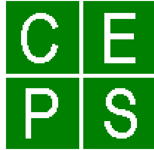

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BASEL II
THE REMAINING ISSUES

MORITZ MEIER-EWERT

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BASEL II – THE REMAINING ISSUES

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MORITZ MEIER-EWERT

In January 2001, the Basel Committee for Banking Supervision (BCBS) presented its latest proposals for a revised Capital Adequacy Accord. The aim of this revision is to address some of the perceived shortcomings of the 1988 Accord, which is currently being applied. These new proposals include a number of important improvements, but unfortunately there is a serious risk that in some areas they are overshooting their target. As a result they could have adverse consequences not only for the structure of the banking industry, but also for developing countries and for systemic stability. Indeed, if implemented in its current form, the Accord could lead to a serious round of consolidation in the banking sector resulting in the domination of the market by a handful of internationally active banks, widen the amplitudes of business cycles as well as increase the frequency of financial crisis through enhanced procyclicality, and effectively cut off a number of developing country borrowers from bank-finance.

In this context, the BCBS has wisely decided to prolong the consultation period for another year, so that the final draft Accord is expected by the end of 2002. It is to be hoped that these potential problems of the new Accord are solved by then. In this context, it is the aim of this paper to briefly outline four issue-areas that must be addressed before the new Accord can be implemented with confidence. After a broad outline of the current state of the proposals in section one, each area will be discussed in turn. Thus, the second section focuses on the issue of a potential decline in the overall capital holdings and hence in the level of protection against systemic risk. The third section then considers the strong procyclical effect that the new proposals are likely to have. Section four looks at the various adverse consequences the Accord may have for developing countries, and the fifth section outlines the potential impact on the structure of the banking industry. Section six concludes.

1. The new proposals

The new Basel Capital Adequacy Accord aims to adjust the existing Accord dating back to 1988 to the changed realities in the financial system. Hence it differs from the old Accord by being more sophisticated with

regard to risk-measurement and the scope of risk covered. It also provides greater incentives for active risk-management and risk-mitigation. Most importantly, however, it no longer subscribes to a „one-size-fits-all“ methodology and allows for an evolutionary regulatory approach, which gives more highly evolved banks the opportunity to move from the conventional standardised approach to an advanced one, which will allow the use of internal ratings.

The new Accord consists of three pillars, the first one of which lists the minimum capital requirements. In addition to the well-known requirements for market risk and credit risk, the Second Consultative Package also introduces a capital requirement on the new category of operational risk. The risk weights used for each kind of requirement have been refined to be more sensitive in comparison to the old Accord, and the opportunity for advanced banks to use internal ratings has been generalised further. The second pillar contains provisions about supervisory review, which allows supervisors to set a bank's capital requirements depending on its risk profile. Finally, the third pillar provides detailed disclosure requirements so as to create an environment in which effective market discipline can take place.

The main objectives of the new Accord remain the same as those of the original one, namely to strengthen and to safeguard the financial system, and to enhance competitive equality. In a number of ways, the proposed new Accord does fill the gaps created by the divergence between the regulatory content of the 1988 Accord and the innovation that has occurred in the financial instruments available to banks ever since its inception. During the ongoing consultations, the Basel Committee has received a large amount of comments, and has taken on board a number of them.[1] However, there is reason for concern that some of the potential adverse consequences of the new Accord for the overall level of capital holdings, for financial volatility, and for developing countries as well as for the structure of the banking industry have not yet been adequately addressed (See Box 1 for an overview). These should be discussed in the remaining time of the consultation period, which is to last until mid-2002, if the new Accord is to be a success.

[1] See: Bank for International Settlements (2001a).

Box 1. The remaining problems of the proposals for Basel II

The following list of potential problems ought to be addressed during the remainder of the recently prolonged consultation period, before the new Basel Accord is implemented:

1) A potential **lowering of overall capital reserves**, leading to a decline in the level of protection against systemic risk.
2) Increased **procyclicality** of the banking system, created by:
   - Greater risk-sensitivity of the new Accord;
   - The use of (procyclical) external credit rating agencies; and
   - The use of Value-at-risk risk-management tools in a herding environment;

   Procyclicality would enhance the amplitude of the business cycle and increase the likelihood of financial crises.
3) Strongly **adverse consequences for developing countries**, due to

- Very high capital requirements on low-rated borrowers, cutting them off from bank lending;
- Enhancement of the competitive advantage of sophisticated large banks from industrialised countries; and
- Potentially large implementation costs for pillars II and III.

4) Increasing **domination of the banking industry by a few large players**, with potentially adverse consequences for small businesses and consumers.

2. The overall level of capital requirements

The minimum capital requirements have for a long time been seen as the central part of the Basel Accord, and therefore it is not surprising that despite the introduction of the two new pillars of supervisory review and effective market discipline, most attention is still being paid to the implications of the revised Accord for the amount of capital holdings required of each bank.

2.1 Are the capital requirements too high ?

Although it is the stated aim of the BCBS that the average level of overall minimum capital required should remain at 8%, the proposals for the new Accord have generated many fears that capital requirements would increase. It has been argued that the proposals for a new Accord would put too heavy a burden on the banking industry, and some of these concerns are outlined below:

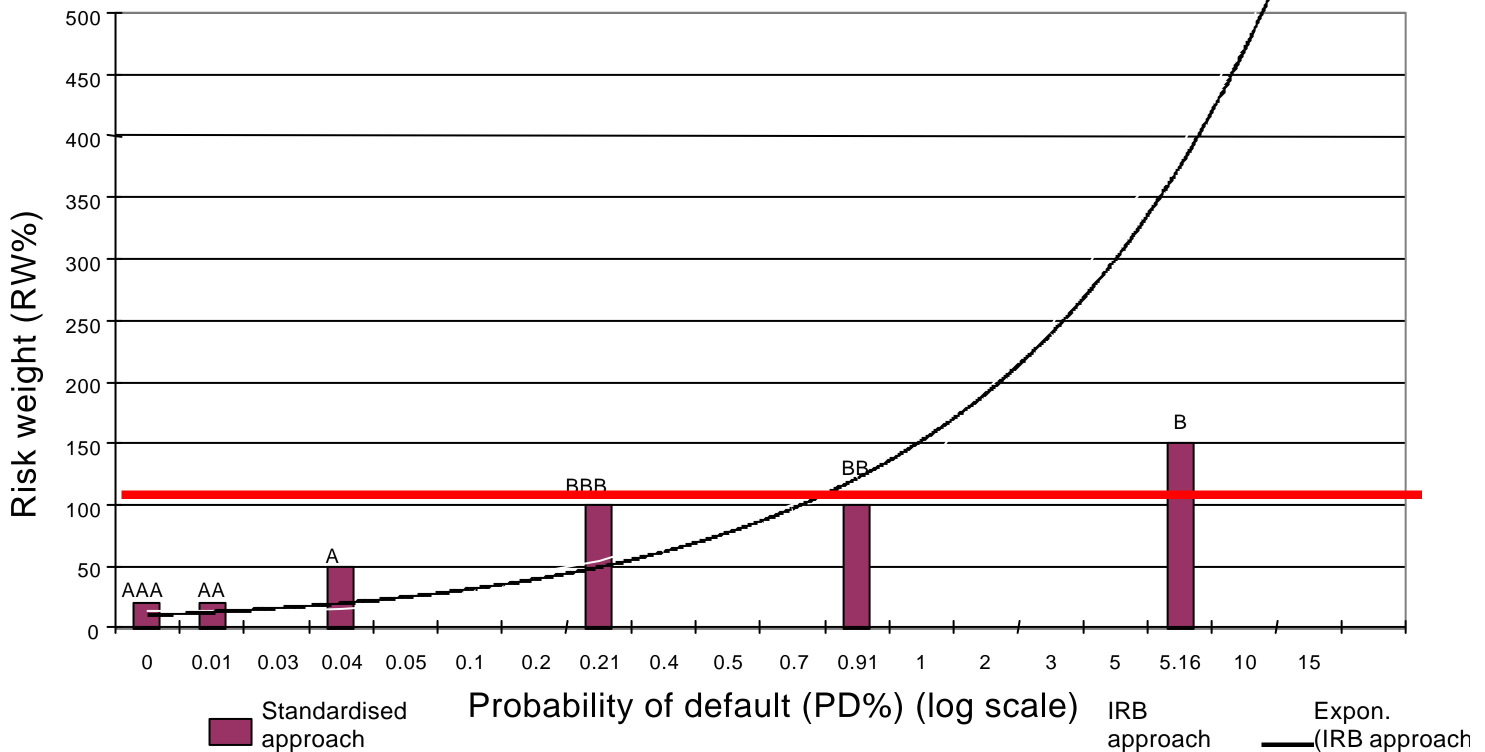
a) *The particular distribution of capital requirements*

Much concern was caused by the perceived adverse consequences of the particular distribution of capital requirements across risk-weightings of the new Accord. As can be seen from Graph 1 (using as an example the category of corporate borrowers only), the new Accord introduces a number of new risk-weights to enable banks to distinguish different categories of borrowers more succinctly.

Graph 1

Standardised vs. IRB Approach under the New Accord

Corporate Debt



Notes: The chart shows an approximation of the proposed IRB risk weights for a hypothetical corporate exposure having LGD equal to 50% (source: paragraphs 175 and 176, the Consultative Document - The New Basel Capital Accord (January 2001)). The chart also shows the risk weights under the new standardised approach for a rated corporate exposure, plotted against the IRB approach using the one year 1981 to 1999 unadjusted average static pools cumulative default rates for the rating category from Table 3 in the Standard & Poor's publication "Ratings Performance 1999" (February 2000). These show average one year default rates for the respective rating categories of 0% (AAA), 0.01% (AA), 0.04% (A), 0.21% (BBB), 0.91% (BB) and 5.16% (B). These figures may not be fully comparable with Basel PD%. The risk weights for those rating categories under the standardised approach are shown based on paragraph 35 of the Consultative Document.

Source. Clifford Chance.

Hence, while the 1988 Accord attributed a risk-weight of 100% to all loans to private corporate borrowers, the standardised approach of the new Accord introduces a grading of risk-weights, which includes 20%, 50%, 100% and 150%, depending on the probability of default attributed to the borrower. Going further, the internal-ratings based approach makes even finer-toothed distinctions possible.

While the general principle of making capital-requirements more sensitive to actual risks is widely welcomed among banks, the concerns originate in the perception that in the current draft, the particular distribution of weightings would result in higher overall required capital holdings for many banks. The reason for this is that while both the standardised approach and the internal-ratings based approach allow a substantial lowering of minimum capital holdings for borrowers with excellent credit ratings (ranging from AAA to A), they do in fact require higher capital-holdings for debtors with a rating worse than BB. Even the relatively respectable credit rating of BB (with a default probability of around 1%) is likely to require a 25% increase in capital holdings under the internal-ratings based approach. Given that in Italy, for instance, the probability of default for bank borrowers has historically ranged between 1.6% and 8.5% (i.e. between BB and lower), this seems to imply significantly higher required capital holdings (both under the standardised and under the IRB-approaches) compared to the current Accord. It should be added that the internal-ratings based approach, which offers further capital savings on investment-grade borrowers when compared to the standardised approach (with most of the savings accruing for borrowers with ratings roughly between AA- and BBB-), the required holdings are significantly higher than under the current Accord below the rating of BB (The almost exponential rise in the graph is somewhat misleading, since it is plotted on log-scale). The Bank of England has calculated that a bank following the IRB foundation approach would experience a 287% increase in required capital holdings on loans to a corporate borrower rated B, and a 488% increase on loans to a corporate borrower rated CCC.[2]

It is these higher requirements for loans to medium or low-rated borrowers that have also generated concerns about the implications of Basel II for small and medium-sized enterprises (SMEs), which account for a large part of economic activity in Europe. It is feared that Basel II will make it more

[2] Calculated from numbers from the Bank of England´s *Quarterly Bulletin*, Spring 2001, as quoted in Griffith-Jones & Spratt (2001).

expensive for them to attain bank-finance, and they will have to start looking for alternative forms of finance. This fear lies at the heart of the recent statement by the German Chancellor that in its current form, Basel 2 was "unacceptable to Germany".[3] Not only will SMEs suffer from the higher requirements on lower-rated borrowers, they will also in some shape or form have to bear the costs of attaining a rating by the External Credit Rating Agencies, (which are still relatively rare in Europe). The Basel Committee has expressed its readiness to accommodate these fears through lower requirements for SME lending.[4]

Of course, it has to be added that the final effect of these high risk-weights could be attenuated to some extent by the fact that some non-bank investors, such as asset management firms, insurance companies and pension funds (who are indifferent to risk-weights) could arbitrage. Also, various risk-mitigation techniques could be used to lower the cost of lending.[5] Nevertheless, given the size of the increase in required capital holdings for low-grade borrowers, it is likely to have some effect.

It should further be mentioned that in making these calibrations, it is very difficult to account for the dynamic responses of banks to the changed environment. The extent to which these extra requirements are compensated for by the lower requirements on investment-grade loans very much depends on the individual risk-profile of banks. If banks maintain their current exposures, many of them could therefore be justified in fearing an increase in their overall capital requirements. However, if capital requirements on loans to borrowers with a BB rating will require more capital in the future, it may be that banks will simply shift their lending activity to less capital-intensive credit grades, implying a credit crunch for some (low-rated) borrowers.

It is in the light of considerations like this that the BCBS is anticipating the need to reduce the calibrations of the foundation IRB approach.[6]

[3] See *The Economist*, 8 November 2001.

[4] See Bank for International Settlements (2001a). This reduction would be in addition to the existing provision in the January proposal allowing some SME loans to be treated as retail exposures. I am very grateful to Andrea Resti for pointing this out.

[5] On these points, see Reisen (2001), section 3.

[6] See Bank for International Settlements (2001a).

b) Operational risk

A second reason for the fears of higher capital requirements is the introduction of a new category of "operational risk", the coverage of which should more or less represent 20% of total capital requirements.[7] Many industry-representatives argued that the definition of operational risk used, namely "The risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events" is too general and unclear. Furthermore, the assumed relationship between the income of a bank and the level of operational risk it faces has been contested. Given the lack of precise knowledge about the nature of the risks faced, many people argue that the current capital requirement is excessive, and that greater emphasis should be put on providing incentives for companies to improve their operational risk-management tools. The BCBS has taken these criticisms on board and has stated in recent communication[8] that the capital requirement on operational risk is likely to be lowered from 20% to 12%.

c) Specialised credit institutions

Thirdly, it was argued that the risk-weights, which a number of specialised industries would be assigned under the new Accord, do not adequately reflect their creditworthiness. Examples of this are leasing companies and factoring or credit-providers, which have always posed difficulties for the application of the Basel Accord.

Initially, a problem arises within the EU, since specialised credit institutions fall into different regulatory categories in different Member States. While they qualify as banks and thus fall under the Basel Accord in some countries (like France), they are technically treated differently and do not fall under it in others (like Italy). Hence the Basel Accord will not apply to all specialised credit institutions in the same way.

However, even to the extent that it does apply, it was argued that the new Accord does not adequately take into account the particular circumstances of these institutions. It does not recognise that their focus on niche-markets leads to the acquisition of special expertise, which may allow them to attain much lower costs of recovery than would have been expected from the ordinary ratings of their customer base. The new Accord does also not allow for the specific methods of risk-mitigation used in this industry,

[7] See Cornford (2001), section 11, for more detail.

[8] See Bank for International Settlements (2001c).

since its definition of collateral is rather narrow. Hence, under the standardised approach, specialised credit institutions are likely to be faced with what are perceived to be unnecessarily high capital-requirements. This problem can to some extent be remedied if an internal ratings-based system is used, but of course that is only available to some specialised institutions.

2.2 … or too low ?

Despite the almost unanimous view of industry that required capital holdings would increase, at least a convincing theoretical case can be made for how the new framework could lead to an overall lowering of capital holdings. It should not be forgotten that competitive market pressures are likely to create a single integrated capital requirement faced by the consumer: This capital requirement would be equal to the IRB-approach above the rating of BB, and to the standardised approach beyond it. The reason for this is that if one assumes that differences in capital requirements translate directly into differences in the price of credit, then advanced banks under the IRB approach will be able to offer loans to borrowers with excellent ratings at a cheaper price than less sophisticated banks under the standardised approach. Hence any customer with excellent ratings will use the services of the former. At the same time, the opposite is true for loans to borrowers with a very bad credit rating. They will find that – since sophisticated banks face almost prohibitively high capital – requirements for their category of borrowers under the IRB approach – loans can be attained more cheaply from less sophisticated banks under the standardised approach. Hence, all lenders rated below BB are likely to use the services of the latter banks. The overall level of capital holdings is then given by the composite curve described above. If one also takes into account that the Basel Committee has decided to attach a 100% rating to unrated borrowers (even though those with a rating worse than BB are assigned 150%), which may lead to adverse selection, meaning that effectively 100 % would be the upper ceiling even under the standardised approach, it is not clear that overall capital requirements will rise at all. Of course, the degree to which this will take place depends both on whether the sophisticated banks will be able to maintain their margins by focussing only on investment-grade borrowers (which may only be possible after some consolidation in the banking sector) and on whether small banks will be willing to enter into the market for loans to e.g. developing countries. Given the potentially large financial incentives, however, the possibility

cannot be dismissed out of hand. Indeed, the fact that such a desire for "cherry-picking" exists can be demonstrated by the fact that a number of banks have requested in their submissions to the Basel Committee that the standardised approach and the IRB approach should be useable simultaneously in different portfolios, which would result in the expected lowering. The overall effect would be a decline in the level of defence against systemic risk.

The results of the recent "Second Quantitative Impact Study" carried out by the Basel Committee seem to suggest that the net effect of the January Proposals would be an increase in the required capital holdings for almost all banks.[9] It is on the basis of this that the Committee is now working on modifications to the proposals that would serve to adjust the capital requirements on certain exposures such that they are slightly higher on investment-grade borrowers and lower on borrowers with lower credit ratings.[10] Nevertheless, it should be borne in mind that this impact study only considers the effect that imposing the new proposals onto the current exposures of banks would have, and does not take into account the dynamic response of banks to the changed environment. Thus the threat of a lower level of protection against systemic risk due to lower capital requirements still stands.

2.3 The need for a proper debate

With both an increase and a lowering of capital requirements being at least conceivable, it is crucial that this issue is subjected to further scrutiny. It is even more important that the final update of the Accord is preceded by a deliberation of what level of capital holdings would constitute a socially desired trade-off between the level of protection against systemic risk on the one hand and the dynamism of the banking sector and its welfare implications on the other.

The current overall level of 8% may not be sufficient to provide socially desired levels of protection against systemic risk (especially in the face of increased procyclicality – see Section 3). This is particularly the case, if the distribution of risk-weights causes banks to refocus their activities on low-risk borrowers, implying an overall lowering of requirements.

During the negotiations for the 1988 Accord, the 8% finally agreed upon were largely an outcome of the fact that most banks (particularly in the US)

[9] Bank for International Settlements (2001b).
[10] Bank for International Settlements (2001c).

were holding the equivalent of this level, and it was the easiest solution politically to stop the perceived competitive lowering of standards by making the current level compulsory.[11] This does not necessarily mean, however, that this level adequately meets popular preferences for the level of risk-insurance. In deciding on this adequate level, one needs to be clear over the trade-off at hand. A rough-and-ready guess would assume that the level of insurance against systemic risk increases with the percentage of capital required. Hence, requiring 15% instead of 8%, for instance, would mean that a greater amount of capital is held by banks, and can thus be used in the case of a bank collapse that is threatening to have broader systemic consequences. Since the amount is greater, it is likely that even certain crises that (for reasons of their severity) could not be prevented with the 8% capital required now, may still be prevented. On the other hand, of course, there are likely to be real costs to higher capital requirements. Firstly, the transition to a higher level of capital from the current 8% could quite conceivably lead to a severe credit-crunch, with potentially recessionary implications as banks are building up their capital reserves. While this effect is almost certainly temporary - with a new equilibrium reached once all banks (who are currently applying the Accord) have moved to the higher levels of capital - these transition-costs are a very real part of the political calculation. Secondly, even once the transition has been completed, the equilibrium will look slightly different from the current state of the world: Not only is the higher level of capital required likely to make banking less profitable, but more importantly, the comparatively greater cost of credit is also likely to lead to lower overall levels of investment and hence economic growth. These negative effects could to some extent be mitigated by a rise in equity financing, but will nevertheless be real. (This list of potential positive and negative effects is by no means meant to be exhaustive, and its main purpose is to draw attention to the need for more studies in this area.)

Ideally, a political trade-off between these costs and benefits would need to be made (and the result of this deliberation may just as well turn out to be much lower capital requirements), and should be informed by much more detailed study of the likely effects of such moves.

[11] On the history of the 1988 Accord, see Kapstein (1991).

3. Procyclicality and banking crises

It is by now widely agreed that the new Accord will have more procyclical effects than its predecessor, meaning that its application could increase the amplitude of the business cycle and cause excessive volatility in the availability of capital, which in turn may lead to the occurrence of both currency and banking crises. Concerns over this issue are particularly appropriate, since there are at least three elements of the Accord that could amplify its procyclicality.

3.1 Increased risk-sensitivity

Firstly, it is generally recognised that the increased risk-sensitivity introduced in the latest proposals – both through the finer distinctions of risk-weights in the standardised approach and through the IRB-approach – will lead banks to act more procyclically. During a downturn, as the probability of default by individual borrowers increases, banks will be required to increase their capital holdings, thus increasing the cost of capital and contributing further to the downturn. The Basel Committee's plea to make Banks assess their borrowers by how well they have withstood "normal business stresses" and assign grades on probability of default using 1-year horizons is unlikely to have a large effect in this context. The Basel Committee argues further that the impact of the factors increasing procyclicality will be mitigated by the changed ex-ante risk-appetites of lenders. Unfortunately, this expected positive effect of the new Accord would not be distributed evenly among the countries having to apply the Accord.[12]

3.2 The use of external credit rating agencies

Procyclicality has also been the main criticism directed at the newly introduced usage of external rating agencies to assign risk-weights to borrowers. Past experiences cast some doubt over the ability of these agencies to adequately identify the probability of default in a number of cases.[13] While those with a penchant for historical perspective may point towards the fact that a majority of the countries that defaulted during the Great Depression between 1929 and 1935 had still been assigned investment-grade ratings by Moody's in 1929, even the Asian crisis in 1997/1998 was characterised by the fact that many of the countries

[12] This argument is made in Griffith-Jones and Spratt (2001), p. 12.

[13] This section heavily draws on Cornford (2000), Section VI. A.

involved were subject to very swift downgrading. Cornford points out that "Thailand, for example, was downgraded four notches by both Moody's and Standard and Poor's between July 1997 and early 1998; Indonesia five notches by Moody's and six by Standard & Poor's between June 1997 and early 1998; and the Republic of Korea 6 notches by Moody's and no less than 10 by Standard & Poor's during the same period."[14] It was instances like this that led to worries that the ratings by these agencies simply parallel (or even follow) changes in market sentiment, and thus exacerbate fluctuations of conditions in credit markets and facilitate financial crises. Indeed, studies examining the yield-spreads before and after an announcement by a rating agency are divided over whether the announcement had an independent impact. Thus it is at least conceivable that an accentuation of fluctuations in the availability and cost of financing from credit markets is the result. This is more so the case for ratings of sovereign lenders, since external ratings agencies may have private information with regard to corporate borrowers. Given the more risk-sensitive weightings, the effect such sudden swings could have on the cost of credit for many developing countries particularly at the time of crisis are potentially very dangerous.

This problem becomes even more acute, if the results of research carried out by an economist at the Institute for International Economics prove to be accurate. Liliana Rojas-Suarez argued that the current indicators used to predict crises in emerging markets are failing completely in providing useful signals, because they do not take into account the specificities of these countries. While these very same indicators may have their use in the analysis of developed economies, it needs to be taken into account that the dynamics of crises develop differently in emerging markets. In addition to the frequently bemoaned severe deficiencies in the accounting and regulatory framework, developing countries differ crucially from developed ones in that they lack liquid markets for bank shares, subordinated debt and other bank liabilities needed to validate the "real" worth of a bank as opposed to its accounting value. Hence classic indicators may not work in the same way. [15]

These substantive problems of procyclicality deriving from the use of External Rating Agencies are supplemented by some practical issues, which may arise in the implementation of the proposals. For instance, it

[14] Cornford (2000), p. 18.

[15] Rojas-Suarez (2001).

has been found that External Ratings Agencies frequently disagree in their ratings of some countries or private borrowers. Andrew Cornford quotes a survey of the sovereign ratings of Moody's and Standard & Poor's, which shows that as of June 1995 they agreed for investment-grade ratings in just over half of the cases, while for ratings below investment grade in they agreed in less than one third of the cases. Since these disagreements are heavily skewed towards the developing/transition country end of the spectrum, Cornford argues, this would make the impact on these economies of the adoption of risk-weights based on agencies' ratings particularly difficult to forecast.[16]

The Basel Committee is trying to address this difficulty of procyclicality and the problem arising from the fact that Ratings by Agencies like Moody's and Standard & Poor's would not be available for all borrowers (a problem that appears particularly acute outside the United States) by allowing these ratings to be supplemented by ratings of several national export credit assessment institutions, which increases the likelihood of ratings being available for sovereign borrowers. Unfortunately, this proposal is not free from problems, either. Indeed, the same criticism of procyclicality has been levelled at these institutions. This is particularly the case since the methodology of these two types of assessment agencies seems to be converging towards "best commercial practice".[17]

Hence, there are a number of difficulties with the use of External Ratings Agencies, chief among which is the strong indication that they would exacerbate fluctuations in the cost of external financing for developing countries, and enhance the procyclical effect of the new Accord.

3.3 Banks' internal risk-management techniques and herding

Finally, there is a third factor potentially contributing to this trend: This is the possibly inherent procyclicality of banks' internal risk management behaviour, which is given a prominent role in the internal-ratings-based approach. In a recent paper, Avinash Persaud showed how procyclicality can arise from the combination of the use of DEAR (daily earnings at risk) limits among banks and herding behaviour.[18] He argued that herding behaviour can be seen to occur when banks or investors like to buy what others are buying, sell what other are selling, and own what others are

[16] Cornford (2000), p. 18.

[17] See Griffith-Jones & Spratt (2001).

[18] This section heavily draws upon Persaud (2000).

owning. There are a number of incentives for such behaviour (most of which originate in the circumstances of imperfect information, and in the remuneration schemes for investors and bankers), and Persaud holds that a lot of evidence points in the direction that herding occurs quite frequently in the markets. For instance, of the 78 crashes that occurred after the EMS crisis (He defines a crash as a 10% fall in the real exchange rate over three months), 70% of them occurred within three years and the contagion observed does not follow the trading-links between these countries. When considered in a herding environment, the widespread use of DEAR-limits by banks could contribute severely to financial volatility and crises. The reason for this is that once an external event triggers an increase in volatility among certain stock-values, the DEAR-limits of some investors holding this stock will be hit. The resulting selling- (and corresponding buying-) decisions will then in turn increase volatility in other stocks and cause the DEAR-limits of other banks to be hit, etc. What is crucial to recognise is that it is not the DEAR-limit method in itself that is problematic, but merely the fact that so many banks use it. Recent econometric research has also confirmed, that a market in which the use of Value-at-risk methodologies is widespread shows greater volatility than a market, in which these techniques are not used.[19] While these considerations probably apply most strongly to the treatment of market risk, they do raise more general questions about the direction of the Accord.

Of course, it is true that no system of capital requirements will be free from procyclical effects. Nevertheless, this argument should not be used to justify any level of procyclicality, and indeed the effects should be minimised as far as possible. Perhaps a function for capital requirements with a somewhat lower gradient would serve to decrease the degree of procyclicality.

An additional measure that could be taken to prevent exaggerated procyclical behaviour is to introduce a conceptual distinction between “expected losses” and “risk”. While expected losses should properly be seen as a cost and should be covered by reserves, they should be distinguished from risk (unexpected losses), which need to be covered by capital. At present, capital is simply a large blanket covering both risks and expected losses. Fine-tuning of risk-weights and a requirement for anti-

[19] Daníelsson et al. (2001)

cyclical provisioning would be even more effective – if more ambitious – methods.

Finally, in view of the numerous concerns about the procyclicality and the resulting potential vulnerability to crises highlighted both in connection with the use of External Credit Agencies and with the internal risk-management systems of banks, it would seem adequate that more research on risk-assessment and -management is carried out before measures as potentially momentous as those implied by the proposed Accord are taken.

4. Basel II and developing countries

The relatively high capital requirements for low-rated borrowers do not only affect SMEs. They could also have very serious adverse consequences for developing countries, with corresponding effects on their welfare and development.

The issue of the impact of the Basel Accord on developing countries is not new, and has already been discussed at the time of the introduction of the 1988 Accord. The most pertinent issue then was undoubtedly the introduction of a somewhat arbitrary distinction between OECD member states and non-OECD countries in assigning risk-weights for loans to sovereign borrowers. Hence, loans to governments of OECD member states were assigned a 0% risk-weight, and thus did not need to be insured by any capital holdings, all other sovereign loans with a maturity of longer than 1 year were assigned a 100% weight. This system was seen as creating unjustified incentives for lending to OECD countries and hence as essentially serving to finance the budget-deficits of OECD countries. It also meant that some developing countries focussed on hastily joining the OECD in order to attain access to cheap loans, and – like Mexico and South Korea – experienced harsh financial crises soon after.

More criticism was drawn by the exception to this rule, which stated that loans to non-OECD sovereigns and banks would be subject to a risk-weight of only 20% (as opposed to 100%), as long as the maturity does not exceed 1 year. Recent research has shown that this rule created strong preferences among banks to give short-term loans to developing country borrowers (sovereign or bank). The ensuing build-up of short-term exposures in many developing countries may have contributed substantially to the Asian financial crisis and could have unnecessarily enhanced the volatility of capital and the frequency of crises.[20]

[20] An argument like this is made by Rodrik and Velasco (1999)

Both of these shortcomings have been addressed in some way in the proposed new Accord: The distinction between members and non-members of the OECD is abolished in favour of a more fine-toothed system for sovereign loans. The new Accord assigns risk-weights of 0%, 20%, 50%, 100% or 150% depending on the credit rating of the sovereign (Though unrated sovereigns are assigned only a 100% rating). While continuing uncertainty over the precise application of the new Accord makes predictions about possible winners and losers difficult, Andrew Cornford shows that these proposed changes could have important consequences for a number of countries.[21] If, for instance, recent ratings by Standard and Poor's are applied, the risk-weights of certain Asian countries (like Singapore and Taiwan POC) would fall from currently 100% to 0%. Some other middle-income developing countries would also receive lower risk-weights (e.g. Chile, China, and Thailand). In contrast, some OECD member states would lose their current 0% weights, and a number of developing countries may have their weightings increased from 100% to 150% (though perhaps they could try to avoid a rating so as to maintain their current risk weighting).

The bias in favour of short-term lending to developing countries has also been addressed to some extent, in that the threshold maturity for preferential treatment has been lowered to three months. The jump between risk-weights has also become smaller, though Deutsche Bank still estimates that the current jump from 20% for double-A ratings to 50% for single-A rating significantly overstates the differences in probability of default, hence creating incentives for short-term lending.[22]

Both the abolition of the arbitrary distinction of countries according to their OECD membership as well as the lowering of the threshold maturity for preferential treatment should be welcomed. Nevertheless, despite serving to reduce some of the negative impact of the 1988 version, the proposed new Accord does create perhaps even more significant new problems.

4.1 Higher capital-requirements for their category of borrowers

The biggest problem is posed by the fact that a large number of both sovereign and bank borrowers from developing countries are likely to be assigned higher risk-weights under the new Accord. As was already referred to in the section on overall capital requirements, the minimum

[21] The following numbers are from Cornford (2000), p. 14

[22] See Griffith-Jones and Spratt (2001), p. 5.

capital requirements under the IRB approach (at least in the current version of the proposal) are very much higher than requirements under the current Accord for ratings lower than B. Since most developing countries are to be found in this category, the impact could be large. Hence, while the IRB approach would only assign a 40% risk weight to countries with a triple-B rating (such as China, Korea and Egypt), countries with a double-B rating would fare a lot worse: countries like Brazil, Colombia and India would be assigned a 379% risk weight under the IRB approach. Countries like Argentina, Jamaica and Pakistan with a single B-rating are assigned a 630% risk-weight, and are thus effectively cut off from international bank-finance.[23] Even under the standardised approach, the risk-weights for countries with ratings lower than B- increase from 100% under the 1988 Approach to 150%, meaning that the cost of loans for these countries will unambiguously increase. The consequences of regulations like this for welfare in developing countries could potentially be disastrous.

How one evaluates the degree of the impact depends largely on the scenario one finds most likely: It seems at least plausible that the steep increase in capital-requirements for loans to developing countries under the IRB-approach will effectively lead sophisticated banks to exit lending to this category of borrowers and to concentrate on those categories, for whom their IRB approach yields the greatest advantages. Others hold, however, that the less sophisticated banks will step in and start lending more to developing countries, since the standardised approach gives them a competitive advantage in this area. While this might ease the plight of capital-deprived developing countries, some questions can be raised about the prudence of encouraging less sophisticated banks to handle high-risk loans. Finally, developing countries may, of course, be able to avoid any negative change in position by avoiding a rating, and by therefore be entitled to a 100% rating, but the widespread use of this technique would probably not be the objective of the new Accord, which relies so heavily on external ratings. It should also be mentioned that – were developing countries able to avoid a lower rating– a consequence of this would be that overall capital holdings in the banking system have decreased (after lowerings in the higher ratings), and that the level of insurance against systemic risk has decreased.

This issue is also one of great pertinence for the European Union, since the higher capital requirements may also apply to bank-loans to some of the

[23] These numbers are from Reisen (2001) and used in Griffith-Jones & Spratt (2001).

accession-countries. The Commission should bear this in mind when drafting its implementation of the new Capital Accord.

4.2 Loss of competitive advantage in financial services

It should also be mentioned that the restructuring of the banking industry that can be expected to result from the Accord would have adverse consequences for the financial services sector in developing countries. Since a number of large sophisticated banks who are in a position to take benefit from the lower risk-weights of the IRB approach are likely to dominate the industry, they will also be able to offer cheaper services than less sophisticated banks in developing countries. Hence, their gaining market access to developing countries could freeze the current comparative advantage of financial services industries of developed countries. Indeed, unless banks from developing countries are able to compete using special expertise of their markets, it is likely that for them situations like that of the Czech Republic or Hungary, where 90% of banks are foreign-owned, might become the norm. [24]

These potential distributional consequences of the revised Accord undoubtedly raise the gravest concerns, and must be addressed before a new Accord is implemented. The main concerns of many developing countries, namely being cut off from bank lending and being exposed to increased volatility, could be addressed to some extent through a change in the function of capital adequacy requirements so as to lower the gradient, since such a function would both reduce the capital requirements on loans to developing countries (compared to the proposed IRB and standardised approaches) and decrease the degree of procyclicality of the Accord.

4.3 Implementation costs

Unfortunately, there are a number of other adverse implications of the Basel II Accord for developing countries. All of these derive from the fact that while the Accord was originally conceived to apply to internationally active banks in the Member States of the BIS, today more than 120 countries (most of them developing) apply its provisions more or less rigorously. The spread of the Basel Accord was brought about partly by efforts of the EU to make capital standards binding for banks in the European Union, which led to the application of principles similar to those of the BCBS in all its Member States, and partly through active

[24] See Griffith-Jones and Spratt (2001), p. 15.

proselytising by the BCBS. The most important factor, however, was the internationalisation of banking, which meant that granting market access to foreign banks increasingly came to depend on their being subject to adequate domestic supervision (as in the American "Foreign Bank Supervision Enhancement Act" of 1991).[25] Hence, developing countries were obliged to make their banks subject to the Basel requirements. Indeed, in its latest communications, the BCBS has explicitly changed the terminology from encouraging "all internationally active banks" to accept the Accord, to encouraging "all significant banks", meaning that almost global coverage is aimed for.[26]

It is clear is that the costs of establishing adequate supervisory structures will be a considerable burden for developing countries. This is all the more relevant, given that the complexity of the new Accord and the IRB-approach in particular has led some commentators to hold that even countries with highly developed banking sectors – like Germany – may not yet have the supervisory expertise to back it up. Of course, it can be argued that the skills required for supervisors in each country only need to match the sophistication of its respective financial sector (or just exceed it), and hence will not be too burdensome for developing countries, but a closer look at the reality of banking supervision will prove the contrary. While it is true that foreign subsidiaries of sophisticated banks in developing countries ought strictly to be under the supervision of their head office in the (developed) home country, the supervision they are subject to in practise is severely lacking. Few people will argue that an annual visit by an accountant from head office for a week constitutes adequate supervision, and hence developing countries' supervisors will need to understand even more complex banking systems. It is very unlikely that developing countries will be in a position to develop or recruit this necessary expertise. The obvious alternative – namely limiting the kind of activities that subsidiaries of foreign banks are licensed to carry out in developing countries – is not very realistic, since foreign banks often gain access to developing country markets in times of financial crises, where foreign capital is badly needed.[27] Hence, there is little doubt that developing countries ought to be given technical assistance for the implementation of pillars II and III of the planned Accord.

[25] See Cornford (2000), Section III.

[26] Bank for International Settlements, (2000), p. 2.

[27] See Cornford (2000), p. 21 and Footnote 82.

4.4 Representativeness of the BCBS

Finally, the fact that standards with such serious implications for developing countries are written by a relatively unaccountable body composed of representatives of the 12 developed Member-States of the BCBS raises serious representation issues. The current set-up of a small committee of reasonably like-minded standard-setters has yielded a number of benefits, such as greater efficiency and decision-making by consensus, which in turn has helped the implementation of the standards. At the same time, a brief look at the distributional consequences of the results achieved today makes clear that this system may have exhausted its viability. Indeed, bringing more developing countries into the standard-setting body may enhance its credibility in the future. As Cornford points out, the BCBS has already taken steps in this direction. The "Core Principles for Effective Banking Supervision", for instance, were prepared in a group of extended membership, which included Chile, China, the Czech Republic, Hong Kong (China), Mexico, Russia and Thailand, as well as another 9 associated countries: This could be a model. Another idea would be to provide for the participation of developing and transition economies in the committee on a rotating basis.[28]

5. Implications for the structure of the banking industry

One of the main reasons for concluding the 1988 Basel Capital Accord was the fear of a decline in capital reserves by banks (and the resulting greater exposure to systemic risk), which was spurred by the competitive pressure originating from those banks who took advantage of the loose regulatory framework they were operating in by holding ever-lower levels of capital, so as to be able to offer loans at more competitive rates. The original Basel Accord tried to stop this competitive dynamic by setting a common minimum level of capital requirements applying to all internationally active banks of BIS Member-States.

Similarly, one of the reasons for updating the 1988 Accord was the perception that innovations in financial instruments since the late 1980´s had created a situation in which highly sophisticated banks were in a better situation to arbitrage by using various techniques to increase higher-risk, higher-yielding assets in relation to a given level of capital, giving them a competitive advantage.

[28] On this issue, see Cornford (2000), p. 19.

Hence the update attempted to close the loopholes that had been created, and – by taking the individual circumstances of each bank into account more – to re-establish a level-playing field. As the proposed new Accord makes greater allowance for risk-mitigation techniques and narrows the distances between the risk-pockets, which previously created room for arbitrage, it certainly goes some way towards addressing the perverse incentives presented by the old Accord. However, there is a risk that the introduction of the IRB-approach for some sophisticated banks will actually give them such a large competitive advantage vis-à-vis the less sophisticated smaller banks (at least in certain market-segments) that it will result in a considerable restructuring in the industry. The reason for this is that the risk weights for investment-grade borrowers (those above a rating of BBB-) are somewhat lower under the IRB approach than under the standardised approach of the new Accord, meaning that banks using the IRB-approach are likely to be able to serve those borrowers at more competitive conditions. The opposite is true for borrowers below the rating of BB, where the standardised approach implies lower capital requirements, meaning that less sophisticated banks may have a competitive advantage in lending to risky borrowers. This is all the more worrying, since the IRB-approach is likely to be available only to a select few large banks of high sophistication even in the medium run. It is expected that of the 9000 banks in the US, only 20 will be in a position to adopt the IRB approach.[29] The consolidation this may trigger in the banking sector could raise questions for competition-policy.

6. Conclusions

A close look at the proposed new Accord draws attention to the considerable degree of uncertainty with regard to its implications (for instance on the level of overall capital requirements) and on some issues raises the spectre of some potentially adverse consequences. In the worst case, the adoption of the Accord as currently proposed could lead to substantial restructuring in the banking industry, which could have the undesirable outcome of allowing some sophisticated banks using the IRB approach to dominate the market, leading to potentially oligopolistic behaviour. In addition to this, the numerous procyclical elements built in to the Accord could make the entire financial system more volatile, leading to more crises. It is against this background of greater volatility, that the uncertainty regarding the implications of the new Accord for overall

[29] Lawrence H. Meyer, quoted in Griffith-Jones & Spratt (2001).

capital holdings -–and hence protection against systemic risk – is even more worrying. Finally, the new Accord may lead some developing countries to be cut off from bank-lending altogether, with considerable adverse consequences for welfare.

Even if this worst-case scenario seems overstated, it is to be hoped that the issues outlined briefly in this paper can be addressed during the prolonged consultation-period, so that a successful update of the 1988 Accord can be implemented in 2005.

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