

Basel Capital Adequacy Pillar II Application
(SREP) and (ICAAP)
Annex no. (138)

Guidance on Basel Capital Adequacy Pillar II Application:
Supervisory Review and Evaluation Process (SREP) and
Application of Internal Capital Adequacy Assessment Process (ICAAP)

1. Introduction

The Basel Capital Adequacy Framework comprises of 3 Pillars. Pillar 1 relates to the Minimum Capital Requirements (MCR) for banks as outlined by the QCB. The MCR is anticipated to achieve a level of bank credit worthiness in markets and strengthen the soundness of banks. In the normal course of business, the types and volumes of activities will change, as will the different risk exposures, causing fluctuations in overall capital ratios. Whenever banks operate at or fall below the MCR, they would breach regulatory minimums and prompt the QCB to take up corrective actions. Thus there may be risks, either specific to individual banks, or more generally to a jurisdiction at large, that are not taken into consideration under the MCR. Furthermore, the classification of assets and risk weighting as per external credit rating agencies may understate the risks embedded in such assets.

The Pillar 1 capital adequacy ratio is only the regulatory minimum level addressing credit, market and operational risks. However, in Pillar 2, other risks are to be identified and risk management processes and mitigation are to be assessed from a wider perspective, to supplement the capital requirements calculated within the scope of the MCR. Pillar 2 involves a proactive assessment of unexpected losses and a methodology to set aside sufficient capital. Effectively, Pillar 2 is the creation of a wider, flexible and more risk-sensitive system which imposes a major challenge on banks in meeting such requirements. It involves new and more sophisticated risk sensitive approaches to risk assessment and risk management.

A cornerstone of the Basel Capital Adequacy Framework is the formal requirement that, within the scope of Pillar 2, banks establish an Internal Credit Adequacy Assessment Process – ICAAP and submit to the QCB an ICAAP document. The ICAAP is a tool which ensures that the banks possess risk capital which is commensurate with their selected risk profile and risk appetite. This also requires banks to develop appropriate governance and control functions and business strategies. The ICAAP is derived from a formal internal process whereby banks estimate their capital requirements in relation to their specific risk profile, strategy, business plans, governance structures, internal risk management systems, dividend policies, etc.

The ICAAP includes a strategic review of a bank's capital needs and as to how these capital requirements are to be funded, i.e. through internal profits, IPOs, right issues, other debt issues, etc.

Pillar 2 also requires QCB to subject all banks to a Supervisory Review and Evaluation Process (SREP) and to impose any necessary supervisory measures on this basis. The QCB will intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and will require rapid remedial action if capital is not maintained or restored. The SREP includes the review and evaluation of each bank's ICAAP, the performance of an independent assessment of each bank's risk profile, and if necessary taking prudential measures and other supervisory actions.

1.1. The risks addressed under SREP & ICAAP shall be as under:

1.1.1. The risks that are not fully captured by the minimum capital ratio under Pillar1.

1.1.2. Risks that are not taken into account by Pillar1, and

1.1.3. Risk factors external to the banks.

1.2. In view of the above, other risks that may be underestimated would include the following:

1.2.1. Interest Rate Risk in Banking Book

1.2.2. Credit Concentration Risk

1.2.3. Liquidity Risk

1.2.4. Settlement Risk

1.2.5. Reputational Risk & Implicit support

1.2.6. Business & Strategic Risk

1.2.7. Risk of under-estimation of credit under Standardized Approach

1.2.8. Risk weaknesses in credit risk mitigation

1.2.9. Factors external to bank (business cycle effects)

1.2.10. Country & transfer risk

1.2.11. Off-balance sheet exposures with focus on securitization

1.2.12. Valuation risk

1.2.13. Sound stress testing practices

1.2.14. Sound compensation practices

1.3. The objective of SREP is to ensure that banks maintain adequate capital to support all risks and encourage better risk management techniques for monitoring and managing their specific risks. To supplement the SREP of QCB, banks will be required to have a well-defined ICAAP. SREP in conjunction with ICAAP assessments by QCB will enable an active dialogue with banks when warranted and appropriate intervention would enable to reduce risk exposure, or augment, and or restore capital.

1.4.. ICAAP in banks should be a formal Board approved process for determining the adequacy of capital in relation to their risk profile and a strategy to maintain appropriate levels of capital.

These guidelines set out further guidance for ICAAP and the duties and responsibilities of QCB under the SREP.

2. Principles of SREP

2.1. The key principles for Supervisory Review and Evaluation Process are:

2.1.1. *Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels. Banks are required to achieve this Principle thorough the Internal Capital Adequacy Assessment process (ICAAP).*

2.1.2. *QCB will review and evaluate bank's ICAAP and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. QCB shall take appropriate supervisory action if QCB is not satisfied with the result of the ICAAP.*

2.1.3. *QCB expects banks to operate above the minimum regulatory capital ratios and may require banks to hold capital in excess of the minimum ratio.*

2.1.4. *QCB would seek to intervene at an early stage to prevent the capital level from falling below a minimum level that is required to support the risk profile of a particular bank and QCB may require rapid remedial supervisory action if appropriate capital is not maintained or restored.*

3. Principle 1 – ICAAP Requirements for banks

3.1. Principles set out under the Basel Capital Adequacy Framework outline the responsibilities under Pillar 2 for the QCB and national banks to implement Pillar 2. National Banks will be required to adhere to Principle 1 and details thereon. There is no standard ICAAP approach and banks should develop an ICAAP based on the nature, size and complexity of their business models. A fundamental principle for ICAAP is proportionality. ICAAP should be relevant to the complexity, size and risk profile of the bank. The bank should not base the ICAAP as per the regulatory templates furnished by QCB, like the capital adequacy template, liquidity template or any other template. In that case, the ICAAP will be only a format of regulatory requirements, and not an internal calculation of relating capital to the inherent risks.

3.2. Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels. The ICAAP process requirements broadly are set out as under. Specific issues are listed separately. A thorough and comprehensive ICAAP is a vital component of a strong and sound risk management framework. A bank's ICAAP should consider short and long term needs and consider prudence of building excess capital over benign period. The ICAAP is a bank-driven process that should factor the bank's internal risk management process and shall be consistent with the existing body of guidance. *The ICAAP processes shall be reviewed by an external auditor firm approved by the QCB and this firm should not have assisted the bank in the development of the bank's ICAAP. The ICAAP should be undertaken at both the solo and consolidated level and provide a 5 year projected capital assessment.*

3.3. **Strategy:** For the ICAAP at the bank to be relevant, it should be developed on the basis of the current Board Approved medium term strategy. What is meant by the Bank's strategy is not simply a budget, a set of projections or a business plan, but a clear and distinct strategy outlining growth by sector, region, funding sources, analysis versus peers, product offering, etc.

3.4. **Projections:** The strategy should be underpinned by detailed projections outlining granular estimates and assumptions of changes in balance sheet and P&L items for a period of 5 years.

3.5. **Operating model:** The Bank's operating model should be summarized in the ICAAP document and any planned changes (to meet the strategy requirements) should be documented. This will include, but not be limited to, any

- Planned technology changes (including major hardware or systems changes);
- Changes to customer channels;
- Changes to the bank's organization structure and/or operating model; and
- Major changes to processes.

3.6. **Risk appetite:** The Bank should establish a clear risk appetite statement which should clearly involve the Board of Directors in setting and not simply approving. The risk appetite should be based on the Bank's selected strategy and operating model. The risk appetite should include internal capital targets and the stressed buffer that is required in-order for the Bank to survive and maintain adequate internal and regulatory capital requirements and sufficient liquidity .

3.7. **Risk governance:** The Bank's risk governance framework should be documented in terms of Board and senior management responsibilities for risk management, policies,

procedures, limits and risk management reporting. This should include documentation on how the risk appetite is cascaded down into the Bank's limit structure.

3.8. **Risk profile:** The Bank should develop a mechanism to monitor its actual risk profile in light of its established risk appetite for all material risks it faces.

3.9. **Risk and capital projections:** The Bank should develop a mechanism to measure key risks and relate these to capital requirements. The strategy and projections should be used to project

- 3.9.1. Actual available capital;
- 3.9.2. Required regulatory capital (MCR); and
- 3.9.3. Required internal capital (under ICAAP).

3.10. The risk and capital projections should be subject to stress testing in light of regulatory requirements and aligned to the Bank's internal risk appetite. The QCB expects banks to demonstrate the three capital projections under the following three scenarios:

- 3.10.1. Base case (in the absence of stress testing);
- 3.10.2. Gross stress tests; and
- 3.10.3. Net stress tests (taking into account credible management actions).

3.11. Banks will have to demonstrate that the internal capital targets are well founded and consistent with their risk profile and current operating environment. The process should be forward-looking and will consist of the following 5 features:

3.11.1. **Board and Senior Management oversight** – The ICAAP should be an internal document, approved by the Board or relevant risk / governance committee. The bank is required to specify the authority signing-off the ICAAP. It is imperative that the bank establishes a programme to ensure that all senior management and Board understand the nature and purpose of ICAAP. Therefore, ICAAP is the responsibility of the bank and its Board and Senior Management.

3.11.2. **Sound Capital Management** – The fundamental requirements are that bank identifies, measures and reports all material risks, a process within ICAAP to relate capital to level of risks, a process wherein the capital adequacy goals with respect to risk, taking account of the bank's strategic focus and business plan, and a process of internal controls, reviews and audit to ensure the integrity of the overall management process.

3.11.3. **Comprehensive assessment of risks** – All material risks are to be assessed under ICAAP. The list of risks outline in this document is not comprehensive but must be considered under ICAAP. An illustrative list is as under:

- 3.11.3.1. **Credit risk** – exposures to individuals, counterparties and also at portfolio levels, aggregation of portfolio, securitization etc. Outcomes of study by the Credit department's credit portfolio review on weaknesses in any portfolio and other inputs should also be used for testing the credit risk.
- 3.11.3.2. **Operational Risk** – The framework for operational risk management should cover bank's appetite and tolerance for operational risks, manner and extent to which operational risk is transferred outside the bank etc. Since Gross Income is the proxy for scale of operational risk, bank can sometimes under-estimate operational risk. Banks may also be guided by the Sound Practices for the Management & Supervision of Operational Risk.
- 3.11.3.3. **Market Risk** – To actively assess and manage all material market risk wherever they arise, at position, desk, business line and bank-wide. The bank should have robust policy for clear marking of boundaries of trading book. The policy should indicate the exceptional conditions under which transfers from banking to trading book and vice versa is done. Additionally, the bank should try to measure, illiquidity, concentrated positions in relation to market turnover, one way markets, positions, significant shifts in correlations.
- 3.11.3.4. **Valuation** – Prudent valuation procedures and its relation capital positions should be evaluated. Banks may be guided by the BCBS Supervisory Guidance for assessing bank's financial instrument fair value practices.
- 3.11.3.5. **Interest rate risk in banking book** – Banks need to refer to BCBS document *Principles for the Management & Supervision of Interest Rate Risk*, for a detailed exposition. The evaluation should include all material interest rate positions and consider all relevant repricing and maturity. Some of the standard methods for calculating the IRBB are by earnings perspective and economic perspectives. This may be calculated by gap analysis, simulation techniques or internal models or a combination of these, or the impact of interest rate risk in banking book on the market value of equity (MVE).

- 3.11.3.6. **Liquidity Risk** – the study should include system of measuring, monitoring and controlling liquidity risk, adequacy of capital given the liquidity profile and the liquidity of markets. Under this, the bank may be required to study the funding liquidity and market liquidity risks. Banks could also use methods like structure of funds approach or liquidity indicator approach to estimating the liquidity needs. It would be ideal to monitor the daily liquidity indicator, monthly liquidity indicator and overall liquidity indicator (total liquid assets as a percentage of total customer and inter-bank deposits). Further, banks can also evaluate the large liability dependence ratio to study the risk of illiquidity.
- 3.11.3.7. **Residual Risks** – While banks are allowed to use credit mitigation techniques to reduce their credit risk, these give rise to other risks like legal risk, documentation risk or liquidity risk. Other examples of residual risks are those emanating from liability to seize, or realize in a timely manner, collateral pledged on default of a counterparty, refusal or delay by guarantor to pay, ineffectiveness of untested documentation. Hence, bank's need to have a robust collateral management to avoid residual risks. Bank must consider whether, when calculating capital requirements, it is appropriate to give full value of the credit risk mitigants as given under Pillar 1.
- 3.11.3.8. **Credit Concentration risk** – this is the single most important cause of major problems in banks. Risk concentrations can arise in bank's assets, liabilities, or off-balance sheet items either product or services, or through a combination of exposures across these categories. The study should include, significant exposures to individual counterparty or group of related counterparties, credit exposures to counterparties in same economic sector or geographic region, indirect exposures arising from bank's credit risk mitigation, like exposure to a single collateral type or credit protection provided by a single counterparty, i.e. concentration at portfolio and collateral level.
- 3.11.3.9. **Counterparty credit risk** – The bank's policies, processes and systems should take into account market, liquidity, legal and operational risks associated with counterparty credit risk and to the extent possible interrelationships amongst them. The measurement of counterparty credit risk must include monitoring daily and intra-day usage of credit lines, gross current exposure and net collateral held where such measures are appropriate, measure and monitor peak exposure at a confidence level chosen by the bank at portfolio and counterparty level, concentrated positions by groups of related counterparties, by industry, by market, customer investment strategies etc.

The bank must conduct an independent review of the counterparty credit management system through its Internal Auditing process at least annually. The counterparty risk emanating under the Treasury of the bank should also be considered.

- 3.11.3.10. **Securitization risks** – Banks should consider and review capital assessment of actual correlation between assets in the pool and how they have reflected in calculation for capital requirements, risk transfer, retaining or repurchasing securitization exposures, risk of provision of implicit support, residual risks, call provisions, early amortization etc.
- 3.11.3.11. **Risk Concentrations** – The typical situations for risk concentrations would emanate from exposures to a single counterparty, borrower or group of connected counterparties or borrowers, industry or economic sectors, including exposures to regulated and non-regulated FIs, geographical regions, exposures arising from credit risk mitigation techniques, including exposures to similar types or to a single or closely related credit protection provider, trading exposures or market risk, exposures to counterparties, funding sources, assets held in banking or trading book, off-balance sheet exposures, including guarantees, liquidity lines and other commitments.
- 3.11.3.12. **Off-balance sheet exposures & Securitization risk** – Securitization had become an alternate source of funding through several structures. Support to these structures had exposed banks to additional and unexpected credit, market & liquidity risks. In the light of these, ICAAP will need to address risks like credit, market, liquidity and reputational risk of each exposure, potential delinquencies and losses on the underlying securitized exposures, exposures from credit lines or liquidity facilities to SPVs/SPEs, exposures from guarantees provided by monolines and other third parties.
- 3.11.3.13. **Sound Compensation Practices** – The staff compensation policies should not be unduly linked to short-term accounting profit generation, but linked to longer-term capital preservation and financial strength and risk adjusted performance measures. QCB will review the practices to ensure that they are adequate under Pillar 2.

3.11.3.13.1. Sound Compensation Principles for guidance in use for ICAAP

3.11.3.13.2. Under the Sound Compensation Practices publication of the BCBS relating to Compensation Principles and Standards Assessment Methodology, Banks are required to adhere to the principles (i to vii) outlined below:

Banks generally apply different strategies when defining their compensation practices. The most prominent approaches are:

- (a) ***Top-down or “award-focused strategy”***, where a bank chooses the amount of its overall bonus pool for a given year depending upon bank’s performance and then allocates the pool among employees with allocations depending upon the contributions of business units and employees to short-term profit. This method does not reliably reduce bank-wide employee compensation when large losses are experienced in legacy losses. This is due to the fact that ***bonus awards depend on activity during the year and not on legacy losses.***
- (b) ***Bottom-up or “payment focused”***, where the incentives operate at the level of individual employees and if unsound risk taking incentives due to an excessive focus on short-term results are the problem, then individual employee’s compensation arrangements should be altered so that risk influences the amount of compensation that the employees ultimately receive, not just short-term profit.

3.11.3.13.3. The above 2 approaches are complementary and a combination of both the approaches might reach the optimal incentive alignment with the risk of the bank. In order to achieve the optimal mix of alignment, the following principles are given by BCBS:

- i. The Board of the bank should actively oversee the compensation system design and operation. The compensation system should not be primarily controlled by the CEO and the Management team. Compensation outcomes, risk measurements and risk outcomes should be regularly reviewed for consistency with the intentions.
- ii. The Bank should establish a Board Remuneration Committee which should comprise a majority of independent, non-executive members.
- iii. For employees in the Risk and Compliance functions, remuneration should be determined independently of other business areas and be adequate to attract qualified and well experienced staff. The performance measures should be based principally on the achievement of the objectives of their functions.

- iv. Compensation must be adjusted for all types of risks. Both quantitative measures and human judgment should play a role in determining risk adjustments. Risk adjustments should account for all types of risks, including difficult-to-measure risks such as liquidity risk, reputation risk and cost of capital.
- v. Compensation outcomes must be symmetric with the overall outcomes. Compensation systems should link the size of the bonus pool to the overall performance of the bank. Employee incentive payments should be linked to the contribution of the individual and business to such performance. Bonuses should diminish or disappear in the event of poor bank-wide, divisional and business unit performances.
- vi. Compensation payout schedules must be sensitive to the time horizon of risks. Profits and losses of different activities are realized over different periods of time. Variable compensation payments should be deferred accordingly. Payments should not be finalized over short periods where risks are realized over long periods. Management should question payouts for income that cannot be realized or where likelihood of realization remains uncertain at time of payment.
- vii. A mix of cash, equity and other forms of compensation must be consistent with the risk alignment. The mix will vary depending on the employee's position and role. The bank should explain the rationale for the mix.

3.11.4. Risks originating from the economic environment – The risks emanating from this category will affect the capital and earnings of the bank. This may be from the national or international factors, economic or business factors, region-wise factors, industries important for the country and jurisdiction, and markets, changes in legal system, regulatory environment, asset price fluctuations, demand and supply imbalances, i.e. factor having a macro-economic implications.

3.11.5. Stress Testing & Scenario analysis – Banks should regularly perform stress tests and scenario analysis that can be incorporated into the bank's risk management systems and can be factored as an input into bank's ICAAP to study the impact of a sudden and unexpected changes in the short-term profitability and long-term capital value of the bank. Different standard scenarios should be used for the analysis and consider both instantaneous shocks and longer, sustained, stress scenarios.

3.11.6. **Risk aggregation & diversification effects** – An effective ICAAP should assess the risks across the entire bank. Bank's aggregating risks among various types of risks or business lines should understand the challenges in aggregation. While aggregating risks, banks should ensure that any potential concentrations across more than one risk dimension are addressed, recognizing that losses could arise in several risk dimensions at the same time, emanating from the same event or a common set of factors. ICAAP should also consider the possible effects of diversification, management should be systematic and rigorous in documenting decisions, in identifying assumptions used in each level of aggregation.

A comparative and indicative illustrative Risk categorization

Main Risk	Sub-Risk categories
External	Competitor, Technological developments, Disaster, Shareholder Value, Environmental factors like economic, social and political factors.
Internal	Reputational, Business Model and its relevance to the external factors, Business strategy, Portfolio, cost controls, internal controls set-up.
Credit Risk	Asset Quality, Asset Concentration, Settlement on timely basis, Collateral Management.
Market Risk	Interest Rate Risk in the Banking Book, Interest Rate Risk, Currency Risk, Equity Risk, Structured Instruments Risk, Commodity Risk.
	Liquidity & Funding Risk – Liquidity, Cash Flow, Concentrations, Capital availability, opportunity costs
Operational Risk	Internal Processes [Effectiveness, efficiency, time cycle, interruption, maintenance, oversight, outsourcing, product services, market share, etc.]; Systems [IT systems, IT infrastructure, integrity, change management etc.] People Risk – Management, knowledge capital, skills & training, Organization structure, Line of Authority, Succession, Integrity, Fraud, etc.] Legal & Regulatory Risk – Appropriate & Adequate coverage of legal contracts, Legislative changes and requirements, regulatory requirements, regulatory reporting, compliance requirements, Capital Adequacy, AML/CTF issues etc.] Other [Damage to physical assets, Theft/Fraud, IT Fraud]
Reputational Risk	Governance Risk [stakeholders vs shareholders, communication & consultation [insufficient/inappropriate], standard of conduct, Customer Services satisfaction, Gaps in performance to customers etc.

3.11.7. **Monitoring & reporting** – Bank should have an adequate system for monitoring and reporting risk exposures and assessing how the changing risk profile affects the need for capital.

Bank should be able to report bank's risk profile and changing capital needs to the Board so as to enable the Board to evaluate the following:

- 3.11.7.1. The level and trend of material risks and their effect on capital levels,
- 3.11.7.2. Sensitivity and reasonableness of key assumption used in capital assessments under the ICAAP system,
- 3.11.7.3. Determine that the bank holds adequate capital against various risks and is in compliance with the established capital adequacy goals set by the bank,
- 3.11.7.4. Assess the future capital requirements based on the changing risk profile and the changes to the strategic business plans of the bank.

3.11.8. Adoption of Risk Universe

3.11.8.1. The Risk Universe Table used for monitoring and reporting to the Board and the related Committees of the Board should be comprehensive. It should ideally have the following parameters in the Table for Risk Universe for a better understanding. Banks are free to use more detailed risk parameters. These parameters for risk like medium to high or extreme high under the risk scale of the bank:

<i>Risk category</i>	<i>Segment</i>	<i>Event</i>	<i>Likelihood</i>	<i>Impact</i>	<i>Risk position</i>	<i>Reason</i>	<i>Mitigants</i>	<i>Responsibility</i>
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3.11.8.2. In order to arrive at the linkages with all the segments in the risk categorization, bank should formulate a correlation matrix of different segments and also have a risk universe mapping by risk segments.

3.11.9. Risk Scoring & Mapping:

- (a) **Identification & monitoring bank-wide risks:** The core risk management is identification, measurement, monitoring and reporting bank-wide risks. The bank should consider all internal and external risk factors and their implication on strategic objectives. The bank should list these potential risks and provide appropriate definitions for the factors in the indicative list given in risk categorization above.
- (b) **Risk Assessment:** Bank should establish risk assessment methodology. This is to be done by summarizing risk categories, identifying key risks across the bank. The risk

assessment methodology process should assess the extent to which potential events have an impact on achieving the objectives. This implies that the identified risks should be analyzed from:

- a. Likelihood of the risk occurring using a scoring system,
- b. Assess the impact of such risk again using a scoring method.

Such a scoring would give out a risk matrix. The risks should be assessed on an inherent and residual basis.

3.11.10. The process of assessment would entail that the bank wide risk assessment is made by the Risk Management Department. The outcomes from the assessment should be used to facilitate further decision regarding the treatment of risks and prioritization. The grading is usually done as:

Rating system	Definition of criteria of level of risk
Extreme, very high risk, high risk, Medium Risk, Low Risk and very low risk	The bank should provide the definition of the criteria for each of the level of risk.

3.11.11. Out of these outcomes, the bank can form a risk matrix using the scoring scale as likelihood and for each score use the level of risks with the risk score to form an impact and risk matrix. The scoring, specific impact and likelihood schedules should be used uniformly bank-wide. The Board should look at the schedules bank-wide like the risks and the definitions, management's response to the level of risks, detailed risk categorization levels, likelihood rating scales, definition and criteria, risk mapping, impact rate scaling etc., should be scheduled bank-wide.

3.11.12. The risk measurement is made in terms of their impact and likelihood, for which the Board is to set specific criteria (likelihood rating scale, definition and criteria on rating scale). Similarly, an impact rating scale, with major parameters relating to rating, definition and criteria, should be approved for use bank-wide. Based on these parameters, bank should be able to form a correlation matrix and arrive at the risk universe matrix.

3.11.13. The basic objective of ICAAP is to relate capital requirements for the inherent risks, comprehensive analysis of all material risks should be linked to capital requirements. Therefore, the ICAAP capital requirement Table should ideally indicate the following capital requirements after a thorough ICAAP is put in place. The Table should be populated for each of the five years the ICAAP is projected for:

Capital Adequacy	
Common Equity Tier 1 Capital	
Additional Tier 1 Capital	
Tier 2 Capital	
Total Capital	
Risk weighted Assets	
Credit Risk weighted Assets	
Market Risk Weighted Assets	
Operational Risk Weighted Assets	
Total Risk Weighted Assets	
Common Equity Capital Tier 1 Ratio	
Capital Conservation Buffer	
Minimum CET + Capital Conservation Buffer	
Minimum Tier 1	
Minimum Total Capital	
Minimum Total Capital + Conservation Buffer	
Pillar 2	
Credit Risk [<i>different from Pillar 1</i>]	
Market Risk [<i>different from Pillar 1</i>]	
Operational Risk [<i>different from Pillar1</i>]	
Concentration Risk	
Liquidity Risk	
Interest Rate Risk in Banking Book	
Other Pillar 2 Risks included for ICAAP	
Total Pillar 2 Capital requirement	
Pillar 2 Ratio	
Stress Testing Capital Charge requirement	
Pillar 1 + Pillar 2 capital requirement	
Pillar 1 + Pillar 2 + Stress Testing Capital Charge	
Increase in capital requirement over Pillar 1	

A summary of the projection of the capital requirements to meet the above requirements should also be furnished.

3.11.10. Internal Control Review – Effective control on capital assessment process requires independent review and involvement of internal and external auditors. The ICAAP may be audited annually by an external auditor who is not the current external auditor of the bank. The control review should include:

3.11.10.1. Appropriateness of bank's capital assessment process under ICAAP given the nature, scope and complexity of bank's activities.

3.11.10.2. Identification of large exposures and risk concentrations.

3.11.10.3. Accuracy and completeness of data inputs into bank's ICAAP.

3.11.10.4. Reasonableness and validity of scenarios used in ICAAP.

3.11.10.5. Stress testing and analysis of assumptions and inputs.

3.12. Basic Principles & building blocks of ICAAP for banks

1. All National Banks should implement a process for assessing the adequacy of capital under the ICAAP process;
2. ICAAP should form an integral part of the risk management process of a bank and should not be developed to comply with the regulatory requirements. Therefore, ICAAP document should not be a duplication or reflection of the regulatory templates furnished by QCB;
3. ICAAP should be risk-based, comprehensive and forward looking;
4. ICAAP is the responsibility of the bank, its Board and Senior Management;
5. ICAAP should be a comprehensive assessment of all the material risks that the bank is exposed;
6. The outcome of ICAAP should provide a sound capital assessment;
7. ICAAP should be actively used by the bank for risk management purposes;
8. The ICAAP framework should be documented and Board approved;
9. ICAAP should be subject to regular review – at least annually or as often as there are material changes that may impact the capital levels;
10. ICAAP should be based on appropriate measurement and assessment processes;
11. ICAAP should be quantitative and qualitative;

12. ICAAP should cover all business units and operations;

3.13. Principles 2 to 4 QCB's responsibilities under Pillar 2

- 3.13.1.** Qatar Central Bank will review and evaluate bank's ICAAP, strategies, ability to monitor and ensure compliance with the regulatory capital ratios. Appropriate supervisory action by QCB will be taken in case QCB is not satisfied with the outcome of the ICAAP. The periodic review will entail all the examination process available with QCB currently, review of ICAAP by the external auditors appropriately focusing on capital. Primarily, QCB would assess the degree to which the internal targets and processes under ICAAP incorporate the full range of material risks faced by the bank. QCB would also assess, the measures used under ICAAP is also operationally used in setting internal limits, evaluating and controlling risks.
- 3.13.2.** QCB would assess the capital adequacy to determine that the target levels of capital set by the bank under the ICAAP are comprehensive and relevant for the current operating environment, these levels set are properly monitored and reviewed by the Senior Management and that the composition of capital is appropriate for the nature and scale of bank's operation. QCB would also evaluate the extent to which ICAAP has considered unexpected events, wide range of external factors and scenarios in setting capital levels.
- 3.13.3.** QCB would evaluate the control environment, basically the management information and reporting system, aggregation of activities and risks, and management's record of handling emerging or changing risks. Considering all the factors, the capital level of the bank needs to be determined.
- 3.13.4.** QCB would also review the bank's compliance with all the other minimum standards prescribed by QCB.
- 3.13.5.** Having reviewed all the factors together with all relevant data and records, QCB would initiate appropriate supervisory action, where necessary, if it is not satisfied with the ICAAP processes. There could be a range of supervisory actions to rectify the shortcoming. Increase in capital is not necessarily the only supervisory response.
- 3.13.6.** QCB expects banks to operate above the minimum regulatory capital ratios and may require banks to hold additional capital in excess of the minimum. Pillar 1

requirements would enable the banking system to hold capital for uncertainties. Bank-specific uncertainties are treated under Pillar 2.

3.13.7. QCB would seek to intervene at an early stage to prevent capital from falling below the minimum and may require remedial action from banks to restore the capital levels or maintain the capital levels. Such remedial actions may not be increased capital only, but also measures to improve systems and controls. Increase in capital requirements may be an interim measure. However, the ultimate decision will rest with QCB after discussing the ICAAP and other relevant results with the bank's board.

3.13.8. QCB's review of compensation practices will be rigorous and sustained. Any deficiencies shall be addressed promptly with supervisory action. QCB will hold discussions with the bank for assessing risks and ensuring that the compensation practices in the bank conform to principles I to vii outlined under the Sound Compensation Practices.

3.14. Disclosure to QCB – The banks are required to submit the ICAAP document, containing the basic information as given in the reporting format given below. Since there is no standard methodology for ICAAP, the broad requirements are given. Banks may add additional details to confirm and explain their strategy and assumptions, approach and methodology. The ICAAP shall be submitted annually on both a solo and consolidated basis. However, QCB may require banks to submit ICCAP outcomes more than once a year as it may deem fit, either for specific banks or banks in general.

3.15. Reporting format and contents

Since there is no standard requirements for ICAAP and disclosure requirements, QCB would like to have the ICAAP document in the following format, so as to have details, both qualitative and quantitative, and for ease of comparison between national banks. Banks are however free to add further quantitative or qualitative information in addition to the list of indicative topics given under the format.

1. **Executive Summary** - Should specify purpose of the ICAAP document, main findings, such as:
 - a. How much and the composition of internal capital the bank considers as required under Pillar2 compared to Pillar 1,
 - b. Adequacy of bank's risk management processes,

- c. Commentary on the material risks to which the bank is exposed and why the level is considered as acceptable or if not the actions envisaged for mitigating the risks,
 - d. Commentary on major issues where further analysis or decisions are required,
 - e. Description on who carried out the assessments, challenged the assessments, validated the assessments, stress tested the outcomes used for ICAAP and the approving authority.
2. **Background** – of the bank, group structure, abridged financials, capital held vis-à-vis regulatory requirements etc.
3. **Summary of current & projected financial and capital ratios**
4. **Capital Adequacy** – (a) Bank's inherent risk appetite in quantitative terms as approved by the Board and used in the ICAAP calculations, (b) Spell out clearly, *"whether what is being given in the ICAAP document is the bank's view of the amount of capital required to meet minimum regulatory needs or whether the ICAAP requirements represents the amount of capital that the bank believes it would need to meet its business plans."* (c) Date of the ICAAP – rationale for the time period selected for ICAAP.
5. **Risks analyzed** – All material risks like, credit risk, market risk, operational risk, liquidity risk, concentration risk, interest rate risk in banking book, residual risk of securitization, strategic risk, business risk, reputation risk, any payment obligation risk, other residual risk, any other risks identified by the bank. A comprehensive explanation, how the risk has been assessed and quantitative outcomes of the assessment. In case any risk has been highlighted in QCB's on-site examination report, how the risk has been mitigated, etc.
6. **Methodology & Assumptions** – A detailed description for each of the major risk, the approach, main assumptions made. Whenever, bank uses stress tests or scenario analysis, the details of the parameters used should be provided.
7. **Capital transferability** – In case of group, details of any restrictions on management of bank's ability to transfer capital into or out of the bank due to any stipulations. Restrictions and flexibility on distribution of dividends on entities in the group should also be indicated.

8. **Key sensitivities & Scenarios used in the ICAAP computation.**
 9. **Management Actions** – assumed in delivering the ICAAP outcomes, like challenges by different Committees of the Board, validation by Management and therefore revising the ICAAP computation / methodology / measurement / and /or outcomes.
 10. **Aggregation & Diversification** – Details how the results of separate risk assessments are aggregated and the overall view on capital in the bank.
 11. **Testing & adoption of ICAAP** – This Section should provide a detailed evaluation of the processes of review and test results by the Senior Management & Board and framework of approval by the Board.
 12. **Use of ICAAP within the bank** – This section will demonstrate the extent to which the concept of capital augmentation and capital planning & management is embedded in the bank's risk management systems.
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