

THE NEW BASEL CAPITAL ACCORD

The New Capital Accord proposed by the Basel Committee on Banking Supervision, which will replace the 1988 Capital Accord when it is implemented in 2005, will have important ramifications for banks in Hong Kong. This article highlights the major changes contained in the current proposals, the potential impact of the new requirements on the local banking industry, and preliminary thoughts on how the approach might be implemented in Hong Kong.

Background

The Basel Committee on Banking Supervision completed the second round of consultation on the New Capital Accord at the end of May this year. In order to allow time to consider thoroughly all the comments received during the consultation, the Committee announced on 25 June 2001 that implementation of the New Accord would be postponed from 2004 to 2005 and that another round of consultation would be undertaken in early 2002 prior to finalising the proposals.

The New Accord aims to refine and broaden the scope of application of the 1988 Accord. While the 1988 Accord has been widely adopted (it has been applied by regulators of over 100 countries) it is generally accepted that it uses a relatively crude risk-weighting system which does not reflect adequately the very different default risks of different borrowers. Moreover, major types of risk, such as interest rate risk in the banking book and operational risk, as well as appropriate incentives for encouraging risk mitigation, are also not catered for in the existing framework. The Committee has thus worked towards the development of a more broad-based and risk-sensitive framework for measuring capital adequacy. The main objectives of the new framework are to align regulatory capital requirements more closely with the key elements of banking risks and to provide incentives for banks to enhance their risk measurement and management capabilities.

Major Areas of Change

The new capital framework is based on three mutually reinforcing pillars: (i) minimum capital

requirements, which seek to develop and expand on the standardised rules set forth in the 1988 Accord; (ii) the supervisory review of an institution's capital adequacy and internal assessment process; and (iii) the effective use of market discipline as a lever to strengthen disclosure and encourage safe and sound banking practices.

The first pillar is likely to be the area that will have the most direct effect on banks in Hong Kong. However, the impact of the other two pillars should not be under-estimated. While they are broadly consistent with the approach already adopted in Hong Kong, they would involve a significant elaboration of current practice.

Pillar 1: Minimum Capital Requirements

A major change to the minimum capital requirements of the 1988 Accord is the replacement of the existing OECD-based risk-weighting system by a modified standardised approach that uses external credit assessments. Under this approach, the risk weight of claims on sovereigns and banks will largely be linked to the relevant counterparty's external rating and no regard will be given to whether the sovereign (or the sovereign in which the bank is incorporated) is a member of the OECD. Likewise, the risk weight of claims on corporates, currently 100% across-the-board, will differ depending on the corporate's external rating. This could range from 20% for a AAA-rated corporate to 150% for a corporate with a rating below BB-. The 150% risk weight also applies to other higher risk assets, such as those past due for more than 90 days. Claims on unrated corporates will continue to be risk-weighted at 100%.

As an alternative to the modified standardised approach, banks with sophisticated risk management systems will be allowed to adopt the internal ratings-based (IRB) approach, provided that they can satisfy their supervisor that their systems meet a set of minimum supervisory standards. Under this approach, banks will be able to rely on their internal assessments of credit risk for setting capital charges. The treatment proposed for corporate, bank and sovereign exposures is broadly similar while retail, project finance and equity exposures will be subject to a separate framework. There are three basic risk components for the IRB approach: (i) the probability of default (PD) associated with borrowers in each of the bank's internal rating grades; (ii) the facility's loss given default (LGD) based on such characteristics as the presence and type of collateral or other risk mitigants; and (iii) the exposure at default (EAD) which measures the bank's exposure at the time of default. The risk components will be converted into risk weights to be used by banks in calculating risk-weighted exposures.

In the proposed treatment for corporate, bank and sovereign exposures, banks may choose either the foundation or advanced approach, depending on the level of sophistication of their internal systems. In the foundation approach, a bank estimates the average PD for each grade of borrowers and the supervisor supplies the other risk components necessary to derive the capital charge. In the advanced approach, a bank will be allowed to use internal estimates of LGD and EAD to calculate the capital charge, subject to meeting additional and more vigorous minimum requirements.

The Committee also proposes a framework for recognising credit risk mitigation techniques. This includes a comprehensive approach and a simple approach for treating collateralised transactions. In general, the former uses "haircuts" to reflect the risk arising from changes in the value of exposures and in the value of collateral received while the latter uses the substitution approach employed in the 1988 Accord. The list of eligible collateral is broader than that in the 1988 Accord, and includes financial collateral such as non-

government bonds and equities. However, real estate collateral is not considered eligible under the standardised approach.

Apart from credit risk, the New Accord introduces (for the first time) explicit capital requirements for operational risk. The Committee has adopted a standard industry definition of operational risk, namely "the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events". This definition includes legal risk but excludes strategic and reputational risk. Three approaches of increasing sophistication (basic indicator, standardised and internal measurement) are proposed to calculate capital charge for operational risk. Based on a survey of a number of multinational banking organisations, the Committee proposes that 20% of a bank's regulatory capital should be allocated to operational risk.

Pillar 2: Supervisory Review

The proposals emphasise that supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum. Banks should have a process for assessing overall capital in relation to their risk profile and a strategy for maintaining their capital level. Interest rate risk in the banking book will also be treated under Pillar 2. In particular, supervisors will need to consider the sufficiency of capital of "outlier banks" whose economic value would decline by more than 20% of the sum of Tier 1 and Tier 2 capital as a result of a standardised interest rate shock that corresponds to about 200 basis points of upward or downward parallel rate movement.

Pillar 3: Market Discipline

The Committee has developed a set of qualitative and quantitative disclosures grouped under four key areas: scope of application (i.e. the consolidation of entities within a banking group subject to the capital regime); composition of capital; risk exposure assessment and management

processes; and capital adequacy. This pillar will supplement the other two by promoting higher disclosure standards and allowing market participants to have access to more useful information for assessing banks' capital adequacy. This is intended to provide incentives to banks to conduct their business in a safe, sound and efficient manner. Moreover, banks will have greater discretion under the New Accord, and particularly under the IRB approach, to determine their capital requirements. It is important that there should be effective market, as well as supervisory, oversight on how this discretion is exercised.

Impact on Banks in Hong Kong

Overview

The New Accord represents a more refined and risk-sensitive approach to setting regulatory capital requirements, and will provide an impetus for banks to enhance their risk management systems and techniques. The new proposals are intended to reward banks that are able to better differentiate and manage their risks with lower capital charges, although the current calibration will have to be revised to achieve this objective (see below).

The New Accord will have some positive implications for Hong Kong and its banks. As Hong Kong is not a member of the OECD, abolishing the OECD-based risk-weighting system will allow lower risk weights on exposures to the Hong Kong SAR Government given Hong Kong's current ratings (A+ and AA- from Standard & Poor's for long-term foreign and local currency debts respectively). Local banks may also benefit from a migration to the external-ratings based approach in terms of funding costs, as those with the requisite ratings (i.e. BBB- or better) would be able to attract lower risk weights under the New Accord for issuing longer term debt.

The current proposals will however raise issues for banks in Hong Kong in terms of capital requirements and implementation costs. There are specific concerns relating to the calibration of the

various approaches (notably the foundation IRB) and the recognition of collateral for credit risk mitigation. Some potential problems that may be encountered by national supervisors and banks in implementing the proposals will also have to be resolved.

Key Issues and Concerns

The HKMA wrote to the Committee in May 2001 to reflect a number of views and comments on the New Accord, including those of the local banking industry. Issues that are of major relevance to the local banking sector are summarised below:

(a) Impact on Capital Requirements

While the Basel Committee has stated explicitly that the intention is neither to produce a net increase nor a net decrease - on average - in minimum regulatory capital after accounting for operational risk, the current proposals are unlikely to achieve this for Hong Kong banks in general. It is expected that the new charge for operational risk will more than offset any reduction in capital under the standardised approach.

Based on the results of a quantitative impact study that the HKMA has undertaken in respect of the standardised approach¹, the capital adequacy ratio (CAR) of a representative sample of banks in Hong Kong would be reduced by an average of 258 basis points (see Table on next page). This reduction is mainly attributable to the capital charge for operational risk (using the basic indicator approach). Applying the standardised approach for credit risk would produce a reduction in CAR of an average of 13 basis points, indicating that the current proposals will not generate any savings in capital charge for credit risk to offset the effect of the capital charge for operational risk. This can be explained by the fact that few of the banks' corporate borrowers are externally rated, while the recognition of collateral is too limited to have much impact in terms of risk mitigation.

¹ This is a separate exercise from the Committee's own global Quantitative Impact Study, using a survey format designed by the HKMA.

Table
Quantitative Impact of the New Accord

| Impact due to | Net Change in Total Risk-Weighted Exposures (%) | Net Change in CAR (%) |
|-------------------------|---|-----------------------|
| Operational Risk | +22.57 | -2.50 |
| Credit Risk | +0.96 | -0.13 |
| Total | +23.53 | -2.58 |

Given that most of the local banks are highly capitalised, it should be possible for them to absorb the overall impact of an increase in capital requirements under the New Accord. In fact, local banks are already observing a minimum CAR of 10% to 12% which is above the 8% minimum required under the 1988 Accord, thus providing a cushion of 2% to 4% for other risks (including operational risk). The issue is whether banks in Hong Kong (and possibly those in Asia) may be put in a disadvantaged position vis-a-vis other foreign banking institutions that can benefit more from the proposed capital changes.

(b) Capital Charge for Operational Risk

The target allocation of a 20% capital charge for operational risk is believed to be too high for banks in Hong Kong, leading to an overall increase in their capital requirements (see above). As the business activities conducted by most banks in Hong Kong are largely conventional in nature, such as retail banking and commercial lending, their operations are generally less complex than those engaged in by large international banks. The present capital charge therefore seems excessive and not in line with the actual operational losses experienced by banks.

(c) Calibration of the IRB Approach

Some banks have expressed doubts as to whether there are sufficient incentives in the present calibration of the New Accord to justify adoption of the IRB approach. Based on their preliminary estimates, the benchmark risk weights under the IRB approach for

higher risk assets, such as exposures to small and medium sized enterprises (SMEs), are much higher than those under the standardised approach. The concern is that this will create a disincentive for banks to migrate to the IRB approach and may indeed give banks applying the standardised approach a competitive advantage. This may also undermine the willingness of banks on the IRB approach to lend to SMEs.

(d) Limited Recognition of Collateral

It is proposed in the New Accord that real estate collateral, though a common form of collateral for many banks in Hong Kong, should not be recognised for the purpose of credit risk mitigation under the standardised approach. While such collateral is certainly subject to fluctuations in market value and is usually less liquid than financial collateral, it is an important means of mitigating losses on defaulted loans and it is therefore appropriate to deal with these issues through applying appropriate haircuts than by disregarding the value of the collateral entirely.

(e) Treatment for Residential Mortgages

Under the new proposals, the risk weight of residential mortgages will rise sharply from 50% to 150% once they are past due for more than 90 days. This would give no allowance for the fact that the loans are secured by residential properties. It would effectively equate the default risk of residential mortgage loans with that of unsecured corporate loans when both types of loans become past due for more than 90 days, and would not be consistent with the low risk

nature of residential mortgage loans. Moreover, the risk weight of 50% for residential mortgages is already quite conservative compared with that implied under the IRB approach. This reinforces the view that a 150% risk weight would be excessive.

(f) Procyclicality

At the macro-economic and industry levels the New Accord may not cause banks to be under-capitalised during an economic downturn as they will generally be expected to manage capital on a forward looking basis with adequate cushion to absorb down-side risks. However, some banks have expressed concern that there may be a pronounced effect on individual industries and borrowers which experience a deterioration in their risk profile when all banks seek to reduce their exposure simultaneously. Such herd behaviour could result in over reaction by the market and exacerbate the underlying problem.

(g) Cross-border Implementation of the New Accord

This is concern that supervisors in different jurisdictions may adopt different approaches for the calculation of capital charges or may exercise national discretion as to the various options under the New Accord in ways that are not consistent or based on the same standard. This would create difficulties, both in terms of costs and reporting burden, for international banking groups operating in a number of jurisdictions. To address this issue, the HKMA has requested the Committee to provide clear guidance to home and host supervisors on their respective responsibilities in applying the New Accord to international banking groups and on the need to harmonise, as far as possible, their approaches to the New Accord.

(h) Market Disclosure

While generally supportive of the new Pillar 3 requirements, banks are concerned that the

proposed level of detail to be disclosed is excessive and that a more appropriate balance needs to be struck between the benefits of greater transparency and the costs of producing the information. This view applies particularly in relation to the disclosure standards for the IRB approach which, it is suggested, will tend to confuse market participants with information that is voluminous, complex and difficult to interpret. There is also concern that some of the information is of a proprietary nature. The current disclosure proposals should therefore be reviewed to ensure that they are relevant and do not impose an excessive reporting burden on banks.

The Committee's Response to Comments

In its announcement on 25 June, the Committee indicated that it would thoroughly review and consider all comments received. In particular, it acknowledged the need for adjusting its proposals to meet the objectives of maintaining an equivalent level of regulatory capital for the average bank and providing adequate incentives for banks to adopt the more advanced approaches. This will entail reductions in the basic calibration of the foundation IRB approach, both for corporate and retail portfolios, and the target proportion of regulatory capital related to operational risk. It also promised to review the treatment of credit exposures to SMEs.

HKMA's Approach to the New Accord

The HKMA is generally supportive of the New Accord, as it will provide a more risk-sensitive approach to measuring capital charges. However, a number of important issues will have to be resolved before implementation. In line with its policy of adopting international best practices and standards, the HKMA currently intends to aim to implement the New Accord in Hong Kong according to the timetable set by the Committee (i.e. in 2005). While it is expected that most of the local banks will use the standardised approach to calculate capital requirements (at least initially), some banks may wish to adopt the IRB approach. The HKMA will endeavour to facilitate banks using

this approach provided they can demonstrate their readiness and capability to meet the supervisory standards set out by the Committee.

Although the Committee does not expect to fully implement the New Accord until 2005, significant lead time will be needed for local banks to develop the systems necessary to use the IRB approach. Banks wishing to use this approach will therefore need to begin work at an early stage on enhancing their internal rating systems and building up the necessary data on defaults so that the validity of their rating systems can be tested.

In the case of banks that do not wish to formally use the IRB approach (which may be inappropriate for smaller banks), the HKMA will nevertheless encourage them where appropriate to adopt some elements of the IRB approach with a view to improving risk management. In particular, they should try to develop or enhance their internal rating systems to enable greater risk differentiation among borrowers of different quality. This will mean developing an internal rating system which has multiple grades for loans that are not yet irregular (i.e. those under the “pass” grade) and which is able to track the migration of individual loans through the various grades. Moreover, they will also need to collect sufficient data to validate their systems.

In the next few months, after consultation with the industry, the HKMA will issue more guidance to local banks on how they can enhance their internal rating systems for capital and/or risk management purposes. The HKMA is also considering revising the existing loan classification system to bring it more in line with the Committee’s requirements for internal ratings under the IRB approach.

Conclusion

Notwithstanding the issues that the Committee still has to address, the New Accord is a major step forward in banking regulation. It aims to encourage banks to improve their risk management systems beyond narrow compliance with a minimum capital ratio. Implementing the New Accord will however be a major challenge for

banks and their regulators in the light of its complexity, the potential impact on banks’ level of capital and the increase in supervisory and disclosure requirements. 

- Prepared by the Banking Policy Department