Guernsey Financial Services Commission

The Internal Capital Adequacy Assessment Process ("ICAAP") and the supervisory review.

October 2007

Introduction

In 1988 the Basel Committee on Banking Supervision ("Basel Committee") issued a report entitled "International Convergence of Capital Measurement and Capital Standards". The report was updated in 1997. Its purpose was to secure international convergence of supervisory regulations governing the capital adequacy of international banks. The report has become known in recent years as "Basel I".

Latterly, the Basel Committee has worked to revise Basel I. The new revised framework was last updated in November 2005 and was re-issued as a "Comprehensive Version" in June 2006. The revised framework is referred to hereafter as "Basel II". Basel II is arranged into three "Pillars" which can be described as follows:-

Pillar 1 is the principal subsection of Basel II that gives the minimum capital requirements that every bank should meet. This Pillar covers capital requirements to be held by a bank as a mitigant against potential losses arising from credit risk, market risk and operational risk and will include a buffer for uncertainties surrounding the Pillar 1 regime that affect the banking population as a whole.

Pillar 2 is a subsection of Basel II that establishes the requirement for a "supervisory review" process. Banks must assess their capital adequacy relative to their overall risks and must identify bank-specific uncertainties not already captured under Pillar 1. In what has become known as the Internal Capital Adequacy Assessment Process, or ICAAP, banks will assess the extent and range of their risks and record the mitigants they have in place to address those risks. The risk mitigants might be specific procedures, controls or insurance programmes in place or might be additional capital held against potential losses arising from those risks or a combination of capital and controls. In addition, there are requirements on supervisors to review banks' ICAAPs, requiring banks to take action to address any shortcomings identified by the supervisor in the ICAAP. This review has become known as the Supervisory Review and Evaluation Process or SREP.

Pillar 3 is a subsection of Basel II that gives the requirements for "market discipline". These requirements are that banks must publish certain details of their risks, capital and risk management. The aim of this requirement is to strengthen market discipline through full disclosure. Generally, the Third Pillar requirements only apply at the top consolidated level of a banking group. Other than disclosure of total and tier 1 capital by significant bank subsidiaries, individual banking subsidiaries have no Pillar 3 requirements imposed on them. The Commission does not currently anticipate that Pillar 3 requirements will apply to Guernsey banks unless they are determined by the banking group to be significant subsidiaries (in which case a disclosure of total and Tier 1 capital might be required).

This paper focuses on Pillar 2 of Basel II and supplements the Commission's *Basel II Briefing: Pillar 2 Preparations: Considerations on Pillar 2 for Subsidiary Banks* issued in November 2006 ("the Pillar 2 Briefing") and the general principles outlined in the paper entitled: *High level principles on Pillar 2 and revision of supervisory returns* ("the High Level Paper") issued by the Guernsey, Jersey and Isle of Man Commissions (known as the Tri-Party Group) in June 2007.

The Pillar 2 Briefing's stated aim was to:-

> "... raise awareness of the scope of Pillar 2 and to alert bankers to the fact that they will need to make good use of the available lead-time in order to be well prepared for Basel II by 2008.
>
> The first reason for bankers to be alert is that they have to stand ready to generate an ICAAP with a goal of aligning the bank's own assessment of its economic capital needs with its regulatory capital needs. Hence the banks should have the capability to perform an ICAAP and to produce overall capital numbers which can be supported and which can be part of a dialogue on risk evaluation between the bank and supervisor. "

The following is intended to build on the Guidance given in the Pillar 2 Briefing and the High Level Paper to assist subsidiary banks further in their ICAAP preparations and in their understanding of the SREP.

<u>Risk assessment</u>

The Commission expects all banks incorporated in Guernsey to carry out their own ICAAP. Banks operating in Guernsey as branches are not required to produce an ICAAP for the branch.

The High Level Paper provided guidance on the use of Group ICAAPs, timing of the ICAAP and provided very general guidance on the format of the ICAAP. The annex to the High Level Paper, which gave a suggested ICAAP format, is reproduced again as an annex to this paper. This paper provides more detail on some of the risks banks might need to consider in carrying out their ICAAP. Whatever risks a bank faces, it should include in its ICAAP an explanation of how those risks have been assessed. Often the results of risk analysis carried out in Guernsey will be qualitative rather than quantitative. The ICAAP should also include an explanation of how each risk has been mitigated including, where relevant, an explanation of any other specific arrangements (i.e. not capital) used to mitigate the risks e.g. insurance, risk management or control structures.

Some of the major risks a bank in Guernsey might face and therefore need to assess as part of its ICAAP are examined below. This is not an exhaustive analysis of bank risks. Furthermore, banks might classify certain risks differently.

- Residual credit risk

While banks use credit risk mitigation (CRM) techniques to reduce their credit risk, these techniques give rise to other risks that may render the overall risk reduction less effective. These additional risks are legal risk, documentation risk and liquidity risk and are of supervisory concern. The Commission will expect banks to have in place appropriate written CRM policies and procedures in order to control these residual risks. Banks may be required to submit these policies and procedures to the Commission and must regularly review their appropriateness, effectiveness and operation.

- Credit concentration risk

A risk concentration is any single exposure or group of related exposures with the potential to produce losses large enough to threaten a bank's health or ability to maintain its core operations. Risk concentrations are arguably the single most important cause of major problems in banks. Credit risk concentration arises in both direct exposures to obligors and may also occur through exposure to protection providers such as guarantors. 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. They 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. The Commission has issued principles for such "large exposures" which must be followed by banks.

Credit risk concentrations include:

- A significant exposure to an individual counterparty or group of counterparties. Banks might also establish an aggregate limit for the management and control of all of its large exposures as a group;

- Credit exposures to counterparties in the same economic sector or geographic region;

- 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.

A bank's management should conduct periodic stress tests of its major credit risk concentrations and review the results of those tests to identify and respond to potential changes in market conditions that could adversely impact the bank's performance.

A bank should ensure that, in respect of credit risk concentrations, it complies with the Basel Committee document *Principles for the Management of Credit Risk* (September 2000) and the more detailed guidance in the Appendix to that paper. (In May 2003 the Commission issued a statement endorsing this Basel Committee document and stated that it expected banks to take account of it. A link to the document is available on the Commission's website.)

The Commission will assess the extent to which a bank considers its credit risk concentrations in its ICAAP and how they are managed. Such assessments should include reviews of the results of any stress tests carried out either locally or at the group level. The Commission will review the bank's assessment and consider what action is necessary where the risks arising from a bank's credit risk concentrations are not considered to be adequately addressed in the ICAAP.

- Counterparty credit risk

Counterparty credit risk or CCR is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. As CCR represents a form of credit risk, in assessing it, banks are required to meet Basel II standards regarding approaches to stress testing, "residual risks" associated with CRM techniques, and credit concentrations, as specified in the paragraphs above.

Banks 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.

Banks' 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. Banks 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 bank-wide level.

A bank's 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 adequate resources need to be devoted. 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.

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.). Banks must take account of large or concentrated positions, including concentrations by groups of related counterparties, by industry, by market, customer investment strategies, etc.

Banks must have a process in place for ensuring compliance with a documented set of internal policies, controls and procedures covering CCR management.

- Interest rate risk on the banking book

The Commission will require banks not holding capital commensurate with their level of interest rate risk to reduce their risk, to hold a specific and appropriate amount of capital or some combination of the two. The Commission will provide further guidance on interest rate risk on the banking book in a forthcoming paper on reporting market, interest rate and settlement risks.

- Operational risk

Gross income, used in Pillar 1 under the Basic Indicator and Standardised Approaches for operational risk, is only a proxy for the scale of operational risk exposure of a bank and can, in some cases (e.g. for banks with low margins or profitability) underestimate the need for capital held against potential losses arising from operational risk. Drawing on the Basel Committee document on *Sound Practices for the Management and Supervision of Operational Risk* (February 2003), the ICAAP should include consideration of whether the capital requirement generated by the Pillar 1 calculation for operational risk gives a realistic picture of the bank's operational risk exposure.

- Credit risk

A bank may be aware of particular circumstances that it believes would lead the Standardised Approaches to credit risk under Pillar 1 to give rise to an underestimation of credit risk. An example is where certain banks have adopted the practice of giving indicative credit facilities to clients on an uncommitted basis. Such clients are often significant corporate customers. Commercially a bank may not realistically be able to walk away from that relationship and the credit risk of such uncommitted facilities needs to be recognised. It is important to estimate the "realistic" exposure to the potential borrower (not just the contractual exposure) and reflect that as a credit risk against which there should be a capital charge. As with operational risk, the ICAAP should include consideration of whether the capital requirement generated by the Pillar 1 calculation gives a realistic picture of the bank's credit risk exposure.

- Reputational Risk

Reputational risk (to banks and to the jurisdictions from where they operate) is one of the most important risks in international finance centres. The Commission will expect banks to have assessed the reputational risk contained in their high risk accounts and relationships and to have used a proxy (which might be the number or proportion of high risk accounts or relationships a bank has on its books) to generate a capital charge for reputational risk and/or provide evidence of measures in place to mitigate that reputational risk. An example of such measures could be robust and clear customer acceptance procedures and implemented processes with no "blind spots" with respect to names of underlying principals (for example the inappropriate use of pooled accounts). A robust customer risk-profiling regime would be a pre-requisite.

- Pension Obligation Risk

This is the risk to banks of having to meet pension fund obligations and the need to address the funding of pension fund shortfalls. Banks with locally funded pension schemes will need to ensure that their ICAAPs take account of risks in this area and the impact that those risks may have on the bank's ability to add to its capital reserves.

- Liquidity Risk.

Liquidity risk is the risk that a bank is unable to fund increases in assets and meet obligations as they come due. Managing this risk is not only crucial to the ongoing viability of a bank; it also transcends the individual bank since a liquidity shortfall at a single bank can have system-wide repercussions. For this reason the analysis of liquidity requires bank management not only to measure the liquidity position of the bank on an ongoing basis but also to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions. As with managing other risks, sound liquidity risk management involves setting a strategy for the bank, ensuring effective board and senior management oversight, as well as operating under a sound process for measuring, monitoring and controlling liquidity risk.

- Strategic/Business Risk.

Strategic and business risks are the impact on capital arising from adverse business decisions, improper implementation of those decisions, or a lack of responsiveness to political, fiscal, regulatory, economic, cultural, market or industry changes. Banks should constantly review and assess the compatibility of their strategic goals to the prevailing environment in which they have material operations. There will be both quantitative and qualitative dimensions to the resources needed to carry out business strategies but these will include effective communication channels, efficient operating systems, reliable delivery networks, and good quality management and staff.

Economic capital

In evaluating capital requirements for risks, banks should endeavour to be consistent. If economic capital modelling techniques are used then, for example, a default rate of 0.1% per annum might be used to tie in with the Basel II rules but, alternatively, the ICAAP could perhaps be based on a bank's chosen default rate of 0.03% to reflect its desire to be AA rated. Where economic capital models are not used, the bank should still endeavour to articulate and conform to a single definition of how much capital is required to meet risks. For example, it could look at realistic worst-case outcomes.

A bank may either use the Pillar 1 capital requirements or use economic capital modelling to assess those risks covered by Pillar 1 capital. If the bank uses economic capital models, the ICAAP should give an overview of these models, including the assumptions underlying them.

Business or economic cycle stress-testing

As mentioned in the Tri-Party Paper, in addition to addressing particular risks in the ICAAP, banks should address key sensitivities and future scenarios. Business and economic cycle strategic stress-testing is often performed on a group or regional basis. Where such stress-testing is performed on that basis, it would be acceptable for a banking group to explain what capital has been retained at a consolidated or sub-consolidated level to meet business cycle risks or to explain where and how this element of capital has been allocated to the bank from group. If no business or economic cycle risk has been allocated from group to the bank, an explanation of the reasoning behind the decision to hold all capital for such risks at the parent level should be included.

Where such business and economic cycle stress testing is carried out at the bank level, analysis could include financial projections forward, for three or five years, based on business plans and capital adequacy calculations. These could take account of expected capital requirements over economic and business cycles.

Typical scenarios at a bank in the case of economic and business cycle testing, at the group level or locally, would include:-

- how an economic downturn would affect the bank's or group's capital resources, Pillar 1 capital requirements and its future earnings taking into account the bank's or group's business plan;
- how changes in the credit quality of the bank's credit risk counterparties would affect the bank's capital and its credit risk capital requirement;
- an assessment by the bank or group of how it would continue to meet its regulatory capital requirements throughout a recession (i.e. a period of negative growth for two calendar quarters in an economy where the bank has significant exposure); and
- projections of cash inflows and outflows under stressed conditions.

Aggregation

The processes of risk assessment and stress testing combined with assessments of the impact of risks and the probability of them occurring will enable banks to begin to assign specific quantitative measures to particular risks. These quantitative assessments should help the management of banks to determine the relative importance of the risks facing the bank. This, in turn, will assist bank management to decide whether to allocate additional capital (and, if so, how much capital) or to establish, enhance or maintain other mitigants to address those risks. As mentioned earlier in this paper, other mitigants might be specific procedures, controls or insurance programmes. Where a bank decides to allocate additional capital as a mitigant against particular risks these additional capital sums should be aggregated to provide an additional capital requirement under Pillar 2. This would be added to the minimum capital figure derived from Pillar 1 to give the bank's overall capital charge.

Banks may wish to argue that certain risks have no correlation with each other meaning such that banks can take advantage of diversification benefits. Under this approach, the capital add-on figure would be less than a simple sum of add-ons for each of the Pillar 2 risks. The Commission will need to be persuaded that no correlation between the risks exists and will consider the reasonableness of such diversification claims on a case-by-case basis.

Group ICAAPs

There are also important issues surrounding aggregate ICAAPs across a banking group. Where a parent organisation determines that it will carry out a group ICAAP, which includes the Guernsey subsidiary, it may decide to allocate capital around the Group using a proxy for risk such as balance sheet size or volume of business. Any such allocation might also be diluted to take account of an assessment made of the probability of risk events occurring in different parts of the Group at the same time. This dilution, derived from analysis of correlations, and any allocation effect, might mean that a Group ICAAP would determine that a lower capital add-on is required in the Guernsey bank than would be arrived at from a stand-alone

ICAAP. In carrying out the SREP the Commission will look very closely at allocations determined from Group ICAAPs to ensure that the Guernsey subsidiary is properly capitalised in light of the risks it faces in its business.

Consolidation

The Commission is becoming aware that some firms will want or need to undertake an ICAAP for businesses other than banking – for example fund administration and fiduciary business. The Commission will consider this approach and looks forward to taking these plans forward with firms.

The supervisory review and evaluation process (SREP)

The Commission will follow the following general principles (outlined in the High Level Paper) in its approach to the SREP:-

- The Commission will be as transparent as possible. Where the Commission sets a capital requirement higher than the minimum prescribed level, it will explain the rationale for this to the bank;

- Pillar 2 does not necessarily mean an automatic capital add-on:

    - The Commission views the Basel Committee's minimum risk asset ratio ("RAR") level of 8% as representing the absolute minimum RAR that will be the outcome of the review process for any bank ,

    - The stated minimum RAR will be that applicable after consideration of the outcomes of both Pillars 1 and 2;

- The Commission will assess the ICAAP to establish whether the amount of capital identified by the ICAAP is sufficient to support the risks faced by the bank. The Commission may then require an RAR to be maintained at a higher level than the standard minimum. It may also require that specific risk elements are allowed for in the form of an additional risk weighted asset equivalent amount;

- The Commission will adopt a proportionate approach to the SREP. The intensity and depth of the review will take account of the nature, scale and complexity of individual banks, as well as the extent to which the bank's risk profile has changed over the previous year;

- The review will normally be an annual process;

- The Commission will, as part of the review, take account of any relevant information obtained from off-site reviews, on-site examinations, prudential returns, meetings, media coverage, sectoral analysis and other research.

- The Commission will review the corporate governance framework around the ICAAP and will pay particular attention to Board and Senior Management oversight and involvement, as well as responses to any issues raised by the Commission during the review. It will also consider the extent to which the internal capital assessment is used routinely within the bank for decision making purposes;

- The Commission will seek to address risks that it considers to be inadequately mitigated. This may reflect a requirement for improvements in such mitigation, rather than necessarily involving an increase in capital. The Commission will always seek the bank's agreement and input to any such proposals

Any queries relating to the information contained in this paper should be addressed in the first instance to:

Dr J Quick
Deputy Director of Banking
Banking Division

Guernsey Financial Services Commission
PO Box 128
La Plaiderie Chambers
La Plaiderie
St Peter Port
Guernsey
GY1 3HQ

jquick@gfsc.gg

Annex – ICAAP format

Below is an outline of a suggested format showing the general areas and headings an ICAAP could take. It first appeared in the paper entitled: High level principles on Pillar 2 and revision of supervisory returns *issued by Tri-Party Group in June 2007:-*

ICAAP SUBMISSION – SUGGESTED FORMAT TO BE USED BY BANKS

XYZ Bank Ltd

Executive Summary

The purpose of an Executive Summary is to present an overview of the ICAAP methodology and results. This overview would typically include:-

- the purpose of the ICAAP and which bank is covered by the ICAAP;
- the main findings of the ICAAP such as :-
    - how much and what composition of internal capital the bank considers it should hold as compared with the Pillar 1 minimum capital requirement; and
    - an assessment of the adequacy of the bank's risk management processes;
- a summary of the financial position of the bank including its strategic position, balance sheet strength and future profitability;
- brief descriptions of the capital and dividend plan; how the bank intends to manage capital going forward and for what purposes;
- commentary on the bank's most material risks, why the level of risk is acceptable or, if it is not, what mitigating actions are planned;
- commentary on major issues where further analysis and decisions are required; and
- who has carried out the assessment, how it has been challenged, and who has approved it.

Background

This section would cover the relevant organizational and historical financial data on the bank such as group structure and key data and trends drawn from the bank's quarterly prudential returns. It would include any conclusions that can be drawn from trends which may have implications on the bank's future. It would also give a brief description of expected changes to the bank's current business profile.

Capital Adequacy

This section would include a detailed review of the capital adequacy of the bank. It might start with a description of the risk appetite of the bank which would set the context for the ICAAP. Where economic capital models are used this would include details of the assumptions behind those models. Where scenario analyses or other means are used, then some other description of how the severity of scenario has been chosen would be included.

The ICAAP might include:-

- the effective date of the ICAAP calculations together with consideration of any events between this date and the date of submission which would materially impact the ICAAP calculation together with their effects;
- details of, and rationale for, the time period over which capital has been assessed;
- an identification of the major risks faced;
- for each risk an explanation of how the risk has been assessed and any quantitative results of that assessment;
- an explanation of how the risks have been mitigated including, where relevant, an explanation of any other specific arrangements (i.e. not capital) used to mitigate the risks e.g. risk management or control structures;
- a clear articulation of the bank's risk appetite by risk category, for example, strong appetite, modest appetite or conservative appetite; and
- details of any restrictions on management's ability to transfer capital into or out of the bank (for example, contractual, commercial, regulatory or statutory restrictions that apply);
- an analysis of significant movements in available capital and capital required since the latest ICAAP (where appropriate) and a comparison of the overall level and quality of capital required under Pillar 1 calculations as compared with the overall capital requirement identified by the ICAAP.

Key sensitivities and future scenarios

This section would detail the sensitivity tests undertaken to key assumptions and factors that have a significant impact on the broader financial condition of the company. Material changes in the financial risks to which the business is exposed would be explored and quantified as far as possible in this section. This is different to any stress testing that might be undertaken for testing or supplementing any modeling assumptions.

Aggregation

This section would describe how the results of the bank's various separate risk assessments are brought together and an overall view taken on capital adequacy. This requires some sort of methodology to be used to quantify the amount of capital required to support individual risks so that they can be aggregated into a total figure.

The challenge process and sign off of the ICAAP

This section would describe the extent of challenge and testing of the ICAAP that has taken place. It would include the testing and control processes applied to the ICAAP calculations, and the senior management or board review and sign off procedures.

Details of the reliance placed on group ICAAPs, any external suppliers/advisers/consultants would also be detailed here e.g. for generating economic scenarios or for any other assistance in preparation or review of the ICAAP.

Use of the ICAAP within the bank

This would demonstrate the extent to which capital management is embedded within the bank including the extent and use of capital modeling or scenario analysis and stress testing within the bank's capital management policy, e.g. in setting pricing and charges. This would also include a statement of a bank’s actual operating philosophy on capital management and how this links to the ICAAP submitted.