisory responsibilities under Pillar 2.

4 See Viñals and Fiechter (2010) for further discussion.

5 Senior Supervisors Group (2009).

6 Basel Committee on Banking Supervision (2009).

7 See Financial Stability Board (2010, 2011).

8 See Byres (2019) for further discussion on the role of judgment in supervision.

9 For a Pillar 2 range of practices of BCBS members, see Basel Committee on Banking Supervision (2019).

10 The degree of implementation may also vary based on whether or not the jurisdiction is a Basel Committee member, as non-Basel Committee members are under no obligation or expectation to implement the standards.

15. **This paper is structured as follows.** Section 2 provides an overview of how proportionality is applied in supervision and compares it with the proportionality approaches used in regulation. Section 3 outlines how surveyed jurisdictions apply proportionality to various supervisory requirements that facilitate the implementation of principle 1 of Pillar 2. Section 4 discusses the evolution of bank rating systems since the GFC and their role in varying the intensity of supervision based on an institution's systemic importance and risk. It also provides an overview of the approaches used in the supervisory assessments of governance and capital adequacy. Section 5 provides a brief discussion of the approaches on supervisory transparency and market disclosures of supervisory findings. Section 6 concludes. Annex 1 lists the countries surveyed, while Annex 2 compares the US Federal Reserve's rating system for large financial institutions with the rating system used by the ECB's Single Supervisory Mechanism. Annex 3 outlines the Pillar 2 capital add-on approaches applied in the euro area, Hong Kong SAR and Switzerland.

Section 2 – General considerations for the application of proportionality

16. **The concept of proportionality – tailoring rules to fit the nature, scale and complexity of supervised entities – is perhaps most commonly known in the application of Pillar 1 requirements of the Basel regulatory framework.** In banking regulation, globally harmonised Basel prudential standards are intended to be applied, in principle, to internationally active banks. For smaller or less complex banks, many jurisdictions take a proportionate approach by applying simplified prudential rules to these entities, to avoid excessive compliance costs without undermining key prudential safeguards.[11] In this context, earlier FSI publications identified various proportionality strategies and practices with respect to key Basel regulatory requirements in selected BCBS[12] and non-BCBS[13] jurisdictions.

17. **With respect to supervision, proportionality is also rooted in applicable international standards and contains two dimensions.** The Basel Core Principles (BCPs) for effective banking supervision,[14] the universally recognised minimum standard for the prudential regulation and supervision of banks emphasises the role of proportionality with respect to the expectations on supervisors to carry out their own functions.[15] The proportionality concept is also reflected in BCPs focused on the supervisory assessment of banks' risk management, where there is a general principle that supervisory expectations should be commensurate with a bank's risk profile and systemic importance.

18. **The first dimension focuses on how supervisors incorporate the proportionality principle in carrying out their own supervisory functions.** In this regard, the development and implementation of RBS inherently takes into account the concept of proportionality, by allocating scarce supervisory resources to banks that pose the greatest risks. This, in turn, depends on their risk profile, size and complexity. In doing so, the RBS approach increases the effectiveness and efficiency of supervision, while reducing the supervisory burden placed on smaller, sounder or less complex banks.

19. **The second dimension of proportionality in supervision can be defined as tailoring supervisory expectations for, and assessments of, banks' risks management practices, based on their risk profile, size and complexity.** While tailoring risk management expectations are similar – in some respects – to how proportionality has been implemented in various quantitative Pillar 1 regulatory

[11] See Restoy (2019).

[12] See Castro Carvalho et al (2017) for further details.

[13] See Hohl et al (2018) for further details.

[14] Basel Committee on Banking Supervision (2012).

[15] In particular, BCP 8 (supervisory approach) acknowledges that an effective system of supervision requires the supervisor to develop and maintain a forward-looking assessment of the risk profile of individual banks and banking groups proportionate to their systemic importance. In addition, BCP 9 (supervisory tools and techniques) stipulates that the supervisor should implement the supervisory approach and deploy supervisory resources on a proportionate basis.

requirements, the differentiating criterion is that risk management expectations are inherently qualitative standards, and the tailoring process necessarily involves various degrees of supervisory judgment. In addition, the aforementioned collective set of risk management expectations provides input to front-line supervisors in their supervisory assessments of firm-wide governance and capital adequacy, both of which are key supervisory responsibilities under Pillar 2. These inputs, in turn, help supervisors to form a broader view of a firm's overall risk profile.

20. **In practice, the application of proportionality in supervision involves various degrees of judgment.** In this context, jurisdictions generally follow one (or a combination) of two approaches with respect to setting supervisory expectations on risk management, varying supervisory intensity and assessing governance and capital adequacy.

21. **The first approach is primarily principles-based, relying heavily on supervisory judgment.** Under this approach, jurisdictions typically provide guidance to banks and supervisors in the form of high-level principles (eg "supervisory requirements should be proportionate to a bank's size, nature of activity, complexity and risk profile"; or "supervisory intensity should vary based on the nature, size and complexity"). Such an approach places the responsibility of tailoring within supervisory teams during the SRP. We classify this approach as *"principles-based proportionality that hinges on supervisory judgment*".

22. **The second approach provides more prescriptive guidance, which is supplemented with supervisory judgment.** Under this methodology, authorities provide more explicit guidance to banks and supervisors (eg specifying minimum ICAAP, stress-testing and broader risk management requirements for smaller vs larger, more complex banks or outlining baseline level of supervisory intensity based on size and risk). These differentiated expectations in supervisory requirements or internal supervisory guidance are further overlaid with supervisory judgment to tailor applicable requirements based on a bank's circumstances. We classify this approach as *"guided discretion"*. Table 1 summarises the similarities and differences in regards to the proportionality approaches taken in regulation and supervision.

Proportionality in regulation and supervision Table 1

	Proportionality in regulation	Proportionality in supervision	
	Tailoring prudential requirements	Tailoring various Pillar 2 risk management requirements	Risk-based supervision
Objective	Reduce compliance burden for non-internationally active smaller, less complex banks without compromising prudential safeguards.	Reduce compliance burden based on tailoring supervisory expectations for, and assessments of, banks' risks management practices, based on their risk profile, size and complexity.	Increase effectiveness of supervision through allocation of scarce supervisory resources based on banks' risk profile, size and complexity.
Implementation	Tailoring of rules and regulation.	Typically adopted in two different ways: • *Principles-based proportionality that hinges on supervisory judgment:* authorities provide high-level principles-based guidance to banks and supervisors; responsibility of tailoring is within supervisory teams. • *Proportionality based on guided discretion:* authorities provide more explicit guidance to banks and supervisors; and differentiated expectations in supervisory requirements further overlaid with supervisory judgment to tailor applicable requirements according to a bank's circumstances.	Vary supervisory intensity based on bank's size and risk: • Authorities implement this approach either through supervisory judgment only or through guided discretion.
Implications (some examples)	Regulatory requirements may differ significantly across banks in the same jurisdiction.	• Simpler and streamlined risk management approaches acceptable for smaller, non-complex banks. • Heightened risk management expectations and more sophisticated and formal approaches expected for larger, more complex banks. • The "hurdle" rate to achieve the same supervisory rating for the "management or firm-wide governance" rating may differ for systemically important vs. smaller banks. • Heavily reliant on supervisory judgment.	• More efficient allocation of supervisory resources. • Forward-looking and less compliance-based approach. • Heavily reliant on supervisory judgment. • Alleviates burden for applicable banks (eg less frequent on-site visits).

Section 3 – Pillar 2 supervisory requirements and proportionality

Links between Pillar 2 and the SRP

23. **When the BCBS developed Pillar 2 of the Basel framework in 2006, it introduced a principles-based approach to provide jurisdictions with the flexibility to design their SRP to suit their domestic needs.** As designed, the principles-based approach to Pillar 2 has led to various approaches across jurisdictions.

24. **While all surveyed jurisdictions have some form of a SRP in place, jurisdictions customise how Pillar 2 fits into their overall frameworks.** In some jurisdictions, Pillar 2 is viewed as being closely aligned with or even identical to the SRP.[16] In contrast, other jurisdictions view Pillar 2 primarily as a mechanism to better link capital with risk. These jurisdictions view Pillar 2 as one element of a broader risk-based SRP. Regardless of these differences, all surveyed jurisdictions have detailed internal guidance to help support their domestic implementation of the SRP.

25. **Therefore, some countries refer to Pillar 2 reviews as their process for assessing capital adequacy, while others view Pillar 2 reviews as synonymous with the broader SRP.** Regardless of these interpretational differences, the SRP in all surveyed jurisdictions includes a combination of on- and off-site supervision; and these methodologies are used to assess an institution's overall risk profile and to ensure that an institution's financial buffers and risk management practices are aligned with their overall risk profiles.

Pillar 2 supervisory requirements and proportionality – an overview

26. **The majority of surveyed jurisdictions have adopted key supervisory requirements to facilitate the implementation of principle 1 of Pillar 2.** Survey results indicate that nearly all jurisdictions in our sample (15 of 16 authorities) impose – at least for some banks – specific requirements for an ICAAP and to perform stress tests. Recovery planning requirements have also been introduced in 12 of 16 surveyed jurisdictions.

27. **A proportionate approach is taken by nearly all jurisdictions that have introduced ICAAP, stress-testing and recovery planning requirements.** While approaches vary, there are two ways in which proportionality is applied: in some jurisdictions, certain banks are exempt from applicable requirements; and, second, when requirements are imposed, supervisory expectations generally vary according to a bank's size, risk profile or complexity. Table 2 provides further details of the adoption status and proportionality practices of Pillar 2 regulatory requirements among surveyed jurisdictions.

[16] In the European Union (EU), for instance, the Supervisory Review and Evaluation Process integrates Pillar 2 into ongoing supervision, encompassing the entire supervisory cycle (eg risk assessment and scoring, quantitative and qualitative supervisory activities, and both on- and off-site and supervisory actions).

Adoption of Pillar 2 supervisory requirements and proportionality — Table 2

Regulatory requirements	# of jurisdictions that have adopted Pillar 2 requirements	# of jurisdictions applying proportionality in implementation	Methods used to apply proportionality
ICAAP	15	15	• Four jurisdictions exempt subset of banks; and when rules are imposed, requirements can be tailored. • 11 jurisdictions do not exempt any locally incorporated banks, but can tailor requirements to bank's size, complexity and risk profile.
Stress testing	16	15	• One jurisdiction exempts subset of banks; and when rules are imposed, requirements can be tailored. • 14 jurisdiction do not exempt any locally incorporated banks, but can tailor requirements to bank's size, complexity and risk profile.
*Recovery plans	12	12	• Six jurisdictions exempt subset of banks and when rules are imposed, requirements can be tailored. • Six jurisdictions do not exempt any locally incorporated banks, but can tailor requirements to bank's size, complexity and risk profile.

*Note, while recovery plans are not part of the original Pillar 2 requirements, following the GFC, many countries have imposed such requirements as a means of informing their supervisory risk assessments.

28. **The criteria used to exempt certain banks from applicable Pillar 2 requirements vary.** With respect to ICAAP and stress testing, a few countries use official bucketing methods to exempt a subset of their banks from applicable requirements, but the segmentation criteria vary across jurisdictions (eg size and cross-border activity, legal charter/scope of business activities). In other jurisdictions, the exemption criteria are driven by the complexity of risk models used by applicable banks. The imposition of recovery plans are most often subject to exemptions across surveyed countries (six jurisdictions) with a general tendency to exempt banks that are not designated as G-SIBs and D-SIBs from the rules. Refer to Tables 4 and 5 for further details.

29. **When ICAAP, stress-testing and recovery planning requirements are imposed, authorities take one of two approaches in applying proportionality.** The first approach, which is principles-based, relies heavily on the judgment of supervisory teams to take a proportionate approach and this method is commonly used in tailoring ICAAP and stress-testing requirements. The second approach uses a combination of hard-wired proportionality overlaid with supervisory judgment (which we label as "guided discretion"). This approach is most commonly used in tailoring recovery planning requirements. Table 3 provides a summary of the approaches used in surveyed jurisdictions.

Approaches used to tailor supervisory requirements — Table 3

Regulatory requirements	# of jurisdictions applying proportionality	Principles-based proportionality that hinges on supervisory judgment	Proportionality based on guided discretion
ICAAP	15	12	3
Stress testing	15	9	6
Recovery plans	12	5	7

ICAAP and stress testing

30. **Principle 1 of Pillar 2 requires banks to have an ICAAP and a strategy for maintaining their capital levels.** While such requirements are technically applicable for internationally active banks, nearly all jurisdictions in our sample have elected to extend the ICAAP and stress-testing requirements to at least some non-internationally active banks operating in their respective countries.

31. **Nearly all countries that impose ICAAP and stress-testing requirements apply proportionality, with some countries exempting a subset of their banks from the applicable rules.** With respect to the ICAAP, the criteria used to trigger the exemptions varies, as shown in Table 4. In addition, only one country exempts a subset of banks that fall below an asset size threshold from stress-testing rules.

Basis for exemption from ICAAP requirements — Table 4

# of jurisdictions that impose ICAAP requirements	# of jurisdictions that exempt some banks	Criteria used to exempt banks
15	4	Example 1 • Banks are placed in five categories (S1, S2, S3, S4 and S5). • S3 to S5 banks are exempt from ICAAP rules (they represent 120+ smaller banks). Example 2 • Two types of bank are exempt: banks under the standardised approach to credit risk; and subsidiaries of local banking groups (where ICAAP is conducted at the group level). Example 3 • Standalone thrift, rural and cooperative banks are exempt. Example 4 • Banks under the advanced internal rating based (A-IRB) approach are subject to ICAAP requirements; all other banks are exempt.

32. **When banks are expected to follow ICAAP and stress-testing requirements,[17] authorities tend to provide principles-based guidance and leave the tailoring to the discretion of supervisory teams.** Some authorities, however, combine "hard-wired proportionality" – where certain requirements are differentiated in regulation/supervisory guidance – with supervisory judgment. Examples of jurisdictions that follow the "guided discretion" approaches are outlined in Table 5 below.

[17] Stress-testing requirements specified in this paper refer to micro-level stress tests for bank-specific risks. They do not refer to the system-level stress tests that are conducted by several supervisory authorities.

Examples of guided discretion used in ICAAP and stress-testing assessments — Table 5

Regulatory requirement	# of jurisdictions that follow this approach	Examples of guided discretion
ICAAP	3	Example 1 • Banks are placed in five categories (S1, S2, S3, S4 and S5); and some ICAAP requirements only apply to S1 banks (six largest banks). Example 2 • A-IRB banks must submit the results of their ICAAP annually and must submit a quarterly comparison of economic capital with regulatory capital and description of changes that were made to Pillar 2 models. • Standardised approach banks are expected to update the ICAAP and required to submit the results of their ICAAP only upon request. Example 3 • Group risk assessment not required for firms for which the jurisdiction is not the consolidated supervisor. • Smaller firms are not required to complete certain operational risk data.
Stress testing	6	Example 1 • Banks are placed in five categories (S1, S2, S3, S4, and S5); requirements differ based on bank segmentation (S2 banks are exempt from incorporating the reverse stress test methodology; S3 banks are exempt from scenario analysis methodology and reverse stress tests etc). Example 2 • D-SIBs are required to have three to five scenarios and need to demonstrate that they can conduct ad hoc stress tests on specified current topics. • Small banks: three predefined scenarios provided: real estate decline, interest rate shock and reverse stress test. Example 3 • IRB banks required to have more granular portfolio data and regular model validation; small and mid-sized banks allowed to have less granular data. Example 4 • Local conglomerates where the home supervisor requires to include stress testing at group level. • Each financial institution provided with different values by the supervisor to estimate impairment of the portfolio. Example 5 • Standalone thrift, rural and cooperative banks have simpler requirements on minimum sensitivity tests covering credit, liquidity and operational risks. Example 6 • Stress scenarios for smaller banks simpler than for larger banks.

Recovery planning

34. **Following the GFC, several jurisdictions have introduced recovery planning requirements to at least a subset of their banks.** Based on our study, 12 of 16 sampled jurisdictions have introduced recovery planning requirements to help banks better prepare for periods of financial stress and to help expedite the recovery process.

35. **All jurisdictions that impose recovery plans take a proportionate approach, with six authorities exempting smaller banks from applicable rules.** The most common exemption criterion is driven by whether or not a firm is designated as a G-SIB or D-SIB. This approach suggests that the focus of the recovery plans in a number of surveyed jurisdictions is on systemically important banks, given the implications that their failure may have for their respective domestic economies. Table 6 specifies the exemption criteria applied in surveyed countries.

36. **When recovery plans are imposed on applicable banks, a slight majority of jurisdictions adopt a proportionate approach by applying a "guided discretion" approach, while the remainder provide high-level principles and defer to the judgment of supervisory teams.** As noted earlier, the principles-based method allows supervisors with the maximum flexibility to tailor recovery planning requirements based on a bank's overall size, complexity or risk profile. The "guided discretion" approach, on the other hand, imposes differentiated recovery planning requirements in applicable supervisory guidance, which is supplemented with supervisory judgment during the evaluation process. Examples of the latter approach are outlined in Table 7.

Basis for exemption from recovery planning requirements — Table 6

# of jurisdictions that require recovery plans	# of jurisdictions that exempt subset of banks from recovery plans	Criteria used to exempt banks
12	6	Example 1 • Banks with a total exposure/GDP ratio of more than 10% are required to develop a recovery plan; all other banks are exempt. Example 2 • Small banks may be exempt from recovery plans (based on risk-based decision of supervisory authority). Examples 3, 4 and 5: similar criteria used • Banks that are not designated as systemically important banks (D-SIBs or G-SIBs) are exempt from recovery planning requirements. Example 6 • Banks with total consolidated assets of equal to or greater than $50 billion are required to submit a recovery plan; if less than $50 billion, a recovery plan is required if it was previously required to submit a plan or if the supervisor determines the bank is highly complex or presents heightened risks.

Examples of guided discretion used in recovery planning assessments — Table 7

# of jurisdictions that follow this approach	Criteria used to apply proportionality
7	Example 1: • While the same recovery plan principles apply to all banks, the jurisdiction has issued two different recovery plan technical notes: one for D-SIBs and another for non-D-SIBs. Therefore, recovery plans for smaller and medium-sized firms are expected to be less complex than for D-SIBs. Examples 2, 3 and 4: similar criteria • Recovery plan requirements for smaller firms are different to those for larger entities. Example 5 • Detailed guidelines specify minimum requirements for local banking groups vs less complex locally incorporated banks. Example 6 • Local conglomerates (eg if the jurisdiction is in-charge of consolidated supervision) are required to develop recovery plans on a group basis, considering the holding company and local and overseas subsidiaries and branches. • Locally incorporated banks owned by foreign financial groups that account for local and downstream operations are required to submit recovery plans (ie all material subsidiaries and branches in country and overseas). Example 7 • Different frequency for different banks.

Section 4 – Bank rating systems and the SRP

Overview of bank rating systems

37. **Supervisory rating scales (hereafter referred to as "bank rating systems") play an integral role in supporting the implementation of the supervisory responsibilities under Pillar 2.** The design and application of bank rating systems are particularly critical as they are the primary mechanism used to (i) determine the risks posed by each regulated entity (principle 2); (ii) impose supervisory requirements that banks operate above the minimum regulatory capital requirements and in line with their overall risk profile (principle 3); and (iii) intervene at an early stage to address identified shortcomings in their financial condition or risk management practices (principle 4). As bank rating systems help to differentiate the risk profiles of regulated entities, they also help authorities to ensure that the intensity of supervision is proportionate to the identified risks posed by each supervised entity.

38. **Bank rating systems generally fall into one of two broad categories.** While each surveyed jurisdiction may have its own acronym for their bank rating system, we classify bank rating systems into one of two distinct models for the purposes of this paper. Approximately 30% of jurisdictions in our sample use a rating system that is at least partially based on the CAMELS methodology while the vast majority of the remaining authorities use what we classify as a "risk profile" rating system. A few countries in the sample use both CAMELS and risk profile rating systems side by side. Graphs 1 and 2 provide an illustration of the CAMELS and risk profile rating systems, respectively.

39. **The CAMELS rating system was one of the first scoring models developed by prudential authorities**. The CAMELS rating system, initially developed by the United States in 1979,[18] is premised on the notion that a bank's main sources of risk arise from financial risks – such as credit, liquidity and market (including interest rate) risks. While all six CAMELS components – in theory – are given equal weight, in practice, the assessment of the "management" (or firm-wide corporate governance) component often drives the overall composite rating assigned to a bank under this system. On the other hand, the CAMELS rating system becomes more difficult to implement in supervised institutions that are exposed to material non-financial risks, for example, such as operational, reputational and strategic risks.[19]

Graph 1: CAMELS rating system

CAMELS rating system	
Capital	• Composite rating assigned based on five-point scale
Asset quality	
Management	
Earnings	
Liquidity	
Sensitivity to market risk	

40. **The risk profile rating system is technically more complex than CAMELS, but gives authorities greater flexibility to take account of the various types of inherent risks at each supervised entity.** The risk profile rating system involves at least a five-step process that demands multiple levels of judgment and aggregation by front-line supervisors (Graph 2). In this context, as the number of inherent risks assessed at each entity increases, the aggregation of the consolidated net risk of each regulated entity becomes commensurately more difficult for front-line supervisors. Moreover, it is important to note that jurisdictions that have adopted the risk profile rating system have no uniform set of inherent risk categories that are subject to the SRP.[20]

[18] The initial framework developed in 1979 was known as CAMEL. In 1996, US regulators amended the CAMEL rating by adding an "S", which stands for sensitivity to market risk. See FDIC (1997) for further discussion of the CAMELS rating system.

[19] To account for non-financial risks, some jurisdictions have adopted a modified version of CAMELS, for example, the CAMELSO, where the 'O" represents operational risk.

[20] Based on our survey, inherent risk categories range from four to 10 or more. Some jurisdictions prefer to review each inherent risk category separately (for example, legal and reputational risks), while others have a lesser number of categories and consider some inherent risks (such as IT and reputational risk) as part of a broader category such as operational risks.

Graph 2: Risk profile rating system – stylised example

Step 1: identify inherent risks	Step 2: assess risk control systems	Step 3: assess net risk	Step 4: assess financial support	Step 5: assign composite rating
• Credit • Market • Liquidity • Operational • Legal • Reputational • Strategic	• Risk management and controls. • Board and senior management oversight. • Internal audit, compliance.		• Earnings • Capital	• Component and overall ratings for net risk and financial support typically based on four-point scale; some jurisdictions have three-point scales. • Overall composite ratings are typically based on four-point scale; some countries use three-point scale.
Overall rating				
Assessed at business line, institution or group level			Assessed at institution or group level	

41. **Both CAMELS and risk profile rating systems contain features that allow supervisors to take a proportionate approach in their application to supervised entities.** The CAMELS rating system is particularly well suited for assessing the risks at smaller or non-complex banks if the primary sources of risk arise from asset quality, liquidity or market risks. The risk profile rating system, on the other hand, allows supervisors to take a broader range of inherent risks into consideration, while determining which of them are most relevant for each supervised entity. For example, the largest, most complex banks may be exposed to more inherent risks than smaller, non-complex banks; and supervisors are generally given the discretion to determine which inherent risks needs to be assessed as part of the SRP.

Post-crisis evolution of bank rating systems

42. **Following the GFC, several jurisdictions have enhanced their bank rating systems to take account of the risk management and supervisory shortcomings identified during that time.** In this context, three of the most consequential changes made by a number of authorities include the greater prominence given to the "liquidity", "firm-wide governance/management" and "strategic risk" assessments (eg the strategic risk assessment was reinforced as part of the assessment of banks' business models, mainly in European Union (EU) jurisdictions) in their supervisory frameworks.

43. **In making these enhancements, authorities have taken various approaches.** Some authorities that have adopted the "risk profile" rating system have modified their existing systems (Graph 3) to emphasise the importance of liquidity and governance assessments, such that it can more easily influence the overall risk rating of a firm. Other jurisdictions, mainly in the EU, introduced a new rating methodology altogether (which we classify as "risk profile +") as part of their broader efforts to harmonise supervisory practices in the EU (Graph 4).

44. **Jurisdictions that apply the CAMELS system did not need to make some of these changes.** This is because the initial design of the CAMELS rating system already provides for a significant role for the "liquidity" and "management" component assessments.

45. **Notwithstanding the enhancements made to bank rating systems, emerging sources of risk pose new supervisory challenges.** These risks include, among other items, cyber risk, the evaluation of culture and behaviour of banks and climate-related risk. Among the most fundamental challenges confronting prudential authorities is how best to assess and integrate such risks into their existing rating systems.

Graph 3: Modified risk profile rating system – stylised example

Step 1: identify inherent risks	**Step 2: assess risk control systems**	**Step 3: assess net risk**	**Step 4: firm-wide governance assessment**	**Step 5: liquidity assessment**	**Step 6: assess capital and earnings support**	**Step 7: assign composite rating**
Overall rating						
Assessed at business line, institution or group level			Assessed at institution or group level			

Graph 4: Risk profile "+" rating system – stylised example (EU model)

Business model analysis	**Firm-wide governance and controls**	**Capital adequacy assessment**	**Liquidity assessment**	**Overall score/composite rating**
• Accentuates importance of strategic risk assessment as part of a broader review of bank business models.	• Accentuates importance of governance assessment.	• Combination of inherent risks, risk controls, net risk and own funds and stress testing.	• Accentuated importance of liquidity and funding risk assessment and of liquidity and funding resources held by banks.	• Component and composite ratings assigned on a four-point scale.

Intensity of supervision

46. **While nearly all surveyed jurisdictions tailor supervisory intensity[21] based on both risk and systemic importance, the methods used vary across countries.** In particular, some jurisdictions use a balance of prescriptive guidance and supervisory judgment, while others set out only high-level principles and allow greater latitude to supervisory teams to determine the intensity of supervision at each regulated entity. Regardless of the approach used, the variation in supervisory intensity involves both the frequency of on-site inspections and the scope of planned oversight activities at each supervised entity.

47. **Several jurisdictions have developed formalised mechanisms to integrate systemic importance with bank ratings to determine the intensity of supervision.** For presentation purposes, we label these approaches as "guided discretion" (hard-wired proportionality that is combined with supervisory judgment). In nearly all cases, the systemic importance (or impact) factor – which in several cases is related to the regulatory authorities' applicable criteria for identifying a systemically important bank – is the more important variable and imposes a baseline level of supervisory intensity. In other cases, a simple size threshold automatically triggers more intense supervision. Examples of some of these approaches are depicted in Table 8.

[21] See Financial Stability Board (2010) for a detailed discussion on the recommendations made to enhance the quality of supervision at systemically important firms following the GFC.

Examples of guided discretion used in determining supervisory intensity

Table 8

Jurisdiction examples	Supervisory intensity methodology		
	Criteria	**Priority**	**Frequency**
Example 1	SIFI designation (based on bank regulatory segmentation criteria)	High	Annual on-site exam
	Risk profile rating – "4"	High	Annual on-site exam
	Risk profile rating – "3"	Medium-high	Annual on-site exam
	Risk profile rating – "2"	Medium	Biennial exam
	Risk profile rating – "1"	Low	Triennial exam

	Criteria	**Frequency and scope of activities**
Example 2	Assets < USD 3 billion and composite CAMELS of "1" or "2" and "management" rating of "1" or "2"	Full-scope exam every 18 months
	All other banks	Full-scope annual exam

	Criterion: each institution is categorised into four buckets based on systemic importance and cross border activity	**Baseline scope of activities**	**Supervisory overlay**
Example 3	Category 1 banks: G-SIBs	Annual assessment of all component and overall bank ratings	Higher intensity required, regardless of institution category, for banks with poor supervisory ratings
	Category 2 banks: large and medium-sized banks that are not in category 1	Annual overall bank rating summary Assessment of component bank ratings every two years Quarterly monitoring	
	Category 3 banks: small to medium sized banks	Annual overall bank rating summary Assessment of component ratings every three years Quarterly monitoring	
	Category 4 banks: all other non-complex banks	Annual overall bank rating summary Assessment of component ratings every three years Quarterly monitoring	

48. **Other jurisdictions follow more principles-based methodologies that require supervisory teams to tailor supervisory intensity depending on the nature, size, complexity and risk profile of supervised banks.** Jurisdictions that follow this approach have less hard-wired mechanisms and rely more extensively on supervisory judgment to ensure that sufficient resources and activities are allocated to higher-risk and systemically important financial institutions.

49. **Regardless of the methods used, tailoring supervisory intensity to bank-specific circumstances involves the use of sound supervisory judgment.** In this regard, jurisdictions that have introduced hard-wired mechanisms to integrate bank risk ratings and systemic importance when determining supervisory intensity generally limit the role of judgment, as compared with authorities that follow principles-based approaches. This is because the impact assessment criterion provides for a minimum level of supervisory engagement. Nevertheless, the bank viability (risk) rating still continues to play an important role in determining the scope and frequency of supervisory activities.

Supervisory assessments of firm-wide governance

50. **All except one of the surveyed jurisdictions (15 of 16) apply proportionality in setting the supervisory expectations for banks' firm-wide risk management practices.** In doing so, most countries use high-level, principles-based guidance as the mechanism for taking a proportionate approach ("risk management and governance standards should be commensurate with the bank's size, complexity or risk profile") and delegate the responsibility for tailoring to supervisory teams.

51. **The higher risk management expectations for SIBs, as part of the broader reforms to address the "too-big-to-fail" problem, provide an added proportionality dimension.** In this regard, some authorities have developed heightened expectations for larger and more complex banks regarding their measurement of risks, data aggregation capabilities, risk governance and internal controls. The heightened expectations may also extend to enhanced requirements for non-executive board members overseeing larger and more complex banks. These expectations, however, are rarely voiced in the form of prescriptive guidance and it is incumbent upon the supervisory teams to determine, through the SRP, whether SIBs meet them.

52. **Few jurisdictions have imposed "hard-wired", differentiated risk management expectations based on a bank's size, risk profile or complexity.** When they do, it typically involves minimum criteria surrounding the structure, composition and independence of board members/committees. One surveyed jurisdiction provides somewhat more explicit guidance on minimum risk management/measurement expectations for credit, liquidity and operational risks for smaller banks versus larger, more complex banks (Table 9).

Varying risk management standards for small and large banks – country example of guided discretion

Table 9

Risk categories	Varying risk management standards	
	Large banks	Small banks
Credit risk	• Loan loss provisioning methodology can reasonably estimate expected loan loss provisions in a timely manner.	• Subject to simplified, but more stringent loan loss provisioning rules.
Liquidity risk	• Liquidity risk management models can include dynamic approaches and a range of techniques.	• Static approach to liquidity management is allowed.
Operational risk	• Utilise more sophisticated tools in identifying and assessing operational risk exposures, including, but not limited to risk self-assessments, scenario analysis, business process mapping or model measurement.	• Can use results of internal/external audits and supervisory issues raised as part of on-site and internal loss data collection analysis.
Stress testing	• Acceptable methodologies include sensitivity analysis, scenario analysis and reverse stress tests.	• Use of simple sensitivity analysis covering credit, liquidity and operational risks.

53. **The supervisory assessment of board oversight and firm-wide governance, perhaps more than any other rating factor, is heavily reliant on expert judgment.** In order to arrive at a "proportionate" risk assessment, supervisors must first make judgments on numerous principles-based supervisory expectations (on whether a firms' ICAAP, stress testing, risk measurement systems, data aggregation capabilities, and internal controls and compliance management programmes) are commensurate with the systemic importance, complexity or risk profile of each entity. Second, they have to synthesise each of these elements to form an overall view of firm-wide governance.

54. **The design of bank rating systems can influence the supervisory assessment of board oversight and governance.** Under the CAMELS rating system, the "M" or management rating can become

burdened as it becomes the "default" category to incorporate various other factors (eg operational risk, legal and reputational risk, cyber risk etc) that cannot be easily captured elsewhere in the rating system. Under the "risk profile" rating system, the focus of board oversight and governance – in some jurisdictions – is often based on an assessment of various inherent risks at the individual business line level. As such, it may be somewhat more challenging for supervisors to form an aggregate view of firm-wide risk governance. Following the GFC, some authorities have introduced "modified risk profile" rating systems (Graph 3) or developed new rating methodologies such as in the EU (Graph 4 – "risk profile +") that embeds the importance of firm-wide governance in their rating system architecture.

55. **The extent to which new areas of supervisory focus are considered in the firm-wide governance assessments can also influence rating outcomes.** In this context, there is no uniform consensus amongst surveyed jurisdictions, on *whether*, and if so, *how* new areas of supervisory attention, such as recovery planning, compensation programs and conduct and culture are factored into the supervisory assessment of board oversight and governance.

Supervisory assessments of capital

56. **Supervisory authorities apply various methods to ensure that banks operate above the minimum Pillar 1 regulatory capital requirements of the Basel framework.** While a few jurisdictions impose higher Pillar 1 capital requirements than applicable Basel standards, almost all surveyed jurisdictions can impose additional capital requirements under Pillar 2 (hereafter referred to as "capital add-ons"). In addition, the way that Pillar 2 capital add-ons are determined and applied varies across jurisdictions. Table 10 summarises the approaches taken in sampled jurisdictions to ensure that banks meet the expectation – under principle 3 of Pillar 2 – that they operate above the minimum Pillar 1 capital requirements.

Supervisory implementation of principle 3 of Pillar 2 – banks should hold capital above regulatory minima

Table 10

Supervisory powers and tools	# of jurisdictions
Pillar 1 capital requirements > Basel minimum	5*
Powers to impose Pillar 2 capital add-ons and applied in practice?	15**

* Minimum risk-based capital ratios range from 9 to 10%.

** Includes one authority that has powers to impose Pillar 2 add-ons for idiosyncratic risk but has not yet done so. This authority, however, has imposed domestic stability buffers under Pillar 2 for their D-SIBs.

57. **All Pillar 2 capital add-ons are bank-specific and typically entail various degrees of supervisory judgment.** Table 11 shows that jurisdictions take one of three approaches in determining Pillar 2 capital add-ons. On one end of the spectrum are jurisdictions (four) that take a holistic approach and rely primarily on the expert judgment of supervisory teams to determine whether, and if so, how large a capital add-on is needed ("supervisory judgment"). At the other end, is one authority that limits the role of supervisory judgment and has therefore developed quantitative methods to determine Pillar 2 add-ons ("primarily mechanistic"). Most countries (10) take a middle-of-the-road approach, which includes degrees of prescriptive guidance that are supplemented with supervisory judgment ("guided discretion")

Determination of Pillar 2 capital add-ons		Table 11
Type of determination	Examples of how jurisdictions determine capital add-on	# of jurisdictions
Supervisory judgment	Holistic assessment: decision whether to impose a capital add-on, and the size of the Pillar 2 add-on, is based on information from the full range of supervisory activities (on-site, off-site, supervisory ratings and ICAAP reviews).	4
Guided discretion	• Pillar 2 add-on ranges are tied to supervisory bank ratings and combined with expert judgment. • Supervisory methodologies for Pillar 2 add-ons for individual risk categories are used and supplemented with additional supervisory judgment on the bank's business model, risk profile and whether the firm is well managed. • Add-on based on supervisory review but subject to a floor (minimum add-on) of 0.25%. • Supervisor's ICAAP calculator generates a capital target that is subject to supervisory judgment before deciding to use it as a starting point for the determination of Pillar 2 add-ons. • Capital add-ons for concentration risk, pension risk and interest rate risk based on quantitative methods (no judgment); there may be additional capital add-ons for other risk management shortcomings if needed (judgment involved). • Use of stress test results combined with supervisory view on various risk management deficiencies. • A significant part of the capital add-on is automatically linked to banks' categorisation (no judgment), while the other part is based on the risk assessment/profile of the bank (supervisory judgment).	10*
Primarily mechanistic	• All add-ons based on standardised, quantitative methods (no judgment involved).	1

One jurisdiction has been classified under "guided discretion" mainly because it leverages the results of its stress tests combined with a qualitative overlay to determine capital requirements for its large banks. This jurisdiction's approach for determining capital adequacy at smaller banks would otherwise be classified under "supervisory judgment" as its review of capital adequacy is based on expert judgment and the supervisor's holistic assessment of a firm's overall risk profile.

58. **Jurisdictions that impose Pillar 2 add-ons have no uniform approach on what the add-ons should cover and how they interact with the capital buffers introduced under Basel III.** There are numerous objectives for the Pillar 2 capital add-on, which include covering non-Pillar 1 risks (eg interest rate risk in the banking book); risks that are not fully captured by Pillar 1 (eg aspects of credit risk); possible underestimation of Pillar 1 risks (eg risk weights for standardised approaches may be too low or modelling errors under the IRB approaches); factors external to the bank (business cycle/systemic risks); or qualitative considerations (eg deficiencies identified in banks' internal governance, banks' risk management control frameworks etc). Most of the surveyed jurisdictions apply Pillar 2 capital add-ons in the form of just one capital add-on. Some countries however differentiate more explicitly and the Pillar 2 add-on is achieved in different ways. Annex 3 provides examples of practices in the EU, Hong Kong SAR and Switzerland.

59. **The application of proportionality is not a main feature of Pillar 2 capital add-ons.** Only a few jurisdictions incorporate proportionality in some manner during the Pillar 2 capital add-on process. This includes two authorities where Pillar 2 add-ons are, in part, based on a firm's systemic importance. Two other authorities apply different methodologies for the application of Pillar 2 add-ons for smaller versus larger banks.[22]

[22] For example, in one jurisdiction, the determination of capital add-ons at large banks is based on the results of stress testing, while for smaller institutions, a holistic assessment of a bank's overall risk profile based on supervisory judgement is used.

Section 5 – Transparency and market disclosure

60. **The outcomes of the SRP can materially alter banks' reported financial condition and risk profile.** Therefore, banks have a vested interest in understanding both the risk assessment methodology and the supervisory ratings assigned to them as these are often the basis for supervisory actions. Similarly, market participants (eg rating agencies, bank investors and large depositors) may have a desire for information on the measures imposed by the supervisory authority, particularly if they have a material bearing on a bank's overall condition.

61. **The majority of surveyed jurisdictions disclose their risk assessment methodology and share their overall supervisory ratings with banks.** The level of detail and the extent to which ratings are shared however, varies. While 14 jurisdictions share the overall risk assessment with banks, only eight jurisdictions also communicate the subcomponent ratings, including the individual governance scores (Table 12). The lower number of jurisdictions that disclose the subcomponent ratings (including "governance") may reflect their views that the disclosure of individual scores could divert board and senior management attention to the scores themselves rather than the underlying issues. On the other hand, the disclosure of the "governance" rating, in particular, provides the board and senior management with an unambiguous view of the supervisory authority's assessment of their collective performance.

Transparency — Table 12

	Shared with the institution (# of jurisdictions)	Not shared with the institutions (# of jurisdictions)	Proportionality applied (where it is shared)
Risk assessment/bank rating methodology	10	6	• None
Overall supervisory risk assessment (bank ratings)	14	2	• In one jurisdiction, it is shared only in the case of D-SIBs. • In one jurisdiction, it depends on the overall score and riskiness of the bank.
Subcomponent/ Governance score	8	8	• One jurisdiction shares only with D-SIBs.

62. **In a few cases, proportionality – based on risk and size – is taken into consideration in determining whether to disclose bank ratings.** In this context, two countries share the overall risk scores and subcomponent scores only with large banks, or only with banks with low ratings.

63. **In regard to public disclosures, the vast majority of jurisdictions do not disclose and some even prohibit banks from disclosing quantitative capital add-ons.** Other jurisdictions leave it to the banks to decide whether to disclose. Only five jurisdictions disclose quantitative Pillar 2 add-ons, either directly through the supervisory authority (four jurisdictions) or by requiring banks to disclose (one jurisdiction). None of the surveyed jurisdictions publicly discloses risk assessments or ratings. Table 13 summarises public disclosure practices.

Public disclosure			Table 13
	Publicly disclosed (# of jurisdictions)	Not publicly disclosed (# of jurisdictions)	Proportionality applied (where it is disclosed)
Risk assessment/scores	0	16	
Quantitative Pillar 2 requirements	5	11	• One jurisdiction discloses only for large banks. • One jurisdiction discloses only for some banks as a punitive measure. • One jurisdiction only discloses if the rating is below a specific level (banks under "formal actions").
Qualitative Pillar 2 requirements	3	13	• One jurisdiction only discloses for some banks as a punitive measure. • One jurisdiction discloses if the rating is below a specific level (banks under "formal actions").

64. **Proportionality plays a limited role in determining whether to publicly disclose quantitative or qualitative measures taken under Pillar 2.** In this regard, three jurisdictions publicly disclose quantitative measures for large banks, problem banks or as a punitive measure based on bank-specific circumstances. Only two jurisdictions publicly disclose qualitative measures for banks that are under "formal actions" or as a punitive measure.

Section 6 – Concluding remarks

65. **Proportionality is inherent in supervision and contains two dimensions.** The first element entails tailoring supervisory expectations for banks according to their size, risk profile and complexity. The same principle applies to assessing banks' risk management practices. The second dimension focuses on how supervisors allocate scarce supervisory resources to banks based on their business models, systemic importance and risk. This latter process has become known as RBS.

66. **RBS was adopted in many jurisdictions before the advent of Pillar 2.** Linking risks with regulatory capital in Basel I, including the introduction of the internal models based approaches to capital regulation, required supervisors to shift from compliance-based to risk-based supervisory activities. Under RBS, a key aim is to identify and address both current and prospective risks before the identified weaknesses affect bank earnings and regulatory capital.

67. **The adoption of Pillar 2 formalised the supervision by risk approach internationally, by explicitly linking the need to assess a bank's risk profile and capital adequacy during the SRP.** By the design of the Basel Pillar 2 framework, jurisdictions use a variety of approaches in determining how Pillar 2 and RBS interact in day-to-day supervision.

68. **Supervisory practices have evolved significantly, following the GFC.** First, supervisory intensity has been significantly enhanced for systemically important banks. This has contributed towards applying a more proportional approach by which supervisory expectations for a firm have become more tailored to its size, risk and complexity. In addition, Basel III significantly expanded Pillar 1 requirements by introducing new rules on leverage, liquidity and capital buffers; and these enhancements have expanded

the scope of supervisory activities to better ensure that the new Pillar 1 requirements reflect a firm's risk profile and systemic importance.

69. **Supervisory rating systems are important drivers of supervisory actions in all jurisdictions and contain features that facilitate proportionate risk assessments.** There are two broad types of rating system in use, with various permutations in between. The traditional CAMELS rating system is prevalent in many jurisdictions and is particularly well suited for assessing the risk profile of smaller and less complex banks, particularly if the primary sources of risk are financial in nature. The risk profile rating system, which is more complex than CAMELS, allows supervisors more flexibility in determining which inherent risks need to be assessed at each supervised entity level and in tailoring supervisory activities accordingly.

70. **Post-crisis enhancements to supervision have led to important changes in supervisory rating systems.** Many authorities have given more prominence to the "liquidity risk" and "firm-wide governance" component assessments in determining the overall risk rating assigned to a firm. Other jurisdictions, mainly in the EU, have introduced an altogether new rating system that elevates the importance of assessing banks' business models, strategies and internal governance in their risk rating framework.

71. **Almost all jurisdictions apply proportionality when adopting rules for ICAAP, stress testing and recovery plans.** Nearly all tailor rules and supervisory expectations according to size, risk and complexity. In addition, some countries exempt smaller and less complex banks from applicable requirements, especially from developing recovery plans.

72. **Supervisory expectations for risk management requirements and governance differ based on bank-specific features such as size, risk profile and complexity.** Setting supervisory expectations for banks' governance practices and assessing them are critical features of supervision in all jurisdictions. As such assessments are inherently qualitative, most jurisdictions rely on the judgment of supervisors to arrive at a proportionate risk assessment.

73. **Pillar 2 capital requirements are bank-specific and entail various degrees of judgment.** Applying Pillar 2 capital add-ons is a common practice, with most jurisdictions applying guided discretion when determining the capital add-ons, although their methodologies differ. A few jurisdictions take a holistic approach, relying primarily on supervisory judgment to determine the size of capital add-ons, if any. The interaction of Pillar 2 capital add-ons with Basel III capital rules, including buffer requirements and potential offsetting arrangements, also varies across jurisdictions.

74. **Proportionality plays a limited role in determining whether to publicly disclose supervisory measures taken under Pillar 2.** Public disclosure of Pillar 2 supervisory measures is limited, with only a few jurisdictions disclosing quantitative or qualitative measures based on either a firm's risk or size. On the other hand, most authorities share with each bank its overall supervisory rating/score, but without communicating the subcomponent ratings so as to avoid diverting banks' attention from underlying issues.

75. **Supervisors may benefit if Pillar 2 implementation becomes the central area of focus, following the finalisation of Basel III.** Post-crisis enhancements to supervision have been significant and have led to changes in supervisory practices. Collectively, these developments have expanded the scope of supervisory activities under Pillar 2. A greater emphasis on Pillar 2, reflecting the role of supervision in the post-Basel III era, can help to support a robust implementation of the post-crisis reforms. Meanwhile, ongoing cross-jurisdiction cooperation will lead to greater information exchange on the approaches used in implementing Pillar 2. In turn, this can help prudential authorities to better tailor their supervisory frameworks to their jurisdiction's specific needs.

References

Basel Committee on Banking Supervision (1988): *International convergence of capital measurement and capital standards*, July.

——— (2006): *International convergence of capital measurement and capital standards (Basel II)*, June.

——— (2009): *Enhancements to the Basel II framework*, July.

——— (2010, rev 2011): *Basel III: A global regulatory framework for more resilient banks and banking systems*, December.

——— (2012): *Core principles for effective banking supervision*, September.

——— (2015): *Report on the impact and accountability of banking supervision*, July.

——— (2017): *Basel III: finalising post-crisis reforms*, December.

——— (2019): *Overview of Pillar 2 supervisory review practices and approaches*, June.

Byres, W (2019): "Translating prudential policy into prudent practice", speech at the Financial Stability Institute, Executives' Meeting of East Asia-Pacific Central Banks and Basel Committee on Banking Supervision High-Level Meeting on Banking Supervision, 13 February.

Castro Carvalho, A, S Hohl, R Raskopf and S Ruhnau (2017): "Proportionality in banking regulation: a cross-country comparison", *FSI Insights on policy implementation,* no 1, August.

Federal Deposit Insurance Corporation (1997): "Uniform financial institutions rating system", *Federal Register*, vol 62, no 3, January.

Financial Stability Board (2010): *Intensity and effectiveness of SIFI supervision*, November.

——— (2011): *Policy measures to address systemically important financial institutions*, November.

Hohl, S, M Sison, T Stastny and R Zamil (2018): "The Basel framework in 100 jurisdictions: implementation status and proportionality practices", *FSI Insights on policy implementation,* no 11, November.

Restoy, F (2019): "Proportionality in financial regulation: where do we go from here?", speech at the BIS/IMF meeting on proportionality in financial regulation and supervision, Basel, Switzerland, 8 May.

Senior Supervisors Group (2009): *Risk management lessons from the global banking crisis of 2008*, October.

Viñals, J and J Fiechter (2010): The Making of Good Supervision: Learning to Say "No", *IMF Staff Position Note*, May.

Annex 1 – Jurisdictions covered by the study

Regional classification — Table 14

Jurisdiction	Region	Jurisdiction	Region
South Africa	Africa	Hong Kong SAR	Asia-Pacific
Brazil	Americas	Malaysia	Asia-Pacific
Canada	Americas	Philippines	Asia-Pacific
Mexico	Americas	Singapore	Asia-Pacific
Peru	Americas	European Union	Europe
United States	Americas	Sweden	Europe
Australia	Asia-Pacific	Switzerland	Europe
China	Asia-Pacific	United Kingdom	Europe

Annex 2 – Comparison of the US rating system for large financial institutions and the EU's Supervisory Review and Evaluation Process rating, as applied by the ECB's Single Supervisory Mechanism

The Board of Governors of the Federal Reserve System has developed a new rating system for large financial institutions (LFI),[23] which became effective on 1 February 2019.[24] The LFI rating system applies to all bank holding companies (as well as non-insurance, non-commercial savings and loan holding companies) with total consolidated assets of US$ 100 billion or more; and all US intermediate holding companies of foreign companies with total consolidated assets of US$ 50 billion or more. The LFI assigns ratings across three pillars/components: capital planning and positions,[25] liquidity risk management and positions,[26] and governance and controls.

The three LFI areas are comparable with the Supervisory Review and Evaluation Process (SREP) of the ECB's Single Supervisory Mechanism (ECB-SSM), which assesses a financial institution's business model (element one), internal governance and risk management (element two), risks to capital (element three) and risks to liquidity (element four). The ECB-SSM SREP uses an overall score within a four-grade rating scale.[27] In contrast, the LFI rating system does not assign a standalone composite/overall rating, but rates

[23] From the Federal Reserve System 12 CFR Parts 211 and 238, Docket No. R-1569.

[24] This holds for banks governed under the large institution supervision coordinating committee (LISCC). For firms not in the LISCC portfolio, the LFI rating system will be applied in early 2020.

[25] Capital positions are defined as the extent to which a firm's capital is sufficient to comply with regulatory requirements, and to support its ability to meet its obligations to depositors, creditors, and other counterparties and continue to serve as a financial intermediary through a range of conditions.

[26] Liquidity positions are defined as the extent to which a firm's liquidity is sufficient to comply with regulatory requirements, and to support its ability to meet current and prospective obligations to depositors, creditors and other counterparties through a range of conditions.

[27] This is in line with the European Banking Authority SREP guidelines. The overall SREP score reflects the supervisor's overall assessment of the viability of the institution: higher scores reflect an increased risk to the viability of the institution stemming from one or several features of its risk profile including its business model, internal governance framework, and individual risks to its solvency or liquidity position.

the separate components as “broadly meets expectations”, “conditionally meets expectations”, “deficient-1” and “deficient-2”. Table 15 provides a summary of the similarities and differences between the two rating systems.

SSM SREP rating system vs the US LFI rating system — Table 15

Topics	SSM SREP	US LFI rating system
Scope of application	Applicable to all banks in the euro area.	All bank holding companies (as well as non-insurance, non-commercial savings and loan holding companies) with total consolidated assets of US$ 100 billion or more; and all US intermediate holding companies of foreign companies with total consolidated assets of US$ 50 billion or more.
Components and elements	Four elements assessed: 1. Business model and profitability assessment. 2. Internal governance and risk management assessment. 3. Risks to capital assessment. 4. Risks to liquidity assessment.	Three components assessed: 1. Capital planning and positions. 2. Liquidity risk management and positions. 3. Governance and controls.
Assessment of capital and liquidity	Element 3 and 4 in three building blocks: • Block 1 – Risk assessment score. • Block 2 – ICAAP / ILAAP assessment. • Block 3 – Stress test.	• Comprehensive capital analysis and review (CCAR). • Comprehensive liquidity analysis and review (CLAR).
Assessment of internal governance	• No details of the distinction between senior management and management of business lines. • Focus on concepts of management and supervisory functions of the management body.	• The guide distinguishes supervisory expectations and main characteristics for board of directors from those for senior management. • Defines roles and responsibilities for individuals and functions accountable for risk management purposes.
Rating scale	• Elements assessed with an automated anchoring score on a four-grade scale and fine-tuned by supervisory judgment. • Overall score after holistic assessment.	• Components are assessed as “broadly meets expectations”, “conditionally meets expectations”, “deficient-1” or “deficient-2”. • No overall score (ie no composite rating).
Capital and liquidity requirements	Measures driven by overall score.	Measures driven by CCAR/CLAR (incl. stress test).
Ratings disclosure	Component and composite/overall ratings are shared with the bank, but not disclosed publicly.	Component ratings are shared with the bank, but not publicly disclosed.

Annex 3 – Pillar 2 add-on approaches in the EU, Hong Kong SAR and Switzerland

EU and Hong Kong SAR

EU banks are subject to a Pillar 2 capital requirement (P2R) and a Pillar 2 Guidance (P2G). Similarly, banks in Hong Kong are subject to two Pillar 2 requirements, P2A and P2B. The two parts of Pillar 2 add-ons have broadly similar objectives in both jurisdictions. P2R and P2A aim to address risks not adequately covered by Pillar 1 and P2G and P2B aim to provide banks with additional capital to increase resilience in times of stress. The table below outlines differences and similarities of the add-ons in the two jurisdictions.

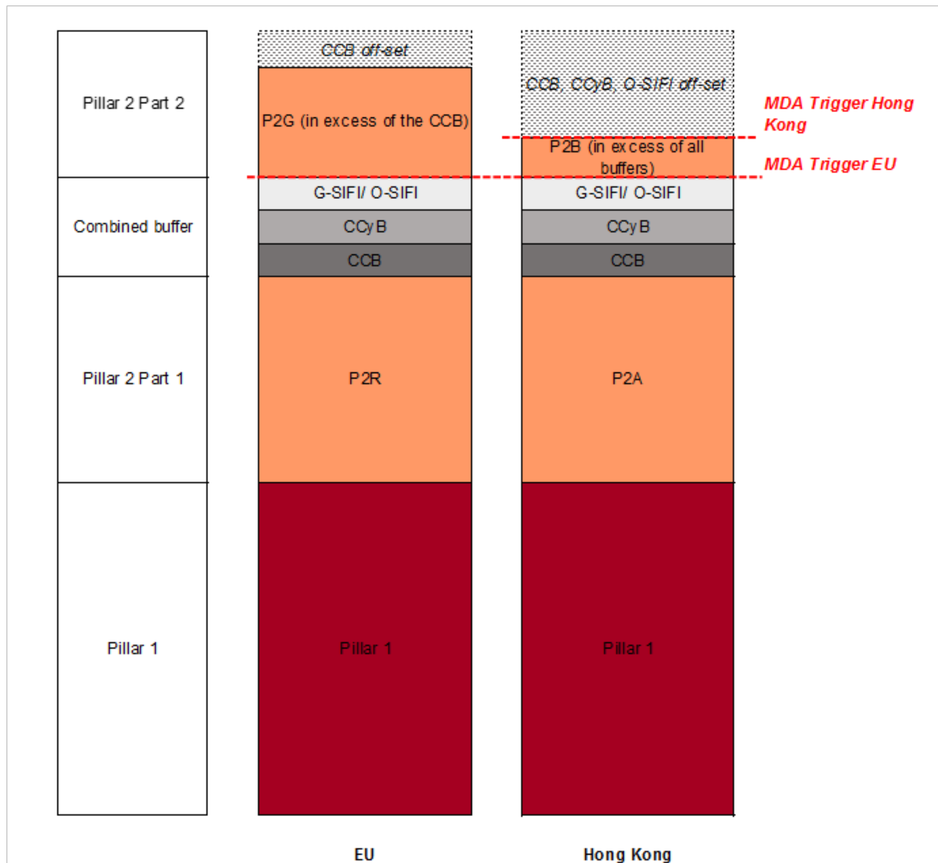
Characteristics of Pillar 2 capital add-ons — Table 16

	European Union	Hong Kong SAR
Basis		
P2R/P2A	Risks not captured, or not adequately captured, under Pillar 1.	Risks not captured, or not adequately captured, under Pillar 1.
P2G/P2B	Based on the quantitative results of supervisory stress tests (CET1 ratio depletion in the worst year of stress). Supervisory adjustments (for example based on changes in bank's balance sheets) also consider relevant management mitigating actions. Not based on inadequate coverage of individual risks, as such no reference to specific inherent risk factors, for example credit and market risk.	Additional capital in response to the assessment of banks' ICAAP; asset quality considerations, business expansion, stress testing, qualitative factors (eg access to additional funding when needed). No reference to specific inherent risk factors.
Composition		
P2R/P2A	At least the quality of P1 capital requirements (56% CET1, 75% T1).	The quality of P1 capital requirements (56% CET1, 75% T1).
P2G/P2B	To be met with CET1 only.	To be met with CET1 only.
Stacking order		
P2R/P2A	Above Pillar 1.	Above Pillar 1.
P2G/P2B	Above any macroprudential buffers.[28] Capital conservation buffer (CCB), countercyclical buffer (CCyB), systemic risk buffer (SRB), global systemically important institutions (G-SIFI) buffer, other systemically important institutions (O-SIFI) buffer.	Above any macroprudential buffers: CCB, CCyB, G-SIBs buffer, D-SIBs buffer, higher loss absorbency ratio (HLA).
Interaction with macroprudential buffers		
P2R/P2A	No offset.	No offset.
P2G/P2B	Full offset against the CCB, offset against the CCyB in exceptional cases. No offset against SRB, G-SIFI, and O-SIFI buffers.	Offset against the entire capital buffer (CCB, CCyB, G-SIB, O-SIB buffers, HLA).
Binding nature		
P2R/P2A	Binding, to be met at all times.	Binding, to be met at all times.
P2G/P2B	No automatic supervisory actions in case of falling below the level of P2G, actions decided on a case-by-case basis. Not relevant for maximum distributable amount (MDA).	P2B in excess of the combined buffer level will count towards the buffer level. MDA relevant.

[28] Macroprudential buffers as defined in Article 128 onwards of the Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and macroprudential buffers as defined in the Banking (Capital) Rules (Cap 155, section 97C), 1 January 2007.

The figure below schematically compares the capital stack of the EU[29] and that of Hong Kong[30] (for the purpose of comparison, assuming the same bank).

Figure 1



Note: The scale of the chart is illustrative only and does not intend to indicate the relative magnitudes of the components of the capital stack.

Sources: HKMA supervisory manual: supervisory review process and EBA guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing.

Switzerland

Switzerland's prudential regulator, the Financial Markets Supervisory Authority (FINMA), considers both a firm's size and overall risk profile in setting Pillar 2 capital add-ons.

In determining size, supervised institutions are assigned to one of five categories.[31] For each category, FINMA defines a target capital requirement (total capital ratios) with the lowest ratio for category 5 set at 10.5%, (ie the minimum Basel III requirement). In contrast, category 1 institutions have a target ratio of 12.8%. Category 1 and 2 banks are labelled as "systemically important" banks and additional capital requirements may apply.

In addition, FINMA may also require an institution-specific add-on reflecting the specific risk profile of each regulated entity. In aggregate, this approach results in higher Pillar 2 capital add-ons for

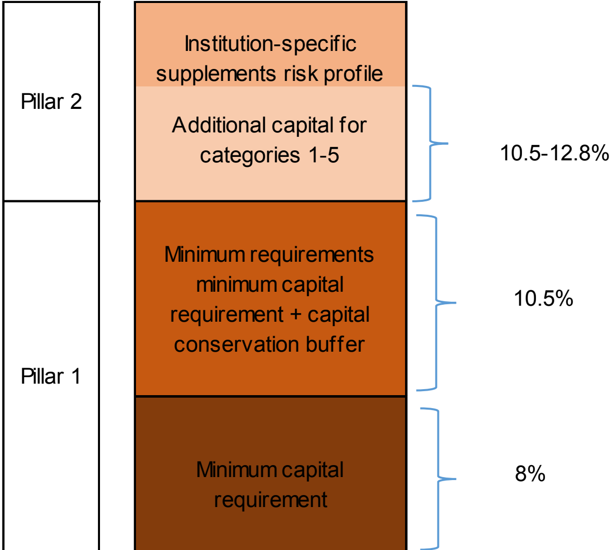
[29] While an institution fails to meet or exceed its combined buffer requirement, it is prohibited from distributing more than the maximum distributable amount calculated in accordance to CRD Article 141.

[30] A bank failing to exceed or falling below the combined buffer is one of the conditions to consider the maximum distributable amount for the distribution payment requirements.

[31] The five categories are defined on the basis of four criteria: balance sheet total, assets under management, privileged deposits and minimum capital requirements. For further information, see Castro Carvalho et al (2017).

larger, more complex banks than smaller, less complex institutions. Figure 2 provides an illustration of FINMA's approach to Pillar 2 capital add-ons.

Figure 2



Source: FINMA

Ordinance on own funds and risk-sharing for banks and securities dealers.