

GETTING TO THE CORE



IT'S CLEAR THAT THE BASEL II CAPITAL ACCORD WILL IMPACT ON BANKS – BUT JUST HOW FAR-REACHING WILL THE EFFECT BE FOR CORPORATE TREASURERS, ASKS **ANDREW CAPPS** OF KPMG.

The third and final Bank for International Settlements Basel Committee consultation paper on proposed capital adequacy requirements for banks was finally published in April 2003. That means banks are now at least aware of the likely extent of the proposals, even if they have not yet done anything about them. Meanwhile, treasurers might be forgiven for thinking that the new Accord will have little impact on them and so can afford to ignore it – but we shall see.

ESSENTIAL REMINDERS

THE OLD ACCORD. The 1988 Basle Accord (yes, the old Accord was 'Basle' and the new one is 'Basel') requires banks to hold regulatory capital based on the risk weights of the asset classes of the exposures held. Although this distinguishes between lending to different asset classes, it does not distinguish between the different risks *within* the various asset classes – for example, lending to a AAA-rated¹ bank has a different risk weight from lending to a AAA-rated corporate, but lending to a AAA-rated corporate has the same risk weight as lending to a BBB-rated corporate.

This is clearly an anomaly in the old Accord that the new Accord seeks to address.

HOW THE NEW ACCORD WILL WORK. The Basel Committee has developed three mutually enforcing pillars on which to build the new capital framework:

- *Pillar 1* sets out the minimum regulatory capital requirement calculation methodologies for credit risk, operational risk and market risk.
- *Pillar 2* recognises that prescribing calculation methodologies is unlikely to fully capture all risks and provides for recognising those additional risks from both internal and supervisory assessments.
- *Pillar 3* sets out the public disclosure requirements which are intended to impose a discipline on the risk management activities of banks.

Although Pillars 2 and 3 could have some effect on corporate treasury borrowing, the main impact will come from Pillar 1, and credit risk in particular, and it is on this aspect of the Accord that the remainder of this article will focus.

THE THREE APPROACHES. The three approaches for calculating the minimum regulatory capital for credit risk are: the Standardised, Foundation Internal Ratings Based (IRB) and Advanced IRB. All three are structured in such a way as to reward more sophisticated risk measurement techniques with lower risk weights – and subsequently lower regulatory capital requirements – for similar risks.

The Standardised approach is similar to the old Accord but applies risk weights based primarily on the rating agency ratings of each entity, rather than the asset class to which an exposure belongs. Each category of exposure has a series of risk weights for the different ratings.

Table 1 shows the risk weights of corporate counterparty exposures for banks adopting the Standardised approach. It is clear to see that this is a more risk-sensitive approach than applying a blanket 100% risk weight for corporate lending. However, it should be noted that the April 2003 final consultation paper also gave supervisors discretion to allow banks to apply a blanket 100% risk weight for corporate exposures without regard to external ratings. From a regulatory capital perspective, this would be a more attractive choice for banks with predominantly unrated or poorly rated, higher risk corporate lending.

For IRB approaches, each exposure a bank has is allocated a risk weight that is dependent upon the category of exposure and the expected loss. This is calculated through estimations of probability of default (PD), loss given default (LGD), exposure at default (EAD) and maturity (M).

The precise mathematical formulae are complex and there is probably no benefit in illustrating an example in this article. However, based on the formulae, *Table 2* shows the risk weights for a range of estimates of PD with LGD of 45% for exposures to companies with a turnover of more than €50m.

Again, you can immediately see that this is a more risk-sensitive approach than the Standardised approach described before.

WHICH APPROACH ARE BANKS LIKELY TO ADOPT?

Banks which lend to corporate customers are most likely to adopt an IRB approach, for three reasons:

- Although there is no specific intention to vary the overall amount of capital held by banks, there will be winners and losers. The

TABLE 1
STANDARDISED APPROACH RISK WEIGHTS FOR CORPORATE COUNTERPARTY EXPOSURES.

Rating	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Risk weight	20%	50%	100%	150%	100%

TABLE 2
IRB APPROACH RISK WEIGHTS FOR A RANGE OF ESTIMATES OF PD WITH LGD OF 45% FOR EXPOSURES TO CORPORATES WITH TURNOVER IN EXCESS OF €50M.

PD	0.05%	0.10%	0.25%	0.5%	1%	3%	5%	10%
Risk weight	20%	30%	50%	72%	97%	135%	178%	250%

intention of the Accord to reward better risk measurement methodologies will ensure that there will be benefits of reduced capital for banks which choose to adopt a more advanced approach, compared with those which choose the Standardised approach with similar risks. This will give distinct competitive advantage and there will be pressure for banks to adopt as advanced an approach as possible.

- The new Accord sets out rules that limit the circumstances in which a bank can adopt different approaches for different types of lending. Consequently, banks whose portfolios primarily contain relatively good quality lending – for example, prime residential mortgages – will want to adopt the IRB approach for that lending and will have, under the Basel proposals, to adopt the IRB approach across its entire portfolio.
- Most corporate lending banks will be under peer pressure to adopt what is considered to be the good business practice of the IRB approach.

The downside to adopting an IRB approach is that the cost of establishing the infrastructure required is substantial. For larger banks, however, the potentially substantial capital savings, better risk management information and peer pressure makes adopting the Advanced IRB approach seem most likely. For smaller, more specialised banks the decision will depend on the structure of the lending portfolio and a cost benefit analysis for moving from the Standardised to an IRB approach.

HOW WILL CORPORATE TREASURIES BE AFFECTED?

RISK-BASED PRICING. The main focus of the impact of the proposals on banks is on regulatory capital requirements, but the impact on their business practices is sometimes overlooked. To be able to adopt the IRB approaches, banks will have to assign exposures to pools based on their estimated PD and LGD calculations. There must be a sufficient number of pools such that, where there are meaningful differences in expected loss estimates, the exposures would be assigned a different pool. Consequently, a bank adopting the Advanced IRB approach will be micro-segmenting its portfolio and be acutely aware of the expected losses for every exposure it has. This is clearly powerful information with which to make business decisions. Indeed, one of the key supporting requirements of the new Accord is that banks use that information in their business decision-making process. Some banks are already practicing risk-based pricing, but the advent of Basel II will ensure

that more of them will be actively using expected loss calculations in their pricing of counterparty exposures.

IMPACT ON BORROWING COSTS. Treasurers are going to be primarily interested in the potential impact Basel II will have on borrowing costs. This will depend on two things, firstly, the risk weight assigned to the exposure, and secondly, the bank's cost of capital or requisite return on capital. Risk weights vary with different combinations of PD and LGD but could be as high as 350% or more for PD exposures where a bank has adopted an IRB approach (compared with 100% under the current rules).

The factors affecting the risk weight assignment will include:

- The approach the lending bank has adopted. For similar exposures, the bank will have reduced risk weights as it moves along the spectrum of risk management sophistication – that is, the more advanced approach it adopts.
- Whether or not the company can be treated as a retail exposure for capital purposes by the lending bank. Some small- to medium-term corporate lending might be classed as retail lending provided the companies have turnovers below a given level and the bank treats the exposures similarly to retail in its operations. Being able to treat exposures as retail lending would marginally reduce the applicable risk weight.
- The turnover of the company – those with turnovers of less than €50m attract a lower risk weight than those with higher turnovers.
- The estimated probability of default of the company.
- The maturity of the exposure.
- The estimated loss given that default.
- The potential exposure at default. This may not be the current exposure where overdraft and similar facilities are provided and the bank may not have control over the precise exposure at default.

The risk weight will dictate how much capital the bank has to hold for each exposure. Holding capital costs more than holding other forms of funding and so any reduction/increase in capital requirements should feed directly into the cost of borrowing for a company. One method to assess the impact on pricing is to assume that capital, in the form of subordinated debt, could be retired and replaced by wholesale funding.

Assuming that subordinated debt costs about 150bp more than wholesale funding, *Table 3* illustrates the possible cost of capital-driven pricing differences as a result of the new Accord for corporate borrowing from banks.

However, there is potentially a much greater pricing difference if the key performance indicator of a bank is return on regulatory capital. Put simply, if a bank halves/doubles its capital requirement, it would need to halve/double the profit margin to maintain a previous return on capital ratio. To illustrate this, if a bank earns a net 50bp from lending to a company, using the same assumptions as *Table 3*, *Table 4* shows the return on capital-driven pricing differences for lending to a single A rated corporate.

The precise pricing difference will depend on each bank's attitude to return on capital compared with absolute profit, but there are significant potential differences from current pricing for either very good or very poor corporate credit risks.

The pricing differences are likely to hit the market much earlier than in a big bang impact at the end 2006 implementation date. This is because any bank currently making lending decisions which will affect capital requirements beyond the implementation date should already be building the future capital difference into the

TABLE 3
POTENTIAL COST OF CAPITAL DRIVEN PRICING DIFFERENCES FOR LENDING TO A SINGLE A-RATED CORPORATE.

	Current Accord	New Accord		
		Standardised	IRB	
Risk weight	100%	50%	30% ²	250% ³
Capital requirement using an 8% solvency ratio	8%	4%	2.4%	20%
Capital difference		(4%)	(5.6%)	12%
Annualised basis point difference ⁴		(6)	(8.4)	18.1

TABLE 4
POTENTIAL RETURN ON CAPITAL DRIVEN PRICING DIFFERENCES FOR LENDING TO A SINGLE A-RATED CORPORATE, WITH A 50BP PROFIT MARGIN.

	Current Accord	New Accord		
		Standardised	IRB	
Risk weight	100%	50%	30%	250%
Capital requirement using an 8% solvency ratio	8%	4%	2.4%	20%
Capital difference		(4%)	(5.6%)	12%
Annualised ⁴ basis point difference		(25)	(35)	75

pricing decision. It is not certain whether this will happen, however, as banks may not have the capability to do so before their IRB approach systems are in place.

CREDIT RISK MITIGATION

The need to reduce capital for banks restricted by the amount of capital available to them may see an increase in activities to mitigate the risks which are capital intensive. Such banks will make greater use of securitisation to remove assets from the balance sheet and use credit risk mitigation techniques, such as purchasing guarantees and credit derivatives, to offset credit risk in their portfolios.

SPECIALISED LENDING

Not all corporate lending is treated in the same way for rating on the IRB approaches. A detailed description of each method is not possible here, but treasurers should at least be aware that a different treatment is required for the following:

- project finance, where the lender looks to the revenues of the project for repayment and security for a loan;
- object finance, which funds the acquisition of physical assets that will be relied on to generate cashflows to repay the loan – for example, ships and aircraft;
- commodities finance used for short-term lending to finance reserves, inventories or commodities, where the repayment is dependent on the sale of the commodity and the borrower has no independent means to repay the loan;
- income-producing real estate financing, where the repayment of

the loan is dependent on revenues generated by the real estate, such as office buildings; and

- commercial real estate financing, which exhibits higher loss rate volatility compared with other specialised lending.

IS THERE A NEED TO OBTAIN A RATING?

Those banks adopting the Standardised approach will base a substantial part of their pricing decision for loans to corporates on the company's rating, or lack thereof. Even with the IRB approaches, where banks should depend on their own ratings, if a bank's internal rating system is radically different from the rating given by a recognised rating agency, the bank is likely to make a judgmental correction. This effectively increases the influence of rating agencies on margins that corporates might expect from their banks.

With the Standardised approach, the risk weighting for better than BBB+ rated companies is 50% or lower, compared with 100% for unrated firms. There is, therefore, an added incentive for companies with relatively low credit risk to obtain a rating. Considering that more than 25% of FTSE 100 companies are unrated, there is plenty of work for the rating agencies before Basel II is implemented. However, one anomaly to note is that the 100% risk weight for unrated firms, compared with the 150% risk weight for below BB-rated companies, gives little incentive to obtain a rating for higher risk organisations.

FROM A BORROWER'S VIEW

The new Basel Accord **will** affect corporate treasuries, most notably in the pricing of loans and advances. We have seen that there is likely to be a small margin difference, depending on the lending bank's cost of capital, and a potentially greater margin difference from a bank that has return on capital performance measurement criteria. For budget planning purposes, corporate treasurers will want to know what this margin difference will be for his or her own borrowing. It is impossible to give a general indication, but if you are a relatively low-risk borrower, you can expect better pricing. Conversely, relatively high-risk borrowers are likely to see higher prices.

Above all, though, corporate treasurers need to realise that, although some banks already employ relatively sophisticated risk analysis techniques, other banks are going to be much more risk-aware than before, because of the systems and methodologies they are putting in place. In addition, because banks will need to regularly check that allocations to risk pools continue to be appropriate, the impact of these new systems and methodologies on pricing is likely to more closely reflect business performance on an ongoing basis.

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Notes

¹ Based on Standard & Poor's rating definitions.

² Risk weight for exposures to corporates that have turnover >€50m with PD 0.1%, LGD 45% and maturity 2.5 years.

³ Risk weight for exposures to corporates that have turnover >€50m with PD 10%, LGD 45% and maturity 2.5 years

⁴ Assumes capital is replaced by wholesale funding that is 150bp cheaper.