

Basel CP 3 and QIS 3 – The Final Phase!

June 2003

After four years of effort, the third and final Basel consultative paper has been issued (CP3). While its contents will come as little surprise to those who have been following the long debate, this is the first time that we have seen a full package of proposals and it will fundamentally reshape the regulation of capital adequacy – and with it the markets in which institutions operate.

The delays are over – although in the European Union (EU) there is another round of consultation and the legislative procedure to be completed. Decisions by individual institutions on what approach to adopt – if they have not been taken already – are now urgent. They are also fundamental. As the Quantative Impact Study (QIS) 3 results show, the capital benefits and costs are potentially substantial. There is a lot to do for institutions that want to use an Internal Ratings Based (IRB) approach for credit risk from the end of 2006.

On the operational risk side, there is also much to do. For example, institutions that had been planning on applying the Standardised Approach may find that compliance with the qualitative requirements has been made substantially more difficult by the tougher requirements set out in CP3.

The consultation runs to July 31, and although there are a number of open issues, it is clear that the basic structure of the new Accord is set. Indeed, for many institutions the focus of attention will shift to the EU consultative document expected in June/July, as it is the EU regime that will have legal effect and that will apply the Basel framework to all banks and credit institutions within the EU, and also to investment firms authorised under the Investment Services Directive (ISD).

If the architecture of the new Accord is now set, the impact of the proposals will be powerfully influenced by national discretion and institutions should not ignore this angle. National regulators are left both very substantive options in determining key aspects of the new regime and a very large measure of freedom to assess the various approaches of individual institutions. Liaison with, and lobbying of, national regulators to ensure that appropriate decisions are taken at a national level will be vital. Institutions are particularly concerned that the substance of Pillar 2 will largely be determined by national regulators, and that this could undermine competitive equality – a point that emerges from PricewaterhouseCoopers' Pillar 2 Survey that will shortly be published.

The delays are over

The Basel Committee on Banking Supervision (Basel) has now published CP3 and the results of QIS 3 that was intended to confirm the calibration of the new capital requirements. The consultative period is short, ending on 31 July. This should allow finalisation of the new Accord in the final quarter of the year. The period of seemingly endless delay and debate is over.

Basel is addressed to internationally active banks in G10 countries – although in practice the new Accord will have much wider application. The EU will issue a consultative paper in June/July covering how it intends to implement the new Basel Accord in the EU capital adequacy framework. This will apply to all banks and to all investment firms in the EU. The intention is that the EU Directive will enter into force at the same time as the new Basel Accord, and on the basis of the draft directive issued in November 2002, the EU regime will look very much like the Basel one – with one or two adjustments especially on the operational risk side.

QIS 3 – the capital savings at stake

QIS 3 confirms the calibration of the new Accord. The results also highlight the potential stakes, and the critical importance of the strategic decision about the approach to credit and operational risk. There are substantial gains to be had (and potentially substantial losses to mitigate). The QIS results show that the overall impact on institutions will vary greatly, depending on their activities and risk profile. Factoring in the impact of the new operational risk charge, some institutions could see substantial increases in overall capital requirements unless they are prepared to move towards more sophisticated approaches – although a sophisticated approach does not of itself guarantee a lower capital charge.

QIS 3 - Overall change in capital requirements (including operational risk charge) (Source: BIS)

	Standardised			IRB Foundation			IRB Advanced		
	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min
G10 Group 1 ¹	+11%	+84%	-15%	+3%	+55%	-32%	-2%	+46%	-36%
Group 2 ²	+3%	+81%	-23%	-19%	+41%	-58%			N/A
EU Group 1	+6%	+31%	-7%	-4%	+55%	-32%	-6%	+26%	-31%
Group 2	+1%	+81%	-67%	-20%	+41%	-58%			N/A
Other ³	+12%	+103%	-17%	+4%	+75%	-33%			

The optimum approach will depend on the profile of the individual institution, but the average result suggests that the biggest and most diversified institutions will need to move to the more sophisticated approaches as soon as possible.

The table below summarises the results of QIS 3 showing the change in capital requirements for credit risk, depending on the choice of approach to credit risk. These demonstrate the very real capital savings that can be made on credit risk. As Group 2 institutions tend to have a more domestic and retail focus, these results powerfully suggest that institutions with the largest exposure to the retail market have the opportunity to make the most significant gains.

QIS 3 – Change in credit risk requirements

(Source: BIS)

	Standardised	Foundation IRB	Advanced IRB
G10 Group 1	0%	-7%	-13%
G10 Group 2	-11%	-27%	N/A
EU Group 1	-3%	-13%	-15%
EU Group 2	-11%	-27%	N/A
Other (Groups 1 & 2)	+2%	-3%	N/A

¹ Group 1 Banks are large internationally active banks.

² Group 2 Banks are more domestically focused banks, and tend to be smaller in size than Group.

³ Other represents banks from non-G10 and non-EU countries, including Australia, China, Hong Kong, Singapore, South Africa, Korea and a number of Latin American, Asian and Central and Eastern European countries. Group 1 and 2 banks are combined.

QIS 3 highlights data issues

The QIS 3 results hold another lesson for institutions, namely that there is much more to do in improving data quality. Without data of sufficient quality, institutions will not be able to get the benefits that may be available from the new approaches. Basel felt that the QIS3 results were inflated by the inability of institutions to provide all the information required to calculate the effects of the proposals.

In particular, credit risk mitigation was an area where respondents found it difficult to provide the data needed to use the new forms of eligible collateral. Some institutions also failed to meet the data standards set out for the calculation of probability of default (PD), loss given default (LGD) and exposure at default (EAD). This contributed to the wide variation in results. Basel expects the dispersion of results to reduce as institutions come into line with Basel's data standards.

In any event, the moral of the story is clear: institutions need to improve their data quality and quickly.

Basel – The Key Changes

Those who have been following the Basel debate closely and in particular those familiar with the technical guidance to QIS 3 will have a strong sense of déjà vu. Even those readers who have not looked at the proposals since CP2 in January 2001 will find much that is familiar in the basic architecture of the three pillars and the menu of options for credit and operational risk. However, this is the first time that we have seen a complete version of the Committee's proposals. An analysis of the principal changes that have occurred since QIS 3 and their implications are set out in the Annex.

Overall, much continues to be left to national discretion. This will mean that the Accord could have very different impact depending on the approach of individual regulators, despite the intention that it should promote competitive equality. Institutions will need to factor in the likely approach of their national regulator. This may also be an area where continued lobbying is appropriate.

On the **credit risk** side, most of the changes are technical, although the reduction of the risk weighting for mortgages to 35% in the Standardised Approach may mean that the cost/benefit case for moving to an IRB approach for some institutions is rather weaker than it was. On the IRB criteria, the weakening of the use test for ratings systems is significant, and potentially makes adoption easier in terms of the overall business impact. Basel accepts that institutions do not need to use the same PDs for each application – for example, the PDs used for pricing applications can be estimates over the life of the loan rather than a one-year PD estimate as required for the capital calculation.

On the **operational risk side**, the changes are potentially more significant. The inclusion of an **Alternative Standardised Approach** based on a measure of business volumes rather than income is an important step. It is intended to apply where an income measure would be misleading or inappropriate. It is intended for use only in the commercial and retail banking business lines and requires the consent of the national supervisor. Institutions need to consider whether this approach could be helpful. Investment firms such as asset managers that argue that they are unjustly treated by an income based charge, should be considering how they could use the introduction of a volume based charge as a precedent to support an alternative volume based charge being developed in the EU Regulatory Capital Directive.

Institutions should also note the significant hardening of the **qualitative criteria for the Standardised Approach**. In particular, institutions are required to have a dedicated operational risk function, and to track relevant operational risk data (including losses) by business line. This information is expected to play a prominent role in both risk reporting and in the management of the institution. Some commentators have asserted that these take the Standardised Approach further in the direction of the Advanced Measurement Approaches (AMA), and have argued that this could dissuade institutions from moving from the Basic Indicator Approach. In any event, institutions will need to re-examine their choice of approach. In terms of the pure regulatory capital charge generated, there may be little difference between the Basic Indicator and Standardised Approaches, and the enhanced qualifying criteria for the Standardised Approach may shift the cost benefit analysis in favour of a cruder approach (although institutions will still have to comply with Basel's paper on Sound Practices for the Management and Supervision of Operational Risk).

The proposals on **Supervisory Review** (Pillar 2) continue to leave wide discretion to national regulators. In general, the proposals on developing the institution's internal view of adequate capital are little developed from CP2, although institutions that adopt an IRB approach to credit risk will be required to test that the capital they hold is sufficient to protect them in adverse economic conditions by "performing meaningfully conservative **stress tests** of their own design". The regulator will then determine whether to set additional capital requirements or require some reduction in risk taking. The proposals on Pillar 2 now include specific consideration of a range of issues that were once part of Pillar 1, including some aspects of **Securitisation**. Regulators will consider under Pillar 2 whether securitisation has produced a significant transfer of risk, and may increase capital requirements if they deem that this has not occurred. The PricewaterhouseCoopers Pillar 2 Survey that will shortly be released shows that the impact of national discretion on the level playing field, together with the possibility that Pillar 2 could result in a reversal of savings in regulatory capital made in Pillar 1 are key concerns of many institutions.

The proposals on **Market Discipline/Disclosure** (Pillar 3) have been further refined, but are similar to the proposals in the working paper of September 2001. Regulators have, however, acknowledged that the debate on disclosure standards is still taking place, and hold out the prospect of modifying their requirements in due course to reflect the outcome of that debate.

Implementation issues

Implementation, as much else in Basel II, is largely determined at national level. Nevertheless, some transitional and implementation issues are worth highlighting.

- The method for calculating the **floor on overall capital requirements** has been subtly altered. In 2007, for institutions using advanced approaches, overall capital requirements (i.e. credit, market and operational risk requirements) may not fall below 90% of the minimum currently required for credit and market risks. Previously the floor did not embrace market risk. For 2008 the floor will be 80% and it may be retained for future years.
- The **roll-out provisions for credit risk** are much improved on CP2. Nevertheless, a decision to use the IRB in one part of a group will imply that the IRB has to be applied across the entire group, subject to materiality. Regulators are more accommodating of phased roll-out, but institutions still have to produce a plan showing how they intend to implement IRB in the group over time. Plans should be "exacting, yet realistic". This aspect should not be neglected when selecting the group's approach to Basel. Institutions should also be mindful of the potential tension between Basel and the EU approaches to partial use; the EU appeared to be minded to allow the permanent partial use of a standardised approach for banks and sovereigns coupled with an IRB approach to retail business.

- The **roll-out provisions for operational risk** now feel rather closer to those for credit risk. Regulators have always been more prepared to see partial use of advanced methods for operational risk than they have for credit risk. However, institutions planning to use AMA will have to capture “a significant part” of the institution’s operational risk on implementation, and provide a plan for rolling out the advanced approaches across the areas selected for these approaches. Eventually, regulators will expect AMA to apply to all material legal entities and business lines.
- Basel is aware of the **cross-border implementation issues** created by the new Accord, and the potential for regulators to trip over each other in validating the approaches being taken by institutions with international operations. Basel calls on supervisors to pay as much attention as possible to the home state supervisor, and supports the principle of mutual recognition. Applied fully, this would be helpful to institutions. However, the extent of national discretion in the Accord – and the potentially very different national approaches to applying the Accord – are such that it is quite possible that the good intentions of Basel in seeking to minimise the regulatory burden will come to relatively little. Global institutions in particular may find that they have to duplicate new systems and functions to meet differing requirements in different territories.

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Issue	Standardised Approach	Internal Ratings Based Approach
Floor on overall capital charge	Floor does not apply	Floor on combined credit, market and operational risk charge is 90% of the credit and market risk charges calculated under Basel I rules in 2007, falling to 80% in 2008. Floor to be reviewed in the light of experience and could be retained. Implications: Slightly more restrictive approach. Need to retain Basel I calculation engines.
Pillar 1 – Minimum Capital Requirements – Credit Risk		
Recognition of Provisions	Risk weighting of past due loans reduced from 150% to 100% where specific provisions are no less than 20% of the outstanding amount of the loan. Subject to national discretion, the risk weighting of past due loans where specific provisions are no less than 50% of the outstanding amount of the loan may be reduced to 50%. Implications: will reward prudent provisioning policies.	General provisions that exceed the cap that can be included in Tier 2 capital can be used as a one-for-one offset to the expected loss portion of the IRB capital requirement. Implications: Could encourage higher level of general provisions.
Qualifying revolving retail exposures (e.g. credit cards)	N/A	The risk weighting curve has been modified to give lower capital requirements. Regulators will be vigilant that this does not lead institutions unduly to reclassify lending solely to reduce capital requirements. Implications: regulators fear that there may be some migration to lending via credit card rather than term loans, and there does appear to be a degree of competitive inequality. However, the high operating costs of revolving credit business may not make it worthwhile to encourage this behavioural shift.
Residential Mortgages	Risk-weight reduced from 40% to 35%. Implications: may alter the cost-benefit analysis for some institutions, making the IRB less attractive from the regulatory capital perspective (IRB may still be attractive from the risk management perspective).	New temporary floor of 10% on LGD. Concern that banks do not have sufficient data to cover the downside of the cycle for mortgage lending. Floor will be reviewed during the three-year transition period. Implications: IRB could be slightly less beneficial for banks with very low loss experience in their mortgage portfolios.
Specialised Lending	N/A	National discretion to assign preferential risk weights to exposures deemed “strong” and “good” provided that the institution’s underwriting characteristics are stronger than the current criteria imply. Implications: Institutions will need to address these criteria and demonstrate their superior performance.
High Volatility Commercial Real Estate	N/A	National discretion to introduce foundation and advanced IRB approaches for such exposures. Implications: Institutions now have an incentive to collect data for this asset class, but paucity of data is likely to make this concession nugatory for some time.
Ratings System Use Test	N/A	Basel now recognises that the use of default and loss estimates can differ depending on the application (e.g. a bank could use PD estimates over the life of a loan in its pricing applications while using a one-year PD in the capital calculations). The reasonableness of the different use can now be justified to the supervisor. Implications: Institutions will need to document carefully the use of differing default and loss estimates and ensure that there are sound reasons for this. Regulators may need some

Issue	Standardised Approach	Internal Ratings Based Approach
		education on the reasons for using different estimates in different circumstances.
Credit Derivatives	The requirement to include restructuring as a credit reference event has been removed provided bank has control over whether there will be a restructuring of the underlying obligation. Basel to continue to investigate during the consultative period for CP3 whether some capital relief can be offered where restructuring is not included as a credit event. Implications: Institutions need to continue to lobby.	
Securitisation	Although this is the first time that a set of fully worked up securitisation proposals has been included in a CP, the basic approach of the Working Paper of October 2002 has been adopted. A Pillar 2 requirement has been added for regulators to assess key regulatory issues, including whether there has been a sufficient and genuine transfer of risk to warrant a reduction of capital requirements. Failing this, regulators could add an additional Pillar 2 capital requirement or deny capital relief. Implications: Institutions will need to ensure (and to be able to demonstrate) that there has been a significant and genuine transfer of risk, if they are to retain concessionary regulatory treatment.	
	Risk weights depend on external rating, with low rated or unrated positions deducted from capital; liquidity facilities are accorded a credit conversion factor of 20% where original maturity is under 1 year and 50% if original maturity is over 1 year. Risk weight is the highest risk weight assigned to any of the underlying individual exposures covered by the facility. Implications: Institutions may need to rerun their calculations especially on liquidity facilities.	Risk weighting normally depends on external rating. Where a rating is not available, originating banks are required to use a supervisory formula – which has been somewhat simplified from the October 2002 paper. Liquidity facilities are to be treated as any other securitisation exposure with a credit conversion factor of 100%. Implications: Institutions may need to rerun their calculations especially on liquidity facilities.

Pillar 1 – Minimum Capital Requirements – Operational Risk

Alternative Standardised Approach (ASA)	CP3 introduces an Alternative Standardised Approach (ASA). This uses a three-year average of outstanding loans and advances (multiplied by 0.035) rather than gross income for Retail and Commercial Banking. The product of this calculation is then multiplied by the beta to give the capital charge. Institutions may use the retail and commercial banking betas (12% and 15% respectively) or choose to aggregate both business lines at a combined beta of 15%. The approach may be suitable for institutions where gross income would be misleading. Implications: Senior management needs to calculate both the TSA and ASA capital figures to decide which approach to use. Institutions will also need to demonstrate to the regulator that the choice they make is the most risk-sensitive approach to the measurement of operational risk.
Qualitative Criteria for the Standardised Approach (TSA)	The criteria are now more formal and more onerous. Institutions must have an operational risk management function; they must systematically track operational risk data (including material losses) by business line; this data must be an integral part of risk management, including reporting to the Board. Validation and regular review are required, including of the operational risk management function. Implications: Institutions will need to review themselves against the new criteria, and assess whether they have sufficient resource and experience to set up an operational risk function independent of Internal Audit. Institutions will need to assess systems and processes for collecting and tracking data, and ensuring that data is consistent across the group. Institutions will also need a Board-approved process for reviewing operational risk profile.
Advanced Measurement Approach (AMA)	Institutions must meet specific criteria, but otherwise institutions are left to develop their own methodology for measuring operational risk. Partial use is allowed, but supervisors will require a plan for full implementation of the AMA across the targeted businesses, and will expect the AMA to cover a significant proportion of the group. The AMA model should also be capable of supporting an economic capital allocation model across business lines. Insurance may be used to mitigate the capital charge (up to a maximum reduction of 20%) and the criteria for recognition have been clarified. Implications: The confirmation of partial use is welcome, but the criteria may not suit institutions that wish to keep large parts of the group permanently on a less advanced approach. The recognition of insurance is welcome, but some criteria, such as those covering exclusion clauses or limitations and minimum notice periods for cancellation may be problematic. Other criteria, such as the haircuts for residual risks, will require further industry consultation.

Pillar 2 – Supervisory Review

At one level Pillar 2 remains substantially a set of principles covering the overall capitalisation and governance of the institution for national supervisors to develop in keeping with their own culture and inclinations. This element of Pillar 2 is little changed. However, at another level there are a number of specific risks that regulators will be required to consider, and to levy additional capital or require other remedial action if they are not satisfied:

- **Operational risk** - for institutions not using AMA, regulators must assess whether the use of an imperfect proxy to generate a capital charge means that the Pillar 1 charge is consistent with the actual risks.
- **Credit Risk** – for institutions using IRB there will be enhanced stress testing requirements.
- **Residual Risk** from credit risk mitigation – institutions must have written policies to control the legal, documentation and liquidity risks that may arise.
- **Credit Concentrations** - institutions are required to have policies, systems and controls to identify, measure and control credit concentrations and to consider them in their assessment of capital adequacy.
- **Securitisation** – institutions will be required to demonstrate that adequate capital is being held against the risk profile as changed by securitisation, and that there has been a genuine transfer of risk.

Implications: Institutions will need further to strengthen their written documentation and their policies and controls. Otherwise there is a risk that the capital benefits that they thought they were obtaining through a reduced Pillar 1 charge may be negated by an increased Pillar 2 assessment.

Pillar 3 – Disclosure

The disclosure requirements of CP2 were substantially reduced in a working paper of September 2001. Despite some further refinement in CP3 a significant volume of quantitative and qualitative disclosure requirements remains. A requirement to make general disclosures of strategies and procedures for risk management of each risk area (e.g. credit risk, market risk etc) has been added. Other changes from September 2001 are:

- The **templates** have been dropped. These created controversy, with institutions unclear of their purpose.
- The level of **prescription** in the quantitative disclosures for credit risk has been reduced – notably in respect of the verification of loss estimates. A transition phase has been introduced: up to 2008 actual losses are required to be reported; after 2008 longer run average data on losses will be required. In addition banks are required to comment on the factors that impacted on loss experience.
- **Operational risk disclosures** have also been reduced. The disclosure of the operational risk capital charge will now be required for the AMA approach only.
- **Interest rate risk disclosures** have also been reduced. The requirement to disclose the impact of the standardised interest rate shock by currency has been dropped.
- The qualitative and quantitative disclosures for **securitisation** have been refined and consolidated.
- For banks using the standardised approach for market risk the requirement to disclose the **capital charge for option positions** has been dropped. Banks that use VaR models now have to disclose a description of the approach used for backtesting and validating the accuracy and consistency of internal models.
- Basel has also recognised the need for the Pillar 3 disclosure framework to **align with accounting standards**, opening the possibility of modifying regulatory disclosure requirements as accounting disclosures develop.

Implications: Institutions will still need to make copious disclosures. These will have to be of a high quality and appropriately verified, if not actually externally audited. Institutions will need to develop stakeholder management approaches so that investors and counterparties, for whom these disclosures are intended, properly understand the messages that are being conveyed.