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WILL THE PROPOSED NEW BASEL CAPITAL ACCORD HAVE A NET NEGATIVE EFFECT ON DEVELOPING COUNTRIES?

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Will the proposed new Basel Capital Accord have a net negative effect on developing countries? [*]

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In recent years criticisms from many quarters have been levelled at the functioning of the existing, 1988, Accord, with critics arguing that the regulatory requirements are crude and do not correspond to actual levels of risk. From the perspective of the international banks, current regulations have created a disincentive to the holding of prime-quality loans. The Bank of England Quarterly Bulletin of Spring 2001 points out that for loans to all borrowers down to BBB the minimum requirements of 8% are higher than the equity capital that a bank would choose to hold. Criticisms of the 1988 Accord have also come from the perspective of developing countries. In particular, the Accord's preferential treatment of short-term bank lending and membership of the OECD has created incentives towards short-term lending to non-OECD countries and provided a distorting bias towards seeking OECD membership.

Although the criticisms of the 1988 Accord have come from more than one source, it seems that it is the pressure applied by the internationally active banks that have led to the proposals in the New Accord. Hence, the focus of the proposals aim to increase the risk-sensitivity of capital requirements and thereby more closely align these requirements with actual risks. To this end, a major proposal is to move towards ever-greater use of banks' own internal risk management systems. Although the new proposals are aimed towards the needs of major banks from the G-10, it is likely that the New Accord, when implemented, will have significant, and, we argue, broadly negative, repercussions for the developing world; this paper aims to highlight some of these potential impacts.

The structure of the paper is as follows: first, a brief background will be given; second, the major proposals contained in the standardised approach will be outlined and the most significant potential effects discussed; third, the proposed internal ratings based approach will be examined and its implications discussed in some detail. The final section of the paper will conclude with an assessment of the likely net effect of the new Accord and some policy proposals.

1. Background

The proposed New Basle Capital Accord is to be built on three mutually reinforcing pillars:

1. Minimum capital requirements
2. Supervisory review process
3. Effective use of market discipline

Minimum capital requirements.

The new framework retains both the existing definition of capital and the minimum requirement of 8% of capital to risk-weighted assets. The major changes proposed are in the measurement of risk itself. Under the new proposals, the measurement of credit risk is more complex, with a spectrum of increasing sophistication available. The New Accord leaves the measurement of market risk unchanged and proposes a new framework for the measurement of operational risk.
The changes proposed to the measurement of credit risk have, arguably, the most far-reaching implications for both developed and developing countries alike. Consequently, it is this aspect of the New Accord that we have focused on.

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[*] For a more detailed and longer version of this paper please see IDS finance website @ http://www.ids.ac.uk/ids/global/finance/intfin.html

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The proposals in the New Accord envisage three possible approaches to the measurement of credit risk:

1. The Standardised Approach (this represents a modified version of the existing approach)
2. The Foundation Internal Ratings Based Approach.
3. The Advanced Internal Ratings Based Approach.

2. The Standardised approach

Table 1 below gives a contrast between the capital requirements under the 1988 Accord and those contained in the new proposals under the Standardised approach for sovereigns, banks and corporates.

The Standardised Approach and the Existing Accord

Table 1.

Type of Borrower		**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to BB-**	**B+ to B-**	**Below B-**	**Unrated**
Sovereign 1988 Accord	OECD	0%	0%	0%	0%	0%	0%	0%
	Non-OECD	100%	100%	100%	100%	100%	100%	100%
New Proposals		0%	20%	50%	100%	100%	150%	100%
Banks 1988 Accord	OECD	20%	20%	20%	20%	20%	20%	20%
	Non-OECD	100%	100%	100%	100%	100%	100%	100%
	Short-term†	*(20%)*	*(20%)*	*(20%)*	*(20%)*	*(20%)*	*(20%)*	*(20%)*
New Proposals	Option 1*	20%	50%	100%	100%	100%	150%	100%
	Option 2**	20%	50%	50%	100%	100%	150%	50%
	Short-term††	*(20%)*	*(20%)*	*(20%)*	*(50%)*	*(50%)*	*(150%)*	*(20%)*
Corporate 1988 Accord		100%	100%	100%	100%	100%	100%	100%
New Proposals		20%	50%	100%	100%	150%	150%	100%

† Under the existing Accord, loans to non-OECD banks carry a 20% risk weight for maturities of less than one year, and 100% for loans of greater maturity.

†† Under the new proposals short-term claims are defined as having an original maturity of three months or less.

* Under the first option, all banks in a given country will assigned a weight one category less favourable than the sovereign's. A cap of 100% will be imposed except for banks in countries rated less than B- (in this instance a cap of 150% will operate)

** Under the second option, the risk weights assigned to banks will be based on the assessment of external credit assessment institutions (see below) of the bank in question.

As well as the greater differentiation between 'risk buckets', the new Accord differs from the 1988 Accord in its treatment of short-term claims. Under the existing system all claims on banks incorporated in the OECD are assigned a 20% risk-weight. For banks in countries outside the OECD, the risk-weight is also 20% for claims of less than one year, but 100% for claims of greater duration. For many observers, this long/short-term distinction for non-OECD borrowers provided an incentive for banks to make short-term loans - this is supported by some evidence that the maturity of loans increases for new OECD entrants.[1] Clearly short-term external debt was a major factor in the East Asian and other crises, indeed, recent research[2] has established econometrically that short-term debt to foreign exchange reserves was the single most important factor explaining currency crises.

Implications

The removal of the OECD/non-OECD distinction is likely to have negative consequences for low rated OECD countries who will find that the conditions attached to loans more closely reflect their actual rating, rather than the fact of their OECD membership. Conversely, highly rated non-OECD countries (such as Chile) should benefit from more favourable terms. Overall, the elimination of the OECD/non-OECD distinction is a positive development, as it is widely accepted that it had become too blunt a mechanism and had led to distorted incentives.

The alterations to the current treatment of maturity should remove some, but not all, of the incentives towards short-term lending to banks rated below AA-, and thereby raise the aggregate maturity of such lending. Also, the

[1] See Reisen (2000)

[2] Rodrik and Velasco (1999)

removal of the sovereign floor will benefit highly rated banks and corporates in less highly rated countries. Overall, therefore, the proposals should, as envisaged, more closely align capital requirements with actual risk. This should be to the benefit of highly rated sovereigns, banks and corporates regardless of OECD membership.

Despite some problematic areas it would seem that many of the criticisms made by developing countries of the existing Accord have been addressed in the standardised approach. The removal of the OECD distinction should be widely welcomed, as should the reduction of the incentives towards short-term lending.

3. The Internal Ratings Based Approach

Whilst many of the changes proposed under the standardised approach are to be welcomed, it is the potentially negative impact of widespread adoption of internal ratings based (IRB) approaches that is most troubling. This is all the more so because it is likely that banks operating under the IRB approach will come to dominate the industry. Also, although the majority of banks are expected to use the standardised approach, the major internationally active banks, that provide the bulk of lending to developing and transition economies - and are actively purchasing banks in those countries - are more likely to be in a position to adopt the IRB approach. In fact, following recent consultations, the Basel Committee has concluded that a greater number of major banks than they had initially thought will be in a position to adopt IRB when the Accord is implemented.

These proposals are likely to have both domestic and international implications for developing and transition countries, as well as broader systemic implications.

Domestic Implications

Developing country banks are likely to face increased competitive pressure from internationally active banks who have adopted the IRB approach and have further enhanced their existing competitive advantages through the use of more finely-tuned, and therefore lower, capital requirements. Both Deutsche Bank and Moody's [3] have argued that this is likely to lead to smaller banks being at a disadvantage, with further industry-wide consolidation being the ultimate result. In developing and transition countries, this may imply an acceleration of trends towards foreign banks controlling domestic banking industries.

International Implications

Developing and transition country's sovereigns, corporates and banks wishing to borrow in international markets will find the lending environment greatly altered, as the major banks' lending patterns are significantly changed by the adoption of IRB approaches. <u>The outcome of these changes is likely to be a significant reduction of bank lending to the developing world, and/or a sharp increase in the cost of international borrowing for much of the developing world</u>. This is because the incentive, under the existing Accord, to the holding of lower quality loans will be eliminated in the IRB approach. Therefore, it seems very probable that adoption of the IRB approach will produce an increase in the quantity of loans to borrowers rated above BBB, and a fall in loans to borrowers rated below BBB. Given that the majority of such low rated borrowers are in the developing world, one effect of the New Accord will be a reduction in overall levels of lending to developing countries from internationally active banks.

Recent research, which uses a methodology developed by Deutsche Bank has been employed by Helmut Reisen to estimate the likely impact.[4] We can see from Table 2 that adoption of the IRB approach as currently proposed could result in speculative grade borrowers (BBB- or lower) being effectively excluded from international bank lending - the median sovereign rating for non-OECD countries in 2001 was BB, with 31 of the 53 rated non-OECD countries being rated below BBB-. Table 2 gives some estimates of the likely impact of the New Accord on sovereigns. The estimates show that the proposed changes would be neutral or broadly positive for sovereigns rated triple-B or higher. However, for sovereigns rated below that, the situation is very problematic. For

[3] Deutsche Bank Global Research (2001), Moody's Investors Research (2001)
[4] Reisen (2001)

example, for sovereigns such as Brazil and India, rated double-B, under the current Accord, each $100 lent requires $8 capital requirement. Under the new standardised approach this would be unchanged, however, under the IRB approach it can be seen that the capital required for the same $100 would rise to $30.3 and spreads would have to increase by more than a thousand bp. This would mean adding around 10% to the annual cost of borrowing for countries rated double-B. Even more dramatically, for countries such as Argentina and Pakistan, rated at single-B, spreads would have to increase by 3709 bp.(that is, the cost of borrowing would grow by 37% annually) under the IRB approach to produce an equivalent level of risk adjusted return as under the existing Accord.

Sovereign Borrowers

Table 2.

	Risk Weight	**Capital required per $100**	**Breakeven Spread Change bp.***	**Examples of Countries in Category**
Double-A (OECD)				
Current	0	0	-	Belgium Bermuda
Standardised	0	0	-	Canada Italy
IRB approach	7	0.6	+3	Italy Portugal
Triple-B (non-OECD)				
Current	100	8.0	-	China Malaysia
Standardised	50	4.0	-50	Korea Tunisia
IRB approach	40	3.2	-60	Egypt Latvia
Double-B (non-OECD)				
Current	100	8.0	-	Brazil Costa Rica
Standardised	100	8.0	-	Colombia Morocco
IRB approach	379	30.3	+1115	India Kazakhstan
Single-B (non-OECD)				
Current	100	8.0	-	Argentina Mongolia
Standardised	100	8.0	-	Jamaica Paraguay
IRB approach	630	50.4	+3709	Pakistan Venezuela

Source: Reisen (2001) and Standard and Poor's Sovereign ratings June 6, 2001.

* Indicates the spread movement required to produce the risk-adjusted return achieved under the current Accord.

In reality it is likely that the actual impact upon spreads will be lower than that predicted above. The main reason is that non-bank investors form a significant part of the investor base and they are indifferent to risk-weights. However, even if these predictions overestimate the likely impact, they still point towards a significant deterioration in the terms under which sovereigns rated below triple-B are able to access international bank lending. The consequence is therefore likely to be a sharp reduction in bank lending to the developing world.

As pointed out by Helmut Reisen, this outcome is produced by the fact that the Basle Committee proposes a strongly exponential, rather than a linear, rise of risk weightings along the spectrum of probability of default. Thus, once ratings fall below BBB the capital requirements increase sharply, implying that for the lowest rated borrowers the cost of loans from banks operating an IRB approach is likely to be prohibitively high.

Systemic implications

The greater use of banks' internal risk management systems is recognised as inherently pro-cyclical and is therefore likely to amplify the economic cycle, thus increasing both the frequency and scale of crises. As developing countries suffer disproportionately from financial crises - given the relatively small size of their economies *vis-à-vis* international capital flows, and the thinness of their markets - this is a cause for great concern.

It is accepted that the existing Accord contains pro-cyclical elements, and the fear is that greater risk sensitivity will increase this tendency. The drive for risk-weights to more accurately reflect probability of default (PD) is inherently pro-cyclical in that, during an upturn, average PD will fall - and thus incentives to lend will increase. Conversely, during a downturn, average PD will increase (due to more difficult economic circumstances) and, in consequence, a credit crunch may develop with all but the most highly rated borrowers having difficulty attracting funds.

The Basel Committee has recognised this concern, but argues that the benefits outweigh the costs. However, the trade-offs in terms of costs and benefits are viewed in terms of their impact on the major banks. The developing world will most probably feel the costs disproportionately (reduced lending coupled with increased scale of crises) while simultaneously attracting few, if any, of the benefits. Also, it may be that the Committee is more broadly underestimating the likely impact upon the business cycle and thus the financial system's propensity for crises; these systemic considerations have significant implications for the developed and developing worlds alike.

Early theorists, such as Irving Fisher, emphasised crises as integral parts of the business cycle, often operating as a 'trigger' whereby an upswing becomes a downturn[5]. More recently researchers have also seen the business cycle as connected with financial crises and argued for reforms to introduce counter-cyclical elements into the regulatory framework.[6] It is argued that the pro-cyclical aspects of regulation contribute towards fuelling the 'boom' that often precedes a crisis and, consequently, the introduction of counter-cyclical components would work to better manage the boom and so help to avoid costly financial and currency crises. A number of possible counter-cyclical measures have recently begun to be proposed to address these concerns. Of the options available the one that has attracted the most support, and even some degree of consensus,[7] is for regulators to encourage - or better, require - higher general provisions to be made for possible loan losses to cover normal cyclical risks.

4. Concluding remarks and Recommendations

In this paper we have pointed out some possible consequences for developing and transition countries of implementation of the New Accord. This final section will conclude and make some specific suggestions that might help reduce the likely negative effects.

Whilst the proposals contained in the standardised approach are *broadly* to be welcomed, in that they address many (though not all) of the concerns expressed in developing countries about the existing Accord, the introduction of IRB approaches has very problematic implications. It is likely that the widespread adoption of IRB approaches by the major international banks will ensure that the impact of the standardised approach cannot be assessed independently. If, as it seems highly likely, the negative impacts of the IRB approaches outweigh the positive impacts of the standardised approach, from a developing country perspective, then the new Accord will merely serve to give with one hand only to take (more) with the other. The systemic implications of greater risk sensitivity in lending patterns are likely to impact upon developed and developing countries alike - although more so on the latter given the smaller size of their economies *vis-à-vis* international capital flows.

As an alternative, the improvements contained within the standardised approach could be developed to further reduce, if not eliminate, incentives towards short-term lending, and the number of risk buckets expanded to reduce regulatory biases towards lending to certain categories of borrower. In addition, counter-cyclical mechanisms could be introduced into the regulatory framework with the intention of a) smoothing capital flows, and b) smoothing the impact of volatile flows on the domestic financial system and therefore the real economy. One aspect of the standardised approach that has attracted much attention is the proposal to use external credit rating institutions to assign ratings. Objections have been raised to the use of private agencies because of the potentially pro-cyclical implications. However, the principle of objective, external credit ratings is surely a sensible one. Given that international financial stability can be viewed as a public good, there is a strong argument for having a public element involved in credit rating. Of the major international financial institutions, the BIS has the best track record in terms of spotting potential crises as well as having financial stability as its' main objective, and would be well placed to fulfil this role.

Our recommendations can be summarised as follows.

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5 Fisher (1933)
6 See Ocampo (2000) and Griffith-Jones and Ocampo (2000)
7 See Turner (2000) and Arrow (2001). See also discussions of the IDS May 2001 Private Sector Discussion Group and at the Centre for Financial Innovation on Financial Architecture in London, May 31, 2001.

- Particularly from the perspective of developing countries - but also due to systemic concerns - there may be a case for postponing introduction of the IRB approach, till its impact is more thoroughly researched and discussed. If that is not possible, there is a strong case for at least slowing the pace of introduction of the new Accord (e.g. to 2008).
- One particular area of concern is the proposal to adopt an exponential rise in risk weightings along the spectrum of higher probability of default, rather than a linear rise. The impact of this proposal, as described above, would be to increase sharply the costs of borrowing for low rated sovereigns, banks and corporates to the extent that they would be effectively cut off from international bank lending. We therefore propose that, if the IRB is to be implemented, the probability of default should grow on a linear and not exponential scale, so as to mitigate this effect.
- The introduction of a counter-cyclical element to compensate for the inherent pro-cyclicality of the IRB approach needs to be carefully evaluated. The most promising approach, especially for international bank lending, would seem the introduction of higher general provisions against losses.
- We propose a further development of the standardised approach to address remaining issues of concern:
    a) reduce further or eliminate remaining incentives towards short-term lending;
    b) expand number of risk buckets so as to avoid the regulatory distortions associated with jumps between buckets;
    c) introduce public element into external ratings to avoid the pro-cyclical problems associated with private sector ratings agencies. It is proposed that the BIS is best placed to fulfil this role;
    d) introduce a counter-cyclical element into the regulatory framework. For international lending the most effective mechanism would seem to be higher general provisioning against losses.

The proposals in the new Accord - particularly those related to the IRB approach - are driven largely by the wishes of the major international banks. However, it is not clear that what is good for these banks is necessarily good for the stability of the international financial system in general nor the developing world in particular. The complexity of modern financial markets has led some (including perhaps the Basel Committee) to conclude that effective external regulation is neither feasible nor desirable. However, it could also be argued that this very complexity increases the need for external regulation, so as to ensure the public good of financial stability. If this public good is to be achieved, and not to become a more distant prospect, further research is clearly need on the implications of the proposed new Basel Capital Accord,

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