

BASEL II
GUIDANCE DOCUMENT
PILLAR 2
SUPERVISORY REVIEW PROCESS

SAMA
BANKING SUPERVISION DEPARTMENT
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Attachment 1: Pillar 2 Risks

ABBREVIATIONS

ICAAP - Internal Capital Adequacy Assessment Process

CAR - Capital Adequacy Requirements

SRP - Supervisory Review Process

1. **Overview**

1.1 **Objective**

The objective of this document is to assist banks in implementing the Pillar II requirements and to facilitate SAMA's Supervisory Review Process (SRP).

SRP is an important component of the Basel II framework. It's main objectives are to:

- enhance supervisory monitoring of the capital adequacy of banks to support risks in their banking activities;
- encourage banks to strengthen their risk management processes for monitoring and controlling such risks; and
- provide the framework and encouragement for banks to adopt more pro-active capital planning and management practices.

1.2 **Background and Scope**

1.2.1 As part of the revised capital adequacy framework, SAMA will conduct the SRP on individual banks to determine their capital adequacy and assess if they should hold additional capital to provide for risks that are not adequately covered or not covered under the minimum capital requirements.

1.2.2 SAMA uses SRP for a more detailed and in-depth risk assessment, and has set a framework for setting the minimum Capital Adequacy Requirement (CAR) of banks. This takes into account the overall risk profile and risk management and control systems of each bank. Also, taken into consideration is the extent to which banks are exposed to risks that are beyond the scope of the minimum capital requirement of Pillar I and, where applicable, the effectiveness of their Capital Assessment Process (ICAAP).

1.2.3 This document sets out the approach that SAMA will adopt in conducting the SRP, including a description of:

- the main principles and objectives underlying the SRP;
- the major assessment factors that SAMA will utilize in determining the minimum CAR of individual banks and the supervisory arrangements and procedures associated with the assessment;
- the supervisory approach to reviewing the ICAAP of individual banks including the standards and requirements expected of them; and

- the process for ongoing monitoring of banks' capital adequacy and compliance with the Capital Adequacy Rules.

1.2.4 This framework should be read in conjunction with other supervisory guidelines, including the SAMA's Supervisory Policy documents that are relevant to the assessment of bank capital adequacy. These include the Basel II SAMA Detailed Guidance Document 2nd Consultative Draft issued by SAMA in June 2006.

1.2.5 SAMA requires formal interaction intended to foster an active dialogue between banks and SAMA such that when deficiencies are identified, prompt and decisive action can be taken to reduce risk or restore capital.

Accordingly, SAMA may adopt an approach to focus more intensely on those banks with risk profiles or operational experience that warrants such attention.

(Refer to Paragraph 722 of International Convergence of Capital Measurement and Capital Standards – June 2006)

1.3 Main Principles

In conducting the SRP, SAMA is guided by the following principles:

- Banks should have a formal internal process for determining their overall capital adequacy in relation to their risk profile and a strategy for maintaining the required level of capital;
- SAMA has the responsibility of evaluating banks' internal capital adequacy assessments and establishing whether the resultant capital position is adequate;
- SAMA expects banks to operate above the statutory minimum and has the power to require Banks to do so; and
- SAMA seeks to intervene at an early stage to prevent banks capital from falling below prudent levels.

1.4 Implementation

1.4.1 As a component of Basle II – Pillar II, SAMA will conduct the SRP on individual banks to assess their capital adequacy and determine if they should hold additional capital to provide for risks that are not covered under the minimum capital requirements.

1.4.2 Under the SRP, banks are required to have a comprehensive process for allocating their internal capital against risks they are faced

with, validity of which is subject to the SAMA's assessment. This formal process for internal capital allocation is described to be the ICAAP.

1.4.3 The SRP conducted on banks and any change in their minimum CAR will be mainly driven by the SAMA's assessment of capital adequacy. However, over time banks ICAAP capabilities may become a more significant factor for consideration as their internal methodologies evolve. It is expected that the larger banks will conduct their own internal capital allocation process with greater diligence than the smaller ones. Consequently, smaller banks will need more time and resources to develop and enhance their capital planning and assessment practices.

1.4.4 Initially, small banks will be expected to have the process started to develop systems for conducting the ICAAP and will not be assessed closely for compliance with the ICAAP Standards set out in section 6. Nevertheless, this will not absolve such banks from the responsibility of ensuring that there is sufficient capital to meet their business and operational needs. In setting the minimum CAR of these banks, SAMA will take into account that their capital management practices may not comply fully with the supervisory standards. However, over time they will be expected to meet these standards.

1.4.5 Other banks will be required to develop their systems for conducting the ICAAP in line with SAMA Standards. While SAMA would not expect banks to have a well developed ICAAP immediately after 1 January 2008, they should initiate efforts to put in place the basic elements of the ICAAP (see para. 6.2.3 for more details), and make steady progress towards enhancing the process over time. SAMA will discuss with individual banks their plan for implementing the ICAAP standards, and monitor such progress on an ongoing basis.

2. Key components of Supervisory Review Process

The SRP conducted on each bank will consists of the following major components:

2.1 Review of risk profile - SAMA will form a view of a bank's overall risk profile as part of the ongoing risk-based supervision, with the object of assessing those risks and control factors that may result in additional capital;

2.2 Review of ICAAP - Banks will be subject to the ICAAP standards set out in section 6 where SAMA will assess their ICAAP as part of the SRP. This review will include a consideration of the assumptions, methodology, coverage and outcome of a banks ICAAP, with a view to ascertaining the adequacy and effectiveness of a banks ICAAP;

2.3 Determination of the minimum CAR and or other supervisory measures - SAMA will consider whether a bank minimum CAR remains sufficient or needs to be changed by applying the assessment framework set out in section 5.3. SAMA may also require bank to take other actions to rectify any system or control deficiencies identified during the SRP. The assessment results, including any supervisory measures proposed, will be communicated and discussed with the banks amounting to an independent review process as described in the next subsection 2.4;

Other means for addressing risk, such as strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls, would also be considered by SAMA.

(Refer to Paragraph 723 of International Convergence of Capital Measurement and Capital Standards – June 2006)

The permanent solution to banks' difficulties is not always increased capital. However, some of the required measures (such as improving systems and controls) may take a period of time to implement. Therefore, increased capital might be used as an interim measure while permanent measures to improve the bank's position are being put in place.

Once these permanent measures have been put in place and have been seen by SAMA to be effective, the interim increase in capital requirements can be removed.

(Refer to Paragraph 760 of International Convergence of Capital Measurement and Capital Standards – June 2006).

Supervisory transparency and accountability

SAMA would set target and trigger ratios and the Categories of capital in excess of the regulatory minimum, factors that may be considered in doing so, would be made publicly available.

(Refer to Paragraph 779 of International Convergence of Capital Measurement and Capital Standards – June 2006)

2.4 Communication of SRP results to the Banks – SAMA will discuss with the banks the results of its assessment, including any areas of concern which may culminate in an increase in its minimum CAR. SAMA will explain the factors which have led to this assessment and recommend actions to be taken to address these concerns. Should there be proposed increase in the minimum CAR, a bank will be informed and provided with an opportunity to make representations before a final decision is made.

2.5 Ongoing monitoring of the Basle capital adequacy – SAMA will monitor that the banks comply with the various regulatory capital standards and requirements applicable to it on a continuing basis. SAMA will update the bank's risk profile regularly, taking into account its progress in addressing any supervisory concerns raised or other events which may significantly affect the bank's ability to monitor and ensure compliance with SAMA Rules.

3. Supervisory Review Arrangements

3.1 SAMA will perform the SRP on each bank regularly (normally once a year) as part of its risk-based supervision. The scope of the SRP will cover all major business activities of the bank, whether operating locally or overseas, on a solo and/or consolidated basis.

3.2 When carrying out the SRP, SAMA will adopt a pro-active approach and take account of any significant development either arising from internal or external conditions to the bank's overall risk profile in the past year and assess how these changes will affect the bank and its business plans in the coming year. Further, SAMA will take into account the results of any offsite and onsite examinations, and make use of any significant information obtained from various means such as prudential interviews, banking returns and supervisory contacts.

3.3 SAMA will take a balanced approach when applying the SRP to banks of different size and complexity. Consequently, the frequency, intensity and depth of the SRP will be determined by the potential risk that the bank poses to the banking System's Safety and Soundness. For example, SAMA may subject Banks with systemic importance to a more in-depth and comprehensive SRP. For banks with smaller operations, SAMA would not expect them to have sophisticated risk management systems and ICAAP, and hence the SRP conducted is likely to be less in-depth and frequent. In classifying banks, SAMA will take account of aspects such as the bank's business nature, scale of operations (i.e. size, risk profile and complexity), history of regulatory compliance and significance to financial stability and other supervisory objectives.

3.4 The SRP will not substitute the role of the Board and senior management of banks. The **primary** responsibility for ensuring that a bank has adequate capital to support its risk profile still remains with its Board and senior management.

4. Application to Banks Licensed in Saudi Arabia

4.1 SAMA as the Supervisory Authority of all local banking groups¹, will apply the SRP to the group as a whole, and will monitor the group's capital adequacy at the consolidated level. For branches of foreign banks in Saudi Arabia, SAMA will discuss ICAAP and SRP with the home supervisors.

¹ This refers to those bank which have locally incorporated investment subsidiaries, or banking subsidiaries overseas.

In order to reduce the compliance burden and avoid regulatory arbitrage, the methods and approval processes used by a bank at the group level may be accepted by SAMA at the local level, provided that they adequately meet the SAMA's requirements. Wherever possible, SAMA will avoid performing redundant and uncoordinated approval and validation work in order to reduce the implementation burden on banks, and conserve supervisory resources

(Refer to Paragraph 781 of International Convergence of Capital Measurement and Capital Standards – June 2006)

5. Supervisory Review Process (SRP)

5.1 General

5.1.1 This section focuses on the major components of the assessment framework adopted by SAMA under the SRP, including the key assessment factors that will be reviewed in evaluating a bank's capital adequacy (see subsection 5.2 below) and the approach towards the setting of their minimum CAR (see subsection 5.3 below).

5.2 Key Factors for Assessing Capital Adequacy

5.2.1 Central to the SRP is SAMA assessment of the level of capital that a bank should set aside for the inherent risks identified for the purpose of risk-based supervision, to which all the assessment factors under the SRP can be linked. These inherent risks are credit, market, operational and Pillar II risks identified in Attachment-1.

5.2.2 In determining the overall risk profile and minimum CAR of a bank, SAMA will take into account two types of assessment factors, i.e. those that are referred to as Inherent Risks and those that are concerned with the Quality of Risk Management.

5.3 Preliminary Assessment of Inherent additional Risks

5.3.1 Inherent Risk includes both Pillar 1 Credit, Market and Operational and Pillar II Risks described in Attachment-1. Pillar I Risks namely, credit risk (in terms of counterparty default risk and transaction risk), market risk and operational risk, are within the scope of the minimum capital requirements and hence are covered by the regulatory minimum of 8%. Any additional Pillar I risks, i.e. those that are not covered sufficiently in Pillar 1 and Pillar II inherent risks described in Attachment-1 are to be assessed under the SRP.

SAMA will use its internal risk assessment methodology and tools to determine the risk profile of a bank with ultimate aim to arrive at the Composite Risk Rating of a bank.

Credit risk: Banks 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. For more sophisticated banks, the credit review assessment of capital adequacy, at a minimum, should cover four areas: risk rating systems, portfolio analysis/aggregation, securitization/complex credit derivatives, and large exposures and risk concentrations.

Internal risk ratings should be adequate to support the identification and measurement of risk from all credit exposures, and should be integrated into an institution's overall analysis of credit risk and capital adequacy. The ratings system should provide detailed ratings for all assets, not only for criticized or problem assets. Loan loss reserves should be included in the credit risk assessment for capital adequacy.

The analysis of credit risk should adequately identify any weaknesses at the portfolio level, including any concentrations of risk. It should also adequately take into consideration the risks involved in managing credit concentrations and other portfolio issues through such mechanisms as securitization programmes and complex credit derivatives.

Further, the analysis of counterparty credit risk should include consideration of public evaluation of the supervisor's compliance with the Core Principles for Effective Banking Supervision.

(Refer to Paragraph 733-735 of International Convergence of Capital Measurement and Capital Standards – June 2006)

A further important aspect of Pillar 2 is the assessment of compliance with the minimum standards and disclosure requirements of the more advanced methods in Pillar 1, in particular the IRB framework for credit risk and the Advanced Measurement Approaches for operational risk. SAMA must ensure that these requirements are being met, both as qualifying criteria and on a continuing basis.

(Refer to Paragraph 724 of International Convergence of Capital Measurement and Capital Standards – June 2006).

Operational Risk

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 risk.

(Refer to Paragraph 737 of International Convergence of Capital Measurement and Capital Standards – June 2006)

Market Risk

For more sophisticated banks, their assessment of internal capital adequacy for market risk, at a minimum, should be based on both VaR modelling and stress testing, including an assessment of concentration risk and the assessment of illiquidity under stressful market scenarios, although all firms' assessments should include stress testing appropriate to their trading activity.

(i). VaR is an important tool in monitoring aggregate market risk exposures and provides a common metric for comparing the risk being run by different desks and business lines. A bank's VaR model should be adequate to identify and measure risks arising from all its trading activities and should be integrated into the bank's overall internal capital assessment as well as subject to rigorous on-going validation. A VaR model estimates should be sensitive to changes in the trading book risk profile.

(ii). Banks must supplement their VaR model with stress tests (factor shocks or integrated scenarios whether historic or hypothetical) and other appropriate risk management techniques. In the bank's internal capital assessment it must demonstrate that it has enough capital to not only meet the minimum capital requirements but also to withstand a range of severe but plausible market shocks. In particular, it must factor in, where appropriate:

- Illiquidity/gapping of prices;
- Concentrated positions (in relation to market turnover);
- One-way markets;
- Non-linear products/deep out-of-the money positions;
- Events and jumps-to-defaults;
- Significant shifts in correlations;
- Other risks that may not be captured appropriately in VaR (e.g. recovery rate uncertainty, implied correlations, or skew risk).

The stress tests applied by a bank and, in particular, the calibration of those tests (e.g. the parameters of the shocks or types of events considered) should be reconciled back to a clear statement setting out the premise upon which the bank's internal capital assessment is based (e.g. ensuring there is adequate capital to manage the traded portfolios within stated limits through what may be a prolonged period of market stress and illiquidity, or that there is adequate capital to ensure that, over a given time horizon to a specified confidence level, all positions can be liquidated or the risk hedged in an orderly fashion). The market shocks applied in the tests must reflect the nature of portfolios and the time it could take to hedge out or manage risks under severe market conditions.

(iii). Concentration risk should be pro-actively managed and assessed by firms and concentrated positions should be routinely reported to senior management.

(iv). Banks should design their risk management systems, including the VaR methodology and stress tests, to properly measure the material risks in instruments they trade as well as the trading strategies they pursue. As their instruments and trading strategies change, the VaR methodologies and stress tests should also evolve to accommodate the changes.

(v). Banks must demonstrate how they combine their risk measurement approaches to arrive at the overall internal capital for market risk.

(Refer to Paragraph 738 of International Convergence of Capital Measurement and Capital Standards – June 2006)

Supervisory review of compliance with minimum standards

There is also an important role for SAMA's review of compliance with certain conditions and requirements set for standardized approaches. In this context, there will be a particular need to ensure that use of various instruments that can reduce Pillar 1 capital requirements are utilized and understood as part of a sound, tested, and properly documented risk management process.

(Refer to Paragraph 755 of International Convergence of Capital Measurement and Capital Standards – June 2006)

Assessment of Quality of Risk Management

In addition to the level of inherent risks, SAMA will assess a bank's performance under the following Quality of Risk Management Factors with a view to ascertaining the bank's ability to manage and mitigate inherent risks:

A. Corporate Governance:

1. Board of Director
2. Senior Manager

Corporate governance – this refers to the assessment of the adequacy of a bank's corporate governance arrangements.

In assessing governance, SAMA will pay particular attention to the oversight exercised by the bank's board and senior management, including their knowledge and experience in risk management, their participation and involvement in development of the bank's ICAAP and risk management processes, and their responsiveness to risk management or control issues raised by SAMA. The SAMA will also take into account senior management's ability to detect and rectify issues or problems arising from internal operations and to react promptly to changes in the external developments (e.g. due to competition or deterioration in macroeconomic variables) that could adversely affect the bank's overall condition.

B. Risk Management and Control Functions

1. Risk Management
2. Internal Audit
3. Compliance
4. Financial Analysis
5. Operational Management

Systems and controls – this refers to the assessment of a bank's overall operating soundness, including the adequacy of:

- risk management systems (i.e. systems used for identifying, measuring, and monitoring the inherent risks);
- internal control systems and environment (including organization structure, delegation of authority, segregation of duties, control culture, internal audit and compliance functions);
- adequacy and effectiveness of Internal Audit and Compliance function;
- infrastructure to meet business needs (such as IT capability, staff competence, and outsourcing); and
- other support systems (such as MIS, accounting and anti-money laundering controls).

Capital strength and ICAAP – this refers to the assessment of:

- Banks quality of capital and its access to additional capital and ability to withstand business cycles and other external risk factors (e.g. the impact of mergers/acquisitions, competition or adverse events on the bank's operations); and
- the quality and effectiveness of a bank's ICAAP for managing its capital adequacy in relation to its risk profile, particularly the level of capital which enables the bank to stay in business, as well as the overall environment within which the ICAAP operates (for bank that are subject to the ICAAP standards set out in section 6).

5.4 Assessment Tools and Techniques

5.4.1 In conducting its assessment under the SRP, SAMA will use a combination of techniques and tools, which include:

- quantitative and qualitative assessments;
- weighting of key risk factors and trends;
- statistical and sensitivity analyses;
- stress and scenario tests;
- benchmarking against industry performance; and
- peer group comparisons.

In particular, the key assessment factors will be evaluated based on an internal judgment weighting system developed by SAMA. These factors will be separately considered by SAMA on a case-by-case basis, with the other techniques and tools incorporated where appropriate. Banks should however note that the assessment factors will be subject to periodic review by SAMA.

Regardless, SAMA's Supervisory judgment will play an important part in its final assessment. SAMA may also seek the views of the external auditors of a bank and, where applicable, its home or host supervisor on particular issues affecting the bank.

5.5 Integration with Risk Based Supervisory Process

For its SRP, SAMA has identified as additional Pillar I risks, these include credit, market and operational. Exclusive of these risks are those that are described in Attachment-1. The integration of SRP with Risk Based Supervision is a dynamic and forward-looking approach used for assessing a bank's risk profile (ascertained by balancing the level of the inherent risks with the quality of risk management systems for each of these risks).

5.6 On-going monitoring of Capital Adequacy

5.6.1 SAMA will perform evaluation and monitoring of Banks capital adequacy on a continuous basis. This will include compliance with the qualifying criteria of the relevant approaches and options adopted by them which are available under Basel II. For example, these may relate to the use of the Standardized or IRB approach and the recognition of credit risk mitigation techniques and securitization transactions for capital adequacy purposes.

As part of the supervisory review process, SAMA would ensure that these conditions are being met on an ongoing basis.

(Refer to Paragraph 753 of International Convergence of Capital Measurement and Capital Standards – June 2006)

5.6.2 If a bank is found to have a continuing decline in its required capital level, SAMA will require the bank to provide a capital restoration plan and the timetable for doing so. Additionally, SAMA will put into place an action plan to monitor the bank closely. If bank's capital is not maintained or restored within the specified timeframe, SAMA may take other relevant supervisory actions, such as restricting a bank from business expansion or limiting its business, operations or network, pending restoration of the capital to an adequate position.

5.6.3 As banks have an obligation to manage their capital and ensure that it is sufficient to cover the risks undertaken by them, they are expected to maintain internal monitoring systems (e.g. through internal validations or audits) to ensure that their capital does not fall below prudent levels, and that they continue to meet the minimum standards required for the use of particular approaches or methodologies under the minimum capital requirements.

6. Supervisory Standards on ICAAP

6.1 General

6.1.1 Under the SRP, banks are expected to have an approved and formalized ICAAP for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels. The ICAAP should be responsive to their specific circumstances and requirements, having regard to the risk profile and level of sophistication of their operations. SAMA has the responsibility of evaluating banks' ICAAP and their capital adequacy through the SRP, the results of which will be taken into account in determining their minimum CAR.

6.1.A. This section sets out SAMA's approach for assessing banks' ICAAP and the Supervisory Standards expected of such ICAAP. The requirements for conducting ICAAP are applicable to all banks except for the following:

- Subsidiaries of a local banking group are not required to establish their own ICAAP if their capital is managed on a group basis and incorporated into the group ICAAP.
- Branches of foreign banks.

6.1.2 SAMA recognizes that there is no single approach to conducting the ICAAP. Consequently, the focus of SAMA is on providing high level guidance rather than prescriptive criteria on ICAAP methodologies or techniques that should be employed. This also takes into account the fact that international regulatory and industry consensus on what constitutes best practice for conducting the ICAAP has yet to be established. The development of relevant methodologies and

techniques (e.g. on how non-quantifiable risks such as reputation and strategic risks are to be measured) is still evolving. The onus, therefore, is on banks to explain and demonstrate how their ICAAP meets supervisory standards, and why they consider their capital targets appropriate given the scale and complexity of their business.

6.1.3 While SAMA will assess the reasonableness of banks' ICAAP outcome in its review, there is no attempt on its part to reconcile the difference between the minimum CAR set by SAMA and the outcome of a bank's ICAAP. This is because regulatory and economic capitals are two different concepts and the objectives that they serve are not the same. Nevertheless, reviewing a bank's ICAAP will assist SAMA to better understand the bank's capital management systems and strategies.

SAMA typically requires (or encourages) banks to operate with a buffer, over and above the Pillar 1 standard. Banks should maintain this buffer for a combination of the following:

a) Pillar 1 minimums are anticipated to be set to achieve a level of bank creditworthiness in markets that is below the level of creditworthiness sought by many banks for their own reasons. For example, most international banks appear to prefer to be highly rated by internationally recognized rating agencies. Thus, banks are likely to choose to operate above Pillar 1 minimums for competitive reasons.

b) In the normal course of business, the type and volume of activities will change, as will the different risk exposures, causing fluctuations in the overall capital ratio.

c) It may be costly for banks to raise additional capital, especially if this needs to be done quickly or at a time when market conditions are unfavorable.

d) For banks to fall below minimum regulatory capital requirements is a serious matter. It may place banks in breach of the relevant law and/or prompt non-discretionary corrective action on the part of supervisors.

e) There may be risks, either specific to individual banks, or more generally to an economy at large, that are not taken into account in Pillar 1

(Refer to Paragraph 757 of International Convergence of Capital Measurement and Capital Standards – June 2006)

Supervisory response

There are several means available to SAMA for ensuring that individual banks are operating with adequate levels of capital. Among other methods, SAMA may set trigger and target capital ratios or define categories above minimum ratios (e.g. well capitalized and adequately capitalized) for identifying the capitalization level of the bank.

(Refer to Paragraph 758 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.1.4 Banks may have different capital adequacy goals, e.g. some may target for a certain credit rating while others want to lead their peers. At a minimum, SAMA would expect a bank to establish its economic capital and a ICAAP to assess the capital needed to cover all material risks, achieve its business plan and enable it to stay in business with sufficient core capital to protect itself from insolvency.

6.1.5 Although it may take banks time to fully comply with ICAAP Standards set out in section 6.2, SAMA may, where appropriate, take into account the effectiveness of a bank's ICAAP in the setting of minimum CAR for that bank. The ICAAP will also enable a bank to measure its risks and allocate capital against such risks more precisely. It is therefore in the interest of banks to enhance their ICAAP capabilities as soon as practicable.

6.2 ICAAP Standards to be met by Banks

6.2.1 SAMA's Standards #1: Banks are expected to develop a ICAAP that meets the following conditions:

- comprehensive in terms of the identification and measurement of the risks in a bank's business and the assessment of how much capital is needed to support these risks;
- risk-based and pro-active, with emphasis on the importance of capital planning, management and other qualitative aspects of risk management and controls, and taking into account a bank's strategic plans and how these relate to macroeconomic factors;
- integrated into the management process and decision-making culture of the bank. For sophisticated banks, the ICAAP should be integrated into their day-to-day management process. For example, in addition to allocation of capital to business units, the ICAAP would likely play a part in making credit decisions or other general business decisions (e.g. expansion plans and budgets). The results of the ICAAP may also feed into the process of determining business strategies and risk appetites. Although smaller banks tend to have less sophisticated capital planning and assessment

systems, their ICAAP should at least produce results that enable the ongoing assessment and management of their risk profile (e.g. the results may influence their lending behavior or use of risk mitigants); and

- capable of producing a reasonable outcome on the overall level of economic capital and the assessment supporting such outcome.

6.2.2 SAMA's Standards #2: The ICAAP should capture all material risks of a bank, including the inherent risks covered under SAMA's risk-based supervisory framework. The overall environment within which the ICAAP should operate is also important. Banks should, in particular, be able to identify other external risk factors that may arise from the regulatory, economic or business environment. In addition, adequate corporate governance and proper risk management/internal control arrangements constitute the foundation of an effective ICAAP.

Monitoring and reporting

The bank's senior management or board of directors 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
- Assess its future capital requirements based on the bank's reported risk profile and make necessary adjustments to the bank's strategic plan accordingly.

(Refer to Paragraph 743 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.3 SAMA's Standards #3: The basic elements of a sound ICAAP should include:

- policies and procedures to identify, measure and report the risks inherent in a bank's activities;
- a process to relate the bank's internal capital to its risks;
- a process to state the bank's capital adequacy goals in relation to risk, taking into account its strategic focus and business plan; and
- a process of internal controls, reviews audits, and a compliance to ensure the integrity of the overall management system.

6.2.4 SAMA's Standards #4: Risk management policies and procedures

The policies and procedures to identify, measure and report the risks inherent in a bank's activities should meet the following standards:

- changes in the Bank's risk profile should be incorporated into risk measures, whether the changes are due to new products or new businesses, increased volumes, changes in concentrations, the quality of the portfolio or the overall economic environment;
- when measuring risks, comprehensive and rigorous stress tests should be performed to identify possible events or market changes that could have serious adverse effects or significant impact on the Bank's capital and operations; and
- adequate consideration should be given to contingent exposures arising from loan or guarantee commitments, securitization and other transactions or activities that may create such exposures.

Residual risk

Residual risk recognizes that risk measurement and mitigation techniques used prove to be less effective than expected.

Therefore, SAMA will require banks to have in place appropriate written CRM policies and procedures in order to control these residual risks. A bank may be required to submit these policies and procedures to SAMA and must regularly review their appropriateness, effectiveness and operation.

(Refer to Paragraph 768 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.5 SAMA's Standards #5: Internal capital allocation process

The process of relating a bank's internal capital to its risks should meet the requirements that the amount of capital held should reflect not only the measured amount of risk but also an additional amount to account for potential uncertainties in risk measurement:

- the bank's capital should reflect the perceived level of precision in the risk measures used, the potential volatility of exposures and the relative importance of the activities producing the risk;
- capital levels should reflect the fact that historical correlation among exposures can change rapidly; and
- the bank should be able to demonstrate that its approach to relating capital to risk is conceptually sound and that outputs and results are reasonable.

6.2.6 SAMA's Standards #6: Setting of capital adequacy goals

There should be a process to state the bank's capital adequacy goals in relation to risks, taking into account its strategic focus and business plan:

- explicit goals and targets need to be established for evaluating the bank's capital adequacy with respect to its risks;
- the bank should develop an internal strategy for maintaining capital levels which should not only reflect the desired level of risk coverage but also incorporate factors such as expected balance sheet growth, i.e., loan growth, future sources and uses of funds, dividend policy, acquisitions, new products and services. Other considerations may also be taken into account (e.g. external rating goals, market image, strategic goals etc.) that are essential for the bank when deciding how much capital to hold. If these other considerations are included in the ICAAP, the bank will be required to show how the considerations have influenced its decisions concerning the amount of capital to hold;
- the bank should have an explicit, approved capital plan that should state its objectives and time horizon for achieving them, and set out in clear terms the capital planning process and the responsibilities for that process. The capital plan should also set out how the bank will comply with capital requirements, any relevant limits related to capital, and a contingency plan for dealing with divergences and unexpected events (e.g. raising additional capital, restricting business activities or using risk mitigation techniques for risk management purposes etc.);
- the bank should conduct stress tests that take into account the risks of the environment and the specific stage of the business cycle, to assess the impact of possible adverse events or scenarios on its capital. The Bank should analyze what impact new legislation, competitors' actions etc. may have on its performance, in order to ascertain what changes in the environment it could sustain. The requirements and scenarios for stress-testing should be proportionate to the nature, size, risk profile and complexity of the bank's business activities;
- the bank should evaluate whether its long-run capital targets might differ from its short-run goals, based on current and planned changes in its risk profile and the recognition that accommodating new capital needs can require significant lead time;

- it is not necessary for the bank to use formal economic capital models for setting capital goals/targets and assessing its capital adequacy, although it is expected that more sophisticated banks will be able to do;
- the capital goals and targets should be reviewed and approved by the Board regularly (at least annually) to ensure their appropriateness; and
- appropriate adjustments to the ICAAP should be initiated timely if changes in the business, strategy or operational environment suggest that the ICAAP is no longer adequate.

Interest rate risk in the banking book

If SAMA determines that banks are not holding capital commensurate with the level of interest rate risk, it must require the banks to reduce their risk or to hold a specific additional amount of capital or some combination of the two. SAMA should be particularly attentive to the sufficiency of capital of outlier banks where economic value declines by more than 20% of the sum of Tier 1 and Tier 2 capital as a result of a standardized interest rate shock (200 basis points) or its equivalent, as described in the supporting document *Principles for the Management and Supervision of Interest Rate Risk*

(Refer to Paragraph 764 of International Convergence of Capital Measurement and Capital Standards – June 2006)

Credit Risk – Stress testing under IRB approaches

SAMA may wish to review how the stress test has been carried out. The results of the stress test will thus contribute directly to the expectation that a bank will operate above the Pillar 1 minimum regulatory capital ratios. SAMA will consider whether a bank has sufficient capital for these purposes. To the extent that there is a shortfall, SAMA will react appropriately. This will usually involve requiring the bank to reduce its risks and/or to hold additional capital/provisions, so that existing capital resources could cover the Pillar 1 requirements plus the result of a recalculated stress test.

(Refer to Paragraph 765 of International Convergence of Capital Measurement and Capital Standards – June 2006)

2. Definition of default

SAMA will assess individual bank's application of the reference definition of default and its impact on capital requirements. In particular, SAMA will focus on the impact of deviations from the reference definition according to paragraph 456 (use of external data or historic internal data not fully consistent with the reference definition of default).

(Refer to Paragraph 766 of International Convergence of Capital Measurement and Capital Standards – June 2006)

3. Residual Risk

In its CRM policies and procedures, a bank must consider whether, when calculating capital requirements, it is appropriate to give the full recognition of the value of the credit risk mitigant as permitted in Pillar 1 and must demonstrate that its CRM management policies and procedures are appropriate to the level of capital benefit that it is recognizing. Where SAMA is not satisfied as to the robustness, suitability or application of these policies and procedures it may direct the bank to take immediate remedial action or hold additional capital against residual risk until such time as the deficiencies in the CRM procedures are rectified to the satisfaction of SAMA. For example, SAMA may direct a bank to:

- Make adjustments to the assumptions on holding periods, supervisory haircuts, or volatility (in the own haircuts approach);
- Give less than full recognition of credit risk mitigants (on the whole credit portfolio or by specific product line); and/or
- Hold a specific additional amount of capital.

(Refer to Paragraph 769 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.7 SAMA's Standards #7: Design of ICAAP

Banks may design their ICAAP in ways to cater for their needs and circumstances. The following are some options may be considered:

- using the statutory minimum as a starting point and adding considerations which are not captured or adequately captured by the statutory minimum. For small and less complex banks, a relatively simple ICAAP is initially acceptable. One possibility might be to base their ICAAP primarily on the methodology set out in the minimum capital requirements, supplemented as necessary for any other generic factors which have a particular bearing on their risk profile (e.g. in terms of size, sector or products and additional Pillar II risks). For example, to obtain a capital goal, a bank may simply take the statutory minimum and adjust it with a capital add-on which is calibrated from elements outside the consideration of the statutory minimum and from other forward-looking elements (including the effect of stressed conditions). The bank should be able to demonstrate that it has adequately analyzed all material risks outside the statutory minimum and found that all such risks were covered by the capital add-on;
- using different methodologies for the different risk types (including all risks captured by the statutory minimum and the capital add-on) and then calculating a simple sum of the resulting capital “needs”;
- using a more sophisticated and complex system, e.g. “bottom-up” transaction-based approaches with integrated correlations; or
- using a combination of the above.

6.2.8 SAMA's Standards #8: Documentation of ICAAP

The ICAAP (including the methodologies, assumptions, procedures etc.) and all related policies and management guidelines as well as the responsibilities of the Board, senior management and all related staff must be formally documented. This documentation of ICAAP should periodically be reviewed and approved by the Board (at least annually).

The Banks board of directors has the responsibility for setting bank's tolerance for risk.

(Refer to Paragraph 730 of International Convergence of Capital Measurement and Capital Standards – June 2006)

The ICAAP and related policies, management guidelines and procedures must be communicated and implemented bank-wide and supported by sufficient authority and resources.

6.2.9 Credit Concentration Risk

Concentration risk arises in both direct exposures to obligors and may also occur through exposures to protection providers. Such concentrations are not addressed in the Pillar 1 capital charge for credit risk.

Banks should have in place effective internal policies, systems and controls to identify, measure, monitor, and control their credit risk concentrations. Banks should explicitly consider the extent of their credit risk concentrations in their assessment of capital adequacy under Pillar 2. These policies should cover the different forms of credit risk concentrations to which a bank may be exposed. Such concentrations include:

- Credit exposures to counterparties whose financial performance is dependent on the same activity or commodity; and
- Indirect credit exposures arising from a bank's CRM activities (e.g. exposure to a single collateral type or to credit protection provided by a single counterparty).

A bank's framework for managing credit risk concentrations should be clearly documented and should include a definition of the credit risk concentrations relevant to the bank and how these concentrations and their corresponding limits are calculated. Limits should be defined in relation to a bank's capital, total assets or, where adequate measures exist, its overall risk level.

A bank should ensure that, in respect of credit risk concentrations, it complies with the Committee document Principles for the Management of Credit Risk (September 2000) and the more detailed guidance in the Appendix to that paper.

(Refer to Paragraph 772-776 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.10 Counterparty Credit Risk

(i) As counterparty credit risk (CCR) represents a form of credit risk, this would include meeting this Framework's standards regarding their approaches to stress testing, residual risks associated with credit risk mitigation techniques, and credit concentrations.

(ii). The bank must have counterparty credit risk management policies, processes and systems that are conceptually sound and implemented with integrity relative to the sophistication and complexity of a firm's holdings of exposures that give rise to CCR. A sound counterparty credit risk management framework shall include the identification, measurement, management, approval and internal reporting of CCR.

(iii). The bank's risk management policies must take account of the market, liquidity, legal and operational risks that can be associated with CCR and, to the extent practicable, interrelationships among those risks. The bank must not undertake business with a counterparty without assessing its creditworthiness and must take due account of both settlement and pre-settlement credit risk. These risks must be managed as comprehensively as practicable at the counterparty level (aggregating counterparty exposures with other credit exposures) and at the firm-wide level.

(iv). The board of directors and senior management must be actively involved in the CCR control process and must regard this as an essential aspect of the business to which significant resources need to be devoted. Where the bank is using an internal model for CCR, senior management must be aware of the limitations and assumptions of the model used and the impact these can have on the reliability of the output. They should also consider the uncertainties of the market environment (e.g. timing of realization of collateral) and operational issues (e.g. pricing feed irregularities) and be aware of how these are reflected in the model.

(v). In this regard, the daily reports prepared on a firm's exposures to CCR must be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the firm's overall CCR exposure.

(vi) The bank's CCR management system must be used in conjunction with internal credit and trading limits. In this regard, credit and trading limits must be related to the firm's risk measurement model in a manner that is consistent over time and that is well understood by credit managers, traders and senior management.

(vii). The measurement of CCR must include monitoring daily and intra-day usage of credit lines. The bank must measure current exposure gross and net of collateral held where such measures are appropriate and meaningful (e.g. OTC derivatives, margin lending, etc.).

Measuring and monitoring peak exposure or potential future exposure (PFE) at a confidence level chosen by the bank at both the portfolio and counterparty levels is one element of a robust limit monitoring system. Banks must take account of large or concentrated positions, including concentrations by groups of related counterparties, by industry, by market, customer investment strategies, etc.

(viii). The bank must have a routine and rigorous program of stress testing in place as a supplement to the CCR analysis based on the day-to-day output of the firm's risk measurement model. The results of this stress testing must be reviewed periodically by senior management and must be reflected in the CCR policies and limits set by management and the board of directors. Where stress tests reveal particular vulnerability to a given set of circumstances, management should explicitly consider appropriate risk management strategies (e.g. by hedging against that outcome, or reducing the size of the firm's exposures).

(ix). The bank must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the CCR management system. The firm's CCR management system must be well documented, for example, through a risk management manual that describes the basic principles of the risk management system and that provides an explanation of the empirical techniques used to measure CCR.

(x). The bank must conduct an independent review of the CCR management system regularly through its own internal auditing process. This review must include both the activities of the business credit and trading units and of the independent CCR control unit. A review of the overall CCR management process must take place at regular intervals (ideally not less than once a year) and must specifically address, at a minimum:

- the adequacy of the documentation of the CCR management system and process;
- the organization of the CCR control unit;
- the integration of CCR measures into daily risk management;
- the approval process for risk pricing models and valuation systems used by front and back-office personnel;
- the validation of any significant change in the CCR measurement process;
- the scope of counterparty credit risks captured by the risk measurement model;
- the integrity of the management information system;
- the accuracy and completeness of CCR data;
- the verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;

- the accuracy and appropriateness of volatility and correlation assumptions;
- the accuracy of valuation and risk transformation calculations;
- the verification of the model's accuracy through frequent backtesting.

(xi). A bank that receives approval to use an internal model to estimate its exposure amount or EAD for CCR exposures must monitor the appropriate risks and have processes to adjust its estimation of EPE when those risks become significant. This includes the following:

- Banks must identify and manage their exposures to specific wrong-way risk.
- For exposures with a rising risk profile after one year, banks must compare on a regular basis the estimate of EPE over one year with the EPE over the life of the exposure.
- For exposures with a short-term maturity (below one year), banks must compare on a regular basis the replacement cost (current exposure) and the realised exposure profile, and/or store data that allow such a comparisons.

(xii). When assessing an internal model used to estimate EPE, and especially for banks that receive approval to estimate the value of the alpha factor, SAMA would review the characteristics of the firm's portfolio of exposures that give rise to CCR. In particular, SAMA would consider the following characteristics, namely:

- the diversification of the portfolio (number of risk factors the portfolio is exposed to);
- the correlation of default across counterparties; and
- the number and granularity of counterparty exposures.

(xiii). SAMA will take appropriate action where the firm's estimates of exposure or EAD under the Internal Model Method or alpha do not adequately reflect its exposure to CCR. Such action might include directing the bank to revise its estimates; directing the bank to apply a higher estimate of exposure or EAD under the IMM or alpha; or disallowing a bank from recognizing internal estimates of EAD for regulatory capital purposes.

(xiv). For banks that make use of the standardized method, supervisors should review the bank's evaluation of the risks contained in the transactions that give rise to CCR and the bank's assessment of whether the standardized method captures those risks appropriately and satisfactorily. If the standardized method does not capture the risk inherent in the bank's relevant transactions (as could be the case with structured, more complex OTC derivatives), supervisors may require the bank to apply the CEM or the SM on a transaction-by transaction basis (i.e. no netting will be recognized).

(Refer to Paragraph 777 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.11 Market Risk

1. Policies and procedures for trading book eligibility

(i). Clear policies and procedures used to determine the exposures that may be included in, and those that should be excluded from, the trading book for purposes of calculating regulatory capital are critical to ensure the consistency and integrity of firms' trading book. Such policies must conform to paragraph 687(i) of this Framework. SAMA has been satisfied that the policies and procedures clearly delineate the boundaries of the firm's trading book, in compliance with the general principles set forth in paragraphs 684 to 689(iii) of this Framework, and consistent with the bank's risk management capabilities and practices. SAMA also needs to be satisfied that transfers of positions between banking and trading books can only occur in a very limited set of circumstances. SAMA will require a firm to modify its policies and procedures when they prove insufficient for preventing the booking in the trading book of positions that are not compliant with the general principles set forth in paragraphs 684 to 689(iii) of this Framework, or not consistent with the bank's risk management capabilities and practices.

2. Valuation

(ii). Prudent valuation policies and procedures form the foundation on which any robust assessment of market risk capital adequacy should be built. For a well-diversified portfolio consisting of highly liquid cash instruments, and without market concentration, the valuation of the portfolio, combined with the minimum quantitative standards set out in paragraph 718(Lxxvi), as revised in this section, may deliver sufficient capital to enable a bank, in adverse market conditions, to close out or hedge its positions within 10 days in an orderly fashion. However, for less well diversified portfolios, for portfolios containing less liquid instruments, for portfolios with concentrations in relation to market turnover, and/or for portfolios which contain large numbers of positions that are marked-to-model this is less likely to be the case. In such circumstances, SAMA will consider whether a bank has sufficient capital. To the extent there is a shortfall SAMA will react appropriately. This will usually require the bank to reduce its risks and/or hold an additional amount of capital.

3. Stress testing under the internal models approach

(iii). A bank must ensure that it has sufficient capital to meet the minimum capital requirements set out in paragraphs.

718(Lxx) to 718(xciv) and to cover the results of its stress testing required by paragraph 718(Lxxiv) (g), taking into account the principles set forth in paragraphs 738(ii) and 738(iv). SAMA will consider whether a bank has sufficient capital for these purposes, taking into account the nature and scale of the bank's trading activities and any other relevant factors such as valuation adjustments made by the bank. To the extent that there is a shortfall, or if SAMA are not satisfied with the premise upon which the bank's assessment of internal market risk capital adequacy is based, SAMA will take the appropriate measures. This will usually involve requiring the bank to reduce its risk exposures and/or to hold an additional amount of capital, so that its overall capital resources at least cover the Pillar 1 requirements plus the result of a stress test acceptable to SAMA .

4. Specific risk modeling under the internal models approach

(iv). For banks wishing to model the specific risk arising from their trading activities, additional criteria have been set out in paragraph 718(Lxxxix), including conservatively assessing the risk arising from less liquid positions and/or positions with limited price transparency under realistic market scenarios. Where SAMA consider that limited liquidity or price transparency undermines the effectiveness of a bank's model to capture the specific risk, they will take appropriate measures, including requiring the exclusion of positions from the bank's specific risk model. SAMA should review the adequacy of the bank's measure of the default risk surcharge; where the bank's approach is inadequate, the use of the standardized specific risk charges will be required.

(Refer to Paragraph 778 of International Convergence of Capital Measurement and Capital Standards – June 2006)

6.2.12 Supervisory Standards of the ICAAP

Amongst other things, SAMA may review where relevant a bank's own assessment of its capital needs and how that has been reflected in the capital calculation as well as the documentation of certain transactions to determine whether the capital requirements accord with the risk profile (e.g. substitution clauses). SAMA will also review the manner in which banks have addressed the issue of maturity mismatch in relation to retained positions in their economic capital calculations. In particular, they will be vigilant in monitoring for the structuring of maturity mismatches in transactions to artificially reduce capital requirements. Additionally, SAMA may review the bank's economic capital assessment of actual correlation between assets in the pool and how they have reflected that in the calculation. Where SAMA consider that a bank's approach is not adequate, they will take appropriate action. Such action might include denying or reducing capital relief in the case of originated assets, or increasing the capital required against securitization exposures acquired.

Significance of risk transfer Securitization transactions may be carried out for purposes other than credit risk transfer (e.g. funding). Where this is the case, there might still be a limited transfer of credit risk. However, for an originating bank to achieve reductions in capital requirements, the risk transfer arising from a securitization has to be deemed significant by SAMA. If the risk transfer is considered to be insufficient or non-existent, SAMA can require the application of a higher capital requirement than prescribed under Pillar 1 or, alternatively, may deny a bank from obtaining any capital relief from the securitizations. Therefore, the capital relief that can be achieved will correspond to the amount of credit risk that is effectively transferred. The following includes a set of examples where SAMA may have concerns about the degree of risk transfer, such as retaining or repurchasing significant amounts of risk or cherry picking the exposures to be transferred via a securitization

Retaining or repurchasing significant securitization exposures, depending on the proportion of risk held by the originator, might undermine the intent of a securitization to transfer credit risk. Specifically, SAMA might expect that a significant portion of the credit risk and of the nominal value of the pool be transferred to at least one independent third party at inception and on an ongoing basis. Where banks repurchase risk for market making purposes, SAMA could find it appropriate for an originator to buy part of a transaction but not, for example, to repurchase a whole tranche. SAMA would expect that where positions have been bought for market making purposes, these positions should be resold within an appropriate period, thereby remaining true to the initial intention to transfer risk.

Another implication of realizing only a non-significant risk transfer, especially if related to good quality unrated exposures, is that both the poorer quality unrated assets and most of the credit risk embedded in the exposures underlying the securitized transaction are likely to remain with the originator. Accordingly, and depending on the outcome of the supervisory review process, SAMA may increase the capital requirement for particular exposures or even increase the overall level of capital the bank is required to hold.

Market innovations

As the minimum capital requirements for securitization may not be able to address all potential issues, SAMA would consider new features of securitization transactions as they arise. Such assessments would include reviewing the impact new features may have on credit risk transfer and, where appropriate, SAMA will take appropriate action under Pillar 2. A Pillar 1 response may be formulated to take account of market innovations. Such a response may take the form of a set of operational requirements and/or a specific capital treatment.

Provision of implicit support

Support to a transaction, whether contractual (i.e. credit enhancements provided at the inception of a securitized transaction) or non-contractual (implicit support) can take numerous forms. For instance, contractual support can include over collateralization, credit derivatives, spread accounts, contractual recourse obligations, subordinated notes, credit risk mitigants provided to a specific tranche, the subordination of fee or interest income or the deferral of margin income, and clean-up calls that exceed 10 percent of the initial issuance.

Examples of implicit support include the purchase of deteriorating credit risk exposures from the underlying pool, the sale of discounted credit risk exposures into the pool of securitized credit risk exposures, the purchase of underlying exposures at above market price or an increase in the first loss position according to the deterioration of the underlying exposures.

The provision of implicit (or non-contractual) support, as opposed to contractual credit support (i.e. credit enhancements), raises significant supervisory concerns. For traditional securitization structures the provision of implicit support undermines the clean break criteria, which when satisfied would allow banks to exclude the securitized assets from regulatory capital calculations. For synthetic securitization structures, it negates the significance of risk transference. By providing implicit support, banks signal to the market that the risk is still with the bank and has not in effect been transferred. The institution's capital calculation therefore understates the true risk. Accordingly, SAMA would take appropriate action when a banking organization provides implicit support.

When a bank has been found to provide implicit support to a securitization, it will be required to hold capital against all of the underlying exposures associated with the structure as if they had not been securitized. It will also be required to disclose publicly that it was found to have provided non-contractual support, as well as the resulting increase in the capital charge (as noted above). The aim is to require banks to hold capital against exposures for which they assume the credit risk, and to discourage them from providing non-contractual support.

If a bank is found to have provided implicit support on more than one occasion, the bank is required to disclose its transgression publicly and SAMA will take appropriate action that may include, but is not limited to, one or more of the following:

- The bank may be prevented from gaining favorable capital treatment on securitized assets for a period of time to be determined by SAMA;
- The bank may be required to hold capital against all securitized assets as though the bank had created a commitment to them, by applying a conversion factor to the risk weight of the underlying assets;
- For purposes of capital calculations, the bank may be required to treat all securitized assets as if they remained on the balance sheet
- The bank may be required by SAMA to hold regulatory capital in excess of the minimum risk-based capital ratios.

SAMA will be vigilant in determining implicit support and will take appropriate supervisory action to mitigate the effects. Pending any investigation, the bank may be prohibited from any capital relief for planned securitization transactions (moratorium). SAMA's response will be aimed at changing the bank's behavior with regard to the provision of implicit support, and to correct market perception as to the willingness of the bank to provide future recourse beyond contractual obligations

Residual risks

As with credit risk mitigation techniques more generally, SAMA will review the appropriateness of banks' approaches to the recognition of credit protection. In particular, with regard to securitizations, SAMA will review the appropriateness of protection recognized against first loss credit enhancements. On these positions, expected loss is less likely to be a significant element of the risk and is likely to be retained by the protection buyer through the pricing. Therefore, SAMA will expect banks' policies to take account of this in determining their economic capital. Where SAMA do not consider the approach to protection recognized is adequate, they will take appropriate action. Such action may include increasing the capital requirement against a particular transaction or class of transactions.

Call provisions

SAMA expect a bank not to make use of clauses that entitles it to call the securitization transaction or the coverage of credit protection prematurely if this would increase the bank's exposure to losses or deterioration in the credit quality of the underlying exposures.

Besides the general principle stated above, SAMA expect banks to only execute clean-up calls for economic business purposes, such as when the cost of servicing the outstanding credit exposures exceeds the benefits of servicing the underlying credit exposures

Subject to national discretion, SAMA may require a review prior to the bank exercising a call which can be expected to include consideration of:

- The rationale for the bank's decision to exercise the call; and

- The impact of the exercise of the call on the bank's regulatory capital ratio.

SAMA may also require the bank to enter into a follow-up transaction, if necessary, depending on the bank's overall risk profile, and existing market conditions.

Date related calls should be set at a date no earlier than the duration or the weighted average life of the underlying securitization exposures. Accordingly, SAMA may require a minimum period to elapse before the first possible call date can be set, given, for instance, the existence of up-front sunk costs of a capital market securitization transaction.

Early amortization

SAMA would review how banks internally measure, monitor, and manage risks associated with securitizations of revolving credit facilities, including an assessment of the risk and likelihood of early amortization of such transactions. At a minimum, SAMA would ensure that banks have implemented reasonable methods for allocating economic capital against the economic substance of the credit risk arising from revolving securitizations and should expect banks to have adequate capital and liquidity contingency plans that evaluate the probability of an early amortization occurring and address the implications of both scheduled and early amortization. In addition, the capital contingency plan should address the possibility that the bank will face higher levels of required capital under the early amortization Pillar 1 capital requirement.

Because most early amortization triggers are tied to excess spread levels, the factors affecting these levels should be well understood, monitored, and managed, to the extent possible (see paragraphs 790 to 794 on implicit support), by the originating bank. For example, the following factors affecting excess spread should generally be considered:

- Interest payments made by borrowers on the underlying receivable balances;
- Other fees and charges to be paid by the underlying obligors (e.g. late-payment fees, cash advance fees, over-limit fees);
- Gross charge-offs;
- Principal payments;
- Recoveries on charged-off loans;
- Interchange income;
- Interest paid on investors' certificates;
- Macroeconomic factors such as bankruptcy rates, interest rate movements, unemployment rates; etc.

Banks should consider the effects that changes in portfolio management or business strategies may have on the levels of excess spread and on the likelihood of an early amortization event. For example, marketing strategies or underwriting changes that result in lower finance charges or higher charge-offs, might also lower excess spread levels and increase the likelihood of an early amortization event.

Banks should use techniques such as static pool cash collections analyses and stress tests to better understand pool performance. These techniques can highlight adverse trends or potential adverse impacts. Banks should have policies in place to respond promptly to adverse or unanticipated changes. SAMA will take appropriate action where they do not consider these policies adequate. Such action may include, but is not limited to, directing a bank to obtain a dedicated liquidity line or raising the early amortization credit conversion factor, thus, increasing the bank's capital requirements.

While the early amortization capital charge described in Pillar 1 is meant to address potential supervisory concerns associated with an early amortization event, such as the inability of excess spread to cover potential losses, the policies and monitoring described in this section recognize that a given level of excess spread is not, by itself, a perfect proxy for credit performance of the underlying pool of exposures. In some circumstances, for example, excess spread levels may decline so rapidly as to not provide a timely indicator of underlying credit deterioration. Further, excess spread levels may reside far above trigger levels, but still exhibit a high degree of volatility which could warrant supervisory attention. In addition, excess spread levels can fluctuate for reasons unrelated to underlying credit risk, such as a mismatch in the rate at which finance charges re-price relative to investor certificate rates.

Routine fluctuations of excess spread might not generate supervisory concerns, even when they result in different capital requirements. This is particularly the case as a bank moves in or out of the first step of the early amortization credit conversion factors. On the other hand, existing excess spread levels may be maintained by adding (or designating) an increasing number of new accounts to the master trust, an action that would tend to mask potential deterioration in a portfolio. For all of these reasons, SAMA will place particular emphasis on internal management, controls, and risk monitoring activities with respect to securitizations with early amortization features.

SAMA expect that the sophistication of a bank's system in monitoring the likelihood and risks of an early amortization event will be commensurate with the size and complexity of the bank's securitization activities that involve early amortization provisions.

For controlled amortizations specifically, SAMA may also review the process by which a bank determines the minimum amortization period required to pay down 90% of the outstanding balance at the point of early amortization. Where SAMA does not consider this adequate it will take appropriate action, such as increasing the conversion factor associated with a particular transaction or class of transactions.

(Refer to Paragraphs 785-807 of International Convergence of Capital Measurement and Capital Standards – June 2006)

7. Requirements for Consolidated Capital

7.1 Banks are required to conduct their ICAAP on a consolidated basis and if they have any subsidiary it will also be subject to Capital rules.

8. Review by SAMA of ICAAP

In reviewing and evaluating a bank's ICAAP, SAMA will have regard to the supervisory standards set out in section 6. Additional factors to be considered include:

- the degree of management involvement in the process, for example, whether the target and actual capital levels are properly monitored and reviewed by the Board (or a designated committee) and senior management;
- the extent to which the internal capital assessment is used routinely within the bank for decision-making purposes;
- the extent to which the bank has provided for unexpected events in setting capital levels;
- the reasonableness of the outcome of the ICAAP in terms of whether the levels and composition of capital chosen by the banks are comprehensive, relevant to the current operating environment, and appropriate for the nature and scale of the bank's business activities;
- the amount of capital required as demonstrated by the ICAAP is sufficient to support the risks faced by the bank.

Compliance with Pillar 2

SAMA expects all Saudi Bank to identify, quantify, manage and monitor all additional Pillar 1 risks (Credit, Market and Operational), i.e. those excess Pillar 1 risk not covered by 8%, as well as the relevant Pillar 2 risks not covered under Pillar 1. Banks are expected to have a view on the importance of these risks and related risk mitigants in the context of their businesses and their operations. Also banks should be prepared to allocate appropriate capital for these risks. SAMA will examine the processes in the banks to manage Pillar 2 risks, compare these with its own assessment and agree on a suitable level of capital to be held for such risks. These risks include but are not limited to the following:

1. Liquidity
2. Concentration
3. Underwriting
4. Residual
5. Settlements
6. Interest Rate / Commission Rate
7. Legal and Compliance
8. IT
9. Reputation
10. Strategic
11. External Shocks
12. Macroeconomic

Residual Risk

The Framework allows banks to offset credit or counterparty risk with **collateral**, guarantees or credit derivatives, leading to reduced capital charges. While banks use credit risk mitigation (CRM) techniques to reduce their credit risk, these techniques give rise to risks that may render the overall risk reduction less effective. Accordingly these risks (e.g. legal risk, documentation risk, or liquidity risk) to which banks are exposed are of SAMA's concern. Where such risks arise, and irrespective of fulfilling the minimum requirements set out in Pillar 1, a bank could find itself with greater credit risk exposure to the underlying counterparty than it had expected. Examples of these risks include:

- Inability to seize, or realize in a timely manner, **collateral** pledged (on default of the counterparty);
- Refusal or delay by a guarantor to pay; and
- Ineffectiveness of untested documentation

(Refer to Paragraph 767 of International Convergence of Capital Measurement and Capital Standards – June 2006)