CENTRAL BANK of BELIZE

Basel II/III Implementation

Internal Capital Adequacy Assessment Process (ICAAP) Guideline

March 2022

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1. Introduction

The Four Principles of Pillar II

1.1. The Basel Framework[1] centers around three supporting pillars - Minimum Capital Requirements (Pillar I), Supervisory Review (Pillar II), and Disclosure Requirements (Pillar III). Pillar II reinforces Pillar I[2] by addressing other key risks and factors not covered under Pillar I. It requires licensees to have adequate capital to support all material risks and it also encourages licensees to address weaknesses in current risk management by using improved risk management techniques in the monitoring and management of their risks.

1.2. Pillar II is based on the four interlocking principles that:

Principle I

1.3. Licensees should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels through the 'Internal Capital Adequacy Assessment Process'.

Principle II

1.4. Supervisors should review and evaluate licensees' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios through the 'Supervisory Review and Evaluation Process' (SREP). Supervisors should take appropriate supervisory action if they are not satisfied with the results of this process.

Principle III

1.5. Supervisors should expect licensees to operate above the minimum regulatory capital ratios and should have the ability to require licensees to hold capital more than the minimum requirement.

Principle IV

1.6. Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular licensee and should require rapid remedial action if capital is not maintained or restored.

Principle I: ICAAP

1.7. The Central Bank of Belize (Central Bank), in furtherance of its responsibility for the regulation and supervision of licensees under the Domestic Banks and Financial Institutions Act (DBFIA) and International Banking Act (IBA), has developed this Guideline, which focuses on Principle I of Pillar II. This Guideline should assist licensees in the formulation and implementation of their

[1] Basel Committee on Banking Supervision: 'International Convergence of Capital Measurement and Capital Standards. A Revised Framework. Comprehensive Version' (https://www.bis.org/basel_framework/); and subsequent supplementary documents published by the BCBS.

[2] Pillar 1 sets minimum requirements for capital to cover credit, market and operational risks. The consultation process for Pillar I occurred during 2019 and the official consolidated document was published on 31 January 2020.

ICAAP.

1.8. Banks should establish their ICAAPs making adequate allowance for the principle of proportionality. The ICAAP will be proportional to the size, nature, scale, and complexity of licensee's activities. Based on that, the ICAAP may not include some of the areas discussed within this Guideline or may include other areas, which are not included, that may be relevant to their operations. As such, the ICAAP may be as simple or complex as a licensee's characteristics warrant. Through its ICAAP, each bank will assess the total amount of capital that it calculates as necessary to safeguard it against all the risks inherent in its business, both currently and taking a forward view. While some banks will wish to adopt a sophisticated economic capital model in formulating their ICAAP, for others the ICAAP will more likely be derived from their Pillar I calculation, together with appropriate capital estimations determined by each licensee to cover other material risks. In each case, it must be evident from the Central Bank's review that the licensee has adequately considered and understood all its material risks when assessing their overall capital needs.

1.9. Given the importance of risk management, the motivation for ICAAP implementation should not be driven by supervisory considerations, but more so by the promotion of a sound risk management and corporate governance culture within the licensee, built on risk-based capital and adequate risk management techniques. Accordingly, the ICAAP should be integrated into the strategic planning process by emphasising, inter alia, that strategic decision-making involves risk-taking, which ultimately must be offset by adequate levels of capital. A thorough and comprehensive ICAAP is a vital component of a strong risk management program.

1.10. Prior to submission to the Central Bank, the ICAAP document should be approved by the bank's Board of Directors.

2. Scope of Application

2.1. This Guideline applies to all banks licensed under the DBFIA and IBA. Each licensee needs to implement a comprehensive ICAAP and prepare an ICAAP report reflecting a relatively high-level overview of its business but with sufficient detail to provide insight into the underlying analysis and procedures used in the assessment.

2.2. The ICAAP of a bank should reflect its own circumstances, and group-wide data and methodologies should be appropriately modified and adapted to yield internal capital targets and a capital plan that is relevant to the bank.

2.3. Each licensee should have an ICAAP that is appropriate for its unique risk characteristics and should not rely solely upon the assessment of capital adequacy at the parent company level. This does not preclude the use of a consolidated ICAAP as an important input to a bank's own ICAAP, provided that each entity's board and senior management ensure that the ICAAP is appropriately modified to address the unique structural and operating characteristics which reflects the risks of the bank.

3. What is an ICAAP?

3.1. The ICAAP is the formal process through which a licensee adequately identifies, measures, aggregates, and monitors material risk, to ultimately build a risk profile that will become the basis for allocating internal capital to support the risks it takes on.

3.2. The design of the ICAAP is the responsibility of the licensees. Each bank is responsible for its ICAAP, and for setting internal capital targets that are consistent with its risk profile and operating environment. The ICAAP should be tailored to the licensee's circumstances and needs, and it should use the inputs and definitions that the bank normally uses for internal purposes.

ICAAP Characteristics

3.3. The level of complexity and sophistication within an ICAAP depends on the nature of a licensee's business operations. However, all ICAAPs should exhibit the following characteristics to ensure their adequacy and integrity.

i. Comprehensive

3.4. The ICAAP should be comprehensive and consider all material risks, including:

a) Pillar I risks, including major differences between the treatment of Pillar I risks in the calculation of regulatory capital requirements and the treatment under the licensee's own ICAAP;

b) Risks not fully captured under Pillar I, such as underestimation of credit and operational risks. Regarding credit risk, particular attention should be given to any residual risk arising from the use of credit risk mitigation (CRM);

c) All material Pillar II risks to which the licensee may be exposed, such as interest rate risk in the banking book, concentration risk, liquidity risk, reputation, and strategic risk. Some of these risks are less likely to lend themselves to quantitative approaches, and licensees are expected to employ more qualitative methods of assessment and mitigation; and

d) Risk factors external to the bank. These include risks that may arise from the regulatory, economic or business environment and which are not included in the above-mentioned risks.

ii. Forward Looking

3.5. The ICAAP should consider the licensee's strategic plans and how they relate to macroeconomic factors. The licensee should develop internal strategies which incorporate factors such as loan growth expectations, future sources, and uses of funds.

3.6. The licensee should have an explicit, approved capital plan, which states the licensee's objectives and the time horizon for achieving those objectives, and in broad terms the capital planning process and the responsibilities for that process.

3.7. The capital plan should include details on how the licensee will comply with capital requirements in the future, any relevant limits related to capital, and a general contingency plan for dealing with divergences and unexpected events (for example, raising additional capital, restricting business, or using risk mitigation techniques. In addition, licensees should conduct appropriate stress tests.

3.8. Senior management and the board should view capital planning as a crucial element in being able to achieve its desired strategic objectives.

iii. *Reasonable Outcome*

3.9. The ICAAP should produce a reasonable overall capital number and assessment. The licensee should document the similarities and differences between its ICAAP number and its regulatory capital.

4. ICAAP Components

4.1. At a minimum, a rigorous ICAAP should incorporate the following components:

- Board oversight;
- Senior management oversight;
- Sound capital assessment, inclusive of stress testing;
- Comprehensive assessment of risks;
- Monitoring and reporting; and
- Internal control review.

Board Responsibility

4.2. The Board of Directors (Board) has the responsibility of ensuring that the bank has an adequate ICAAP.

4.3. The Board should:

i. Define corporate objectives, risk strategies, and the licensee's risk profile;
ii. Set the licensee's tolerance for risks;
iii. Establish, along with the Senior Management Team and the Chief Risk Officer, the bank's risk appetite, considering the competitive and regulatory landscape and the bank's long-term interests, risk exposure and ability to manage risk effectively;
iv. Approve the approach and oversee the implementation of key policies pertaining to the bank's ICAAP;
v. Ensure that management implements the ICAAP with adequate systems and internal monitoring policies and procedures;
vi. Review timely reports on the nature and level of all risk exposures and their relation to capital levels;
vii. Understand and acknowledge that risk measurements will include a level of uncertainty;
viii. Ensure that the results of the ICAAP form part of the ongoing management of the licensee's business; and

ix. Review the ICAAP at least annually, or whenever material changes in the licensee's risk profile or business environment become evident.

Senior Management Responsibility

4.4. The responsibility for the ongoing development of the ICAAP should reside with Senior Management. Therefore, the ICAAP should be considered and incorporated into the licensee’s strategic and operations management processes. Senior Management must be able to assess on a regular basis, the material risks within the licensee’s activities, as the results of such assessments will play a key role in the allocation of capital to business units, as well as influencing key business decisions such as expansion plans and budgets.

4.5. Throughout these processes, management must establish clear and transparent reporting lines and define corresponding responsibilities. Specifically, managers should:

i. Consistent with the direction given by the Board, Senior Management should implement business strategies, risk management systems, risk culture, processes, and controls for managing the risks to which the bank is exposed and concerning which it is responsible for complying with laws, regulations and internal policies;
ii. Establish, along with the Board and the Chief Risk Officer, the bank’s risk appetite, considering the competitive and regulatory landscape and the bank’s long-term interests, risk exposure and ability to manage risk effectively;
iii. Define strategies and procedures for the setting of limits and adherence to capital requirements;
iv. Ensure that there are adequate systems for measuring, assessing, and reporting on the size, composition and quality of exposures on a bank-wide basis across all risk types, products and counterparties;
v. Establish procedures for the regular and independent validation and testing of any models used to measure components of risk;
vi. Report to the Board in a timely manner, the nature and level of all risk exposures and their relation to capital levels;
vii. Ensure dissemination of information and procedures on the ICAAP to relevant staff;
viii. Establish suitable internal control systems and reporting structures and ICAAP supporting documentation to support the ICAAP;
ix. Ensure that employees are trained and well equipped to perform their duties; and
x. Ensure that there is a regular (at least annual) review of systems, procedures and processes that support the ICAAP, and that adaptation is carried out as necessary.

4.6. Overall, Senior Management is responsible for integrating capital planning and capital management into the licensee’s risk-management culture and approach.

Comprehensive Assessment of Risks

4.7. The ICAAP involves multiple stages. The main stages are described below.

i. <u>Risk Appetite & Risk Profile Identification and Assessment</u>

4.8. This initial stage is critical to ensuring the integrity of the ICAAP, as it sets the stage for the remainder of the risk management process. The licensee can only control risks if they are identified in this step. This segment of the ICAAP should be reviewed regularly and any changes to the licensee's risk profile factored into the process. For instance, the introduction of new products or services by a licensee may alter its risk profile significantly.

4.9. Licensees should explicitly define their risk appetite. The risk appetite refers to the aggregate level and types of risk a bank is willing to assume, decided in advance and within its risk capacity, to achieve its strategic objectives and business plan. The risk capacity is the maximum amount of risk a bank can assume given its capital base, risk management and control capabilities as well as its regulatory constraints.

4.10. The Board should consider, inter alia, when defining the licensee's risk appetite:

- How much risk can the licensee take on (and especially: which supervisory constraints must be observed)?
- How much risk does the licensee want to take on (and at what rate of return)?
- How much capital is necessary to cover the specific risks involved (capital planning)?

4.11. Key to the process of identifying risks is the identification of the data necessary for the quantification of risks and how such data can be provided.

4.12. Once the risk appetite has been determined, it should be transposed onto risk types and in more granular measures, such as business lines or operational sub-units. In this way, the licensee can more clearly define its risk profile. The risk profile is a point-in-time assessment of a bank's gross risk exposures (i.e. before the application of any mitigants) or, as appropriate, net risk exposures (i.e. after taking into account mitigants) aggregated within and across each relevant risk category based on current or forward-looking assumptions. This step will aid Senior Management in decision-making and assignment of responsibility for individual business lines and operational sub-units.

ii. <u>Assessment and Quantification of Material Risks</u>

4.13. The purpose of assessing risks is to give a picture of the significance and effects of risks on the licensee. Licensees need to look in detail at each type of relevant risk to determine its materiality. Licensees can establish their own risk indicators for each type of risk to help assess which risks are most material to its operations. Risk indicators are an important tool which can assist licensees in assessing their risk profile on an ongoing basis and may signal a change in the level of materiality of a risk. Licensees should ensure that a concise description of their material risk identification process is well documented.

4.14. After licensees have identified the material risks throughout their operations, decisions must be made on how individual risks will be assessed and measured for the calculation of both internal and regulatory capital requirements. Such decisions must be transparent and formally documented.

4.15. For material risks, licensees also need to consider and assess how the risks are mitigated. Materiality should be considered against a range of benchmarks such as capital, earnings, market rating, impact on customer confidence, and impact on cost of funding. Some risks tend to overlap, so care should be taken not to double-count. While in some cases the degree of risk against which it is prudent to hold capital can be measured precisely (e.g. for interest rate risk in the banking book by assessing the effect of a sudden 200 basis point shift in the yield curve), in other cases it will be necessary to allocate a suitable capital cushion less systematically.

4.16. Once individual risks have been identified and the capital required to cover the risk has been quantified, the required capital for all the risks needs to be aggregated to determine the total ICAAP figure – i.e. the total amount of capital needed to cushion the licensee's unique risk profile.

4.17. While not all risks can be measured precisely, a process should be developed to estimate risks. Therefore, the following risk exposures, which by no means constitute a comprehensive list of all risks, should be considered.

Credit Risk

4.18. Licensees should have methodologies that enable them to assess the credit risk involved in exposures to individual borrowers or counterparties as well as at the portfolio level. The credit review assessment of capital adequacy, at a minimum, should cover four areas: risk rating systems, portfolio analysis/aggregation, large exposures, and risk concentrations.

4.19. Internal risk ratings are an important tool in monitoring credit risk. Internal risk ratings should be adequate to support the identification and measurement of risk from all credit exposures and should be integrated into a bank's overall analysis of credit risk and capital adequacy. The ratings system should provide detailed ratings for all assets, not only for problem assets.

Risk Concentrations

4.20. The impact of risk concentrations should be reflected in a bank's ICAAP. Typical situations in which risk concentrations can arise include exposures to:

- Single counterparty, borrower or group of connected counterparties or borrowers;
- Industry or economic sectors;
- Similar collateral types, and other exposures arising from credit risk mitigation techniques; and
- Trading exposures/market risk.

4.21. Risk concentrations can also arise through a combination of exposures across these broad categories. A bank should understand its firm-wide credit risk concentrations resulting from similar exposures across its different business lines.

4.22. A bank may also incur a concentration to a particular asset type indirectly through collateral or guarantees used to mitigate credit risk. Banks that place more reliance on collateral values than on an evaluation of a borrower's or counterparty's capacity to perform may see themselves exposed to unexpected market risk in addition to wrong way risk[3], particularly where the value of the collateral declines.

4.23. A bank should have in place adequate, systematic procedures for identifying high correlation between a collateral and the obligors of the underlying exposures due to their performance being dependent on common factors beyond systemic risk (i.e., “wrong way risk”).

Risk Diversification

4.24. Banks should exercise caution when including risk diversification benefits in ICAAP. Assumptions on diversification are often based on expert judgement and are difficult to validate. Banks should be conservative in their assessment of diversification benefits, between different classes of risk.

4.25. Banks should have clear policies and procedures supporting the aggregation across risk types. Banks should understand the challenges presented by risk aggregation and the inherent uncertainty in quantitative estimates used to aggregate risks (including the difficulty in estimating concentrations across risk types). Banks are encouraged to consider the various interdependencies among risk types, the different techniques used to identify such interdependencies, and the channels through which those interdependencies might arise – across risk types, within the same business line, and across different business lines. Any associated uncertainty in aggregating capital estimates across risk types and business lines should translate into greater capital needs.

Cross Border Lending

4.26. Banks that engage in cross border lending are subject to increased risk including country risk, concentration risk, foreign currency risk (market risk) as well as regulatory, legal, compliance and operational risks, all of which should be reflected in the ICAAP. Laws and regulators’ actions in foreign jurisdictions could make it much more difficult to realize on assets and security in the event of a default. Where regulatory, legal and compliance risks associated with concentrations in cross border lending are not considered elsewhere in an bank’s risk assessment process; additional capital may be required for this type of lending in an bank's ICAAP.

Operational Risk

4.27. Similar rigor should be applied to the management of operational risk, as is done for the management of other significant banking risks. The failure to properly manage operational risk can result in a misstatement of a bank’s risk/return profile and expose the bank to significant losses.

4.28. A bank should develop a framework for managing operational risk and evaluate the adequacy of capital given this framework. The framework should cover the bank’s appetite and tolerance for operational risk, as specified through the policies for managing this risk, including the extent and manner in which operational risk is transferred outside the bank. It should also include policies outlining the bank’s approach to identifying, assessing, monitoring, and controlling/mitigating the

[3] A Wrong Way Risk occurs when credit exposure to a counterparty is negatively correlated with the credit quality of that counterparty. In other words, the more a party gains on a trade, the more likely it is for the counterparty to default.

risk.

Market Risk

4.29. Banks should have methodologies that enable them to assess and actively manage all material market risks, wherever they arise throughout the bank (i.e., position, trading desk, business line or firm-level).

Interest Rate Risk in the Banking Book

4.30. The measurement process should include all material interest rate positions of the bank and consider all relevant repricing and maturity data. Such information will generally include current balance and contractual rate of interest associated with the instruments and portfolios, principal payments, interest reset dates, maturities, the rate index used for repricing, and contractual interest rate ceilings or floors for adjustable-rate items. The process should also have well-documented assumptions and techniques.

4.31. Regardless of the type and level of complexity of the measurement system used, bank management should ensure the adequacy and completeness of the system. Because the quality and reliability of the measurement system is largely dependent on the quality of the data and various assumptions used in the model, management should give particular attention to these items.

Liquidity Risk

4.32. Liquidity is crucial to the ongoing viability of any banking organization. Banks' capital positions can have an effect on their ability to obtain liquidity, especially in a crisis. Each bank must have adequate systems for measuring, monitoring, and controlling liquidity risk. Banks should evaluate the adequacy of capital given their own liquidity profile and the liquidity of the markets in which they operate.

Other Risks

4.33. Although risks such as strategic and reputation risk are not easily measurable, banks are expected to develop techniques for managing all aspects of these risks. Reputation risk is a key issue for an industry that relies on the confidence of consumers, creditors, and the general marketplace. For example, when a bank acts as an advisor, arranges, or actively participates in financial transactions, it may assume insurance, market, credit, and operational risks. Reputation risk often arises because of inadequate management of these other risks, whether they are associated with direct or indirect involvement in the sale or origination of financial transactions or relatively routine operational activities.

4.34. Reputational risk can lead to the provision of implicit support, which may give rise to credit, liquidity, market, and legal risk – all of which can have a negative impact on a bank's earnings, liquidity and capital position. A bank should identify potential sources of reputational risk to which it is exposed. This includes the bank's business lines, liabilities, affiliated operations, and markets in which it operates. The risks that arise should be incorporated into the bank's risk management process and appropriately addressed in its ICAAP and liquidity contingency plans.

iii. *Development of a Suitable Risk Policy*

4.35. A risk policy must be formulated which will aid management in the setting of individual risk limits. The likely steps in developing such limits are as follows:

- Definition of limits (initially aggregated for the overall operations of the licensee) based on the licensee's articulated risk appetite and its target risk structure;
- Assignment of limits to individual risk categories and business lines or operational sub-units;
- Validation of the utilization of individual limits; and
- Implementation of limits in actual operations.

iv. *Stress Testing*[4]

4.36. In addition to ensuring that licensees have comprehensive procedures for assessing their material risks, the Central Bank also expects a bank's management to be able to demonstrate that they are alert to the particular stage of the business cycle it is currently operating within. Licensees need to put in place rigorous forward-looking stress-testing, seeking to identify possible events or cyclical changes in market conditions that may impact severely their earnings, liquidity, or asset values.

4.37. The assumptions underlying the usual assessment methods may not be relevant in a stressed situation and this can lead to substantial underestimates of risk. For this reason, it is important for a licensee to define and document relevant stress scenarios, together with their relevant underlying assumptions.

4.38. Licensees must define relevant stress scenarios for all material risk types and analyse the effect that simultaneous and concurrent occurrences of exceptional situations would have on the licensee's risk-bearing capacity. The results of the stress tests provide indications, which may be helpful in identifying any existing weaknesses.

4.39. A bank's capital planning process should incorporate rigorous, forward-looking stress testing that identifies possible events or changes in market conditions that could adversely impact the bank. In their ICAAPs, banks should examine future capital resources and capital requirements under adverse scenarios. The results of forward-looking stress testing should be considered when evaluating the adequacy of a bank's capital.

Monitoring and Reporting

4.40. The licensee should establish an adequate system for monitoring and reporting risk exposures and assessing how the bank's changing risk profile affects the need for capital. The bank's Senior Management and Board should, on a regular basis, receive reports on the bank's risk profile and capital needs. These reports should allow Senior Management to:

- Evaluate the level and trend of material risks and their effect on capital levels;
- Evaluate the sensitivity and reasonableness of key assumptions used in the capital assessment measurement system;
- Determine that the bank holds sufficient capital against the various risks and is in compliance with established capital adequacy goals; and

[4] Licensees should review the Central Bank's guideline on stress testing in formulating stress test scenarios.

- Assess its future capital requirements based on the bank's reported risk profile and make necessary adjustments to the bank's strategic plan accordingly.

Internal Audit, Controls and Review

4.41. Adequate internal audit and controls provide critical support in any risk management system. Within the ICAAP, licensees are required to have strategies and processes in place for continuously assessing and maintaining the adequacy of internal capital. It is therefore essential that regular independent internal reviews of these strategies and processes be carried out to enable maintenance of the ICAAP's integrity, reliability, and relevance.

4.42. The internal control system should ensure compliance with relevant laws and other regulations, as well as internal policies and procedures. The system of internal control should include, inter alia, an ICAAP review process that is subject to independent internal reviews conducted at least annually or as often as deemed necessary, to ensure that capital coverage reflects the actual risk profile of the licensee. Areas that should be reviewed include:

i. Appropriateness of the licensee's capital assessment process given the nature, scope, and complexity of its activities;
ii. Identification of large and/or material exposures and risk concentrations;
iii. Accuracy and completeness of data inputs into the licensee's assessment process;
iv. Reasonableness and validity of scenarios used in the assessment process; and
v. Stress testing and analysis of assumptions and inputs.

5. Critical Success Factors

5.1. Below are some factors that are critical to developing and maintaining an adequate ICAAP.

Methodology, Assumptions and Definitions

5.2. The ICAAP should include a description of how the assessments for each of the risks within the ICAAP have been approached and the main underlying assumptions. In addition, licensees must include within ICAAP documentation, all definitions of terminology used.

Suitable IT Systems

5.3. Licensees may conduct a gap analysis to determine the capacity and capabilities of existing IT systems as it relates to the requirements of an ICAAP. In some cases, licensees may be able to rely on existing risk management systems (risk measurement, limit monitoring) to support their ICAAP. However, it may be necessary for some licensees to invest in expansions and new acquisitions within its IT systems, to support its ICAAP.

Documentation

5.4. Adequate supporting documentation is critical to help ensure the proper functioning of an ICAAP. Documentation of methods and procedures used within the ICAAP should describe, inter alia, the risk management process, internal risk definitions, risk assessment methods applied during the risk management process, as well as assumptions made during this process.

5.5. The ICAAP must be transparent throughout the organisation and documentation of its different aspects must be tailored to the relevant target groups throughout the organisational structure. It is therefore advisable to use various levels of detail and explanation of the ICAAP for different levels of responsibility throughout the organisation. The scope and level of detail of documentation should be proportionate to the size, complexity, and risk levels of the licensee. Therefore, management must determine if varying levels of documentation are necessary to support the type of business operations, which the ICAAP is meant to support.

5.6. The ICAAP should be clearly documented and approved at the Board level. In addition, documentation should be updated as necessary.

6. Role of the Central Bank

6.1. The Central Bank is responsible for evaluating how well licensees are assessing their capital needs relative to their risks and therefore requires that the ICAAP be shared with the Central Bank. Once received, the ICAAP will be reviewed in detail by the Central Bank as the basis for a supervisory review dialogue with the licensee.

6.2. The Central Bank will place particular emphasis on the quality of the risk management and controls of a financial bank which may be assessed by any combination of:

i. on-site examinations;
ii. off-site review;
iii. discussions with management of the financial bank;
iv. review of work done by internal or external auditors (provided it is adequately focused on the necessary capital issues); and
v. periodic reporting.

6.3. The review and assessment of a bank's ICAAP will form a significant part of the Central Bank's risk-based supervisory model. The review will reflect the principle of proportionality as it relates to the nature, scale and complexity of the activities and the risks posed to the Central Bank's supervisory objective of preserving safety and soundness of banks.

6.4. The Central Bank will provide individual feedback to banks on its supervisory review and evaluation of the ICAAP. In addition, where necessary, the Central Bank may request further information and meet with the Board and Senior Management of banks to evaluate fully the comprehensiveness of the ICAAP and the adequacy of the governance arrangements around it. The bank's management should be prepared to discuss and defend all aspects of the ICAAP, including both quantitative and qualitative components.

6.5. After completing the review of the bank's ICAAP, the Central Bank will take appropriate action if it is not satisfied with the results of the bank's own risk assessment and capital allocation. It should be noted, however, that increased capital would not be the only option adopted by the Central Bank for addressing increased/unmitigated risks. The Central Bank will consider a range of other options/ actions including:

i. intensified monitoring and reporting;
ii. restriction or prohibition of certain activities;
iii. restriction or prohibition of the payment of dividends; and
iv. requiring the preparation and implementation of a satisfactory capital adequacy restoration plan.

6.6. Banks should not regard capital as a substitute for addressing fundamentally inadequate controls or risk management processes. Banks are expected to implement risk mitigating measures including strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls etc. that are commensurate with their risk exposures, size, and complexity.

ANNEX I

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (ICAAP) FORMAT[5]

Executive Summary
The executive summary should present an overview of the ICAAP methodology and results. Matters that should typically be covered include: • the purpose of the report; • the main findings of the ICAAP analysis; • the capital the bank considers it should hold including how much and what composition of internal capital it considers it should hold as compared with the Pillar 1 minimum capital requirement (details with calculations should be provided); • the adequacy of the bank's risk management processes; • a summary of the financial position of the bank; • whether the bank has adequate capital resources over its planning horizon including periods of economic downturn; • an overview of the bank's strategy; • a brief description of the capital policy and dividend plan, how the bank intends to manage capital going forward and for what purposes; • description of the bank's most material risks, why the level of risk is acceptable or what mitigating actions have been/will be put in place; • description of the major issues where further analysis is required; and • the personnel who have approved the ICAAP Report and the date of approval.
Background
This section should include relevant organizational and historical financial data on the bank. This may include details of the group structure (legal and operational), reporting structure, sub-committees, profitability, dividends, capital resources, deposit liabilities and any conclusions that can be drawn from trends in the data that may have implications for the future. It should also give a brief description of expected changes to the bank's current business profile.
Risk Appetite Statement
This section must provide an overview of the Bank's risk appetite and set the frequency for the reviews of the Board and Senior Management's risk appetite and tolerance. For details on formulating a Risk Appetite Statement, refer to Annex III.

[5] While the Central Bank provides guidance on the format of the ICAAP document, a bank may make amendments to the format, where appropriate. In addition, banks may append any documents that they deem necessary to support the detail presented in the ICAAP document.

Material Risks
This section should provide a concise description of the bank's risk identification process and outline how the bank identifies material risk areas. Key risks that must be considered as part of an ICAAP are: • Credit risk; • Market risk; • Operational risk; • Interest rate risk in banking book; • Credit concentration risk; • Counterparty credit risk; • Residual risk; • Funding risk/Liquidity risk; • Business and strategic risk; • Reputation risk; • Securitization risk; and • Any other risks identified.
Capital Adequacy
This section should include a detailed review of the capital adequacy of the financial bank covering the following information: - **Timing** • The effective date of the ICAAP calculations, with details of any events that have happened since and that may materially change the ICAAP's calculations. The impact of such events should be included. **Risk Analysis** In an appendix to the ICAAP submission, provide further detail on the bank's risk assessment and quantification methodology, including: • How the bank defines each of the key risks listed above and any others considered key based on the bank's risk profile; • How the bank determines the materiality of each key risk; • Identification of any risks that have been identified but deemed immaterial and the justification for this determination; • A description of how each material risk is then quantified for capital allocation purpose, including detailed methodology to specify data, assumptions, and calculations; and • Conclusions arising out of the risk assessment including an analysis of significant movements in available capital and capital required since the last ICAAP and a comparison of the capital required under Pillar 1 calculations, as compared with the overall capital requirement identified by the ICAAP.

Methodology and Assumptions

- A description of how the risk assessment has been carried out and what assumptions have been made;

- An explanation of how the risk assessment relates to the internal capital target set by the bank is required;

- Details on how capital is allocated for the following:
    - Pillar 1 risks – that is, credit, market and operational;
    - risks not covered or not fully covered under Pillar 1 and Pillar 2 risks; and
    - stress testing / scenario analysis.

- Where internal models are used to quantify risks, the following information should be provided:
    - key assumptions and parameters within the capital modelling work and background information on the derivation of key assumptions;
    - how parameters have been chosen, including the historical period used and the calibration process;
    - limitations of the model;
    - the sensitivity of the model to changes in the key assumptions or parameters chosen; and
    - validation work undertaken to ensure the continuing adequacy of the model(s).

Stress Testing

This section should provide a concise description of how the bank's stress testing program is used to support capital adequacy assessment and management.

Licensees must stress test all material portfolios and significant risks identified.
Licensees must develop their own scenarios so that stress tests covering all its major risks and material portfolios are reported.

To evidence the implementation of ICAAP stress tests and their outcomes, licensees should provide:

- Quantitative outcome of the scenarios considered and impact on key measurements, including Profit and Loss and capital, and prudential ratios, as well as, in integrated approaches, the impact on the liquidity position; and

- Explanation of how the scenario outcomes is relevant to the bank's business model, strategy, material risks and group entities covered by ICAAP.

Summary of Current and Projected Financial and Capital Positions
This section should explain the present financial position of the bank, any changes to its current business profile, projected business volumes, projected financial position and future planned sources of capital.
Capital Planning
This section should outline the key aspects of the bank's capital needs to support its operations in the medium term (3 to 5 years), to support its strategic plan (forecasted/long-term) and to support unforeseen and unexpected events as set out in contingency plans. The detailed capital plan, if a separate document, should be submitted as an appendix to the ICAAP.
Risk Aggregation and Diversification
This section should describe how the results of separate risk assessments have been combined to obtain an overall view of capital adequacy. This requires some sort of methodology to be used to quantify the amount of capital required to support individual risks so that they can be aggregated into a total figure. Any adjustments made for diversification or risk correlations must be explained.
Use of ICAAP within the Bank
This section should: • Summarize how the ICAAP has been used by the bank and how it is embedded in the decision-making process; • Describe how ICAAP results have been integrated into risk limits setting and monitoring; and • Describe how the ICAAP results are reported to the Board.
Future Action Plan

This section should include:
 	
• A summary of significant deficiencies and weaknesses identified by the bank and action plans, including timeframes to address them including:
    • changes in risk profile;
    • improvements in governance and internal organization; and
    • changes in equity/capital targets.
 	
• Planned changes (improvements) in governance, risk management and internal controls including:
    • improvements in risk policy; and
    • improvement in risk management tools.

Approval Process
This section should: • Summarize the extent of challenge and testing of the ICAAP and the control processes applied to the ICAAP calculations; • Outline the Board and Senior Management sign-off procedures; • Identify the nature of any independent review of the ICAAP (append any reports generated); and • Identify any plans to enhance the ICAAP going forward.

ICAAP Submission Form

	Minimum Regulatory Capital Under Pillar 1	Licensee Assessment of Capital Required for the Risk under the ICAAP	ICAAP Page Reference[6]
Credit Risk			
Market Risk			
Operational Risk			
Total Pillar I[7]			
Pillar II Risk[8]			
Pillar II Risk			
Pillar II Risk			
Total Pillar II			
Additional capital to cover stress testing			
Additional capital to arrive at target capital			
ICAAP Capital			

[6] Please indicate the section of the ICAAP report for more details.
[7] For each risk type, please provide a brief explanation of the difference between calculations using the regulatory methodologies and ICAAP calculations.
[8] Banks are to indicate which risk is being identified under Pillar 2 and where necessary, add as much rows as needed.

ANNEX III

Risk Appetite Statement

As part of the ICAAP process, a bank's Board and Senior Management are responsible for defining the bank's risk appetite and essentially the "tone at the top." The risk appetite should set out the level of risks the bank is prepared to take or accept to achieve its business objectives.

The risk appetite statement (RAS) should be integral in the risk management framework of a bank and establishing an appropriate risk appetite is a key component of a successful framework.

An effective risk appetite statement should:

i. Include key background information and assumptions that informed the bank's strategic and business plans at the time they were approved;

ii. Be linked to the bank's short- and long-term strategic, capital, and financial plans, as well as compensation programs;

iii. Establish the amount of risk the bank is prepared to accept in pursuit of its strategic objectives and business plan, taking into account the interests of its customers (e.g. depositors) and the fiduciary duty to shareholders, as well as capital and other regulatory requirements;

iv. Determine how much risk the bank is currently undertaking as compared to its capacity to undertake the level of risk. (This also forms part of the process towards sound capital assessment and capital planning.)

v. Include quantitative measures that can be translated into risk limits applicable to business lines and legal entities as relevant, and at group level, which in turn can be aggregated and disaggregated to enable measurement of the risk profile against risk appetite and risk capacity;

vi. Include qualitative statements that articulate clearly the motivations for taking on or avoiding certain types of risk, including for reputational and other conduct risks[9], and establish some form of boundaries or indicators (e.g. non-quantitative measures) to enable monitoring of these risks;

vii. Ensure that the strategy and risk limits of each business line and legal entity, as relevant, align with the bank-wide risk appetite statement as appropriate;

viii. Be forward looking and, where applicable, subject to stress testing to ensure that the bank understands what events might push the bank outside its risk appetite and/or risk capacity; and

ix. Formalize and approve a risk appetite statement. Once the risk appetite has been approved, the statement should then be communicated to the wider organization.

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[9] Conduct risk is a form of business risk that refers to potential misconduct of individuals associated with a firm, including employees, third-party vendors, customers, or agents interacting with the firm.