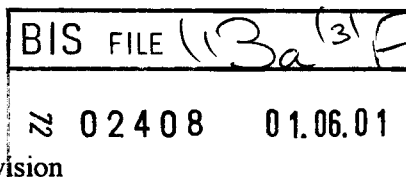


May 29, 2001

The Secretariat
Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel, Switzerland



Arthur Andersen LLP

1345 Avenue of the Americas
New York NY 10105-0032

www.arthurandersen.com

Dear Sir or Madam:

Introduction

We have studied with great interest the Basel Committee on Banking Supervision's January 16, 2001 Consultative Document on the new Basel Accord ("Basel II") for internationally active financial institutions, and are grateful for the opportunity to provide comments and suggestions.

We have framed our comments in three sections, covering:

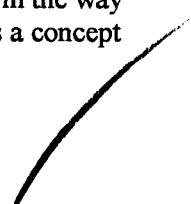
1. General comments
2. Credit risk considerations
3. Operational risk considerations

General Comments

We commend the Committee on its exhaustive revisitation of the previous Accord ("Basel I") and the introduction of numerous improvements. Basel II represents a marked improvement over the current regime as it introduces a flexible approach tailored to each institution's level of sophistication and allows incorporation to a certain degree of each financial institution's actual experience. We welcome the new optionality that it introduces, allowing financial institutions to calculate capital requirements using a menu of models. In the pages below, we make certain suggestions and comments, which we hope to be constructive, on areas in which the new Accord requires clarification or fine-tuning.

The new Accord raises several issues relating to the existence of a 'level playing field.' For example, the applicability of the Accord to "internationally active financial institutions" requires a clear and uniform definition of those financial institutions that will be subject to capital requirements. There are already discussions to the effect that some countries will apply the Accord to all their financial institutions whereas others will interpret the scope more literally; in this regard, the Committee might consider the use of appropriate size and/ or volume measures that serve as the cut-off point for mandatory adoption of the Accord, as had been done for market risk.

Separately, the new Accord now encompasses holding companies and represents an attempt to recognize that financial institutions can be vulnerable to risk through a range of activities that are best conducted at the holding group level. This represents a positive development in fostering greater alignment in the way individual regulators view financial conglomerates, especially as the "financial supermarket" is a concept that has taken hold around the world over the past decade.



Financial institutions without an Internal Ratings Based approach will, *ceteris paribus*, hold significantly higher levels of capital, as a result of the operational risk capital charge. However, no clear economic rationale is provided as to why this increased level of capital is required. In addition, interest rate risk on the balance sheet (currently under Pillar II), strategic and reputational risks are still to be covered.

Risk transfer is discussed in detail under credit risk and its importance as an area for further research is recognized under operational risk. To the extent that the banking system could transfer, or in some way, "pool" risks, this would improve financial system stability and the allocation of scarce capital in the global economy. We therefore suggest that the Committee consider its role in terms of encouraging risk transfer, "pooling" or capital alternatives. By clarifying the impacts of these strategies on capital, regulators would facilitate the banking and insurance industries developing appropriate insurance products, "risk pooling" and alternative capital arrangements.

Although we are supportive of greater risk sensitivity, Basel II defines a set of models which, at least in part, require a parallel implementation effort to financial institutions' own internal economic capital models. Every opportunity needs to be taken to remove this inefficient duplication to ensure regulation assists financial institutions to manage risk rather than creating a distraction of resources from risk management. Greater focus on the qualitative aspects of risk management as a basis for capital at the expense of some of the complexity in the quantification of risk (particularly without overall capital calibration) would contribute to the achievement of this objective.

Pillar 3 represents for many financial institutions a wholly new requirement, and we welcome the desire of the Committee to foster greater transparency in the financial marketplace. Implementation will require careful consideration to ensure alignment between what other bodies, chiefly accounting and auditing boards, require in terms of financial disclosure. Disclosure of model results, for example, will play a significant role in illustrating the depth and breadth of a financial institution's qualitative and quantitative approach to risk management. Thus, consideration should be given to the placement and nature of the disclosure, and any attendant auditing requirements that might arise.

As a result of the above considerations, we strongly recommend that the banking supervisors work closely with the international accounting and auditing standard setters in developing disclosure

Credit Risk Considerations

Undoubtedly, the major innovation in Basel II is the introduction of external or internal ratings and their associated default probabilities to determine risk weightings. The consequent eradication of the OECD bias is a significant improvement as it reduces the current penalty financial institutions bear to lend to corporates based on their conscious decision to accept risk. The credit risk approach also addresses asymmetrical information between regulators and the regulated by relying more on financial institutions' internal models where these are judged robust. Greater flexibility and a menu of approaches for risk assessment effectively create incentives for sophisticated risk management. We therefore generally agree with the concept of external ratings, but wish to raise to the Committee's attention several discrepancies and concerns that will reduce the effectiveness of the approach.

Consistency

A first area of concern relates to the consistency of the proposed capital requirements across the three possible choices. Understandably, as a financial institution progresses from one level of sophistication to the next it may generally accrue some capital benefits. These benefits, however, need careful design to ensure that progress through sophistication levels is neither too generous nor penalizing. If we look at the worst case scenario for a corporate credit, we find a risk weight of 150% in the Standard Approach, but up to a multiple of that figure in the IRB Approach (per the calculation under paragraph 173). This small example suggests an urgent need for calibration to ensure attractiveness of adopting greater levels of credit management sophistication.

Corporates

Another major discrepancy is in the area of corporate borrowing. Since many smaller corporate borrowers do not have ratings, financial institutions that are not able to adopt an internal ratings scale due to lack of sophistication will find themselves obligated to use the risk weighting applicable to unrated entities, namely 100%. This will penalize financial institutions that cater to local, unrated corporate entities. Given that internal models will typically compute default probabilities and loss given default corresponding to substantially lower risk weightings than 100%, this could provide a "windfall" capital treatment favoring those financial institutions that lay claim to their own internal model. Although it is understandable that a more sophisticated institution can reduce capital requirements through better credit understanding, there is a concern that the gap between these two categories of banks may be disproportionate.

Additionally, since unrated credits will systematically be weighted at 100% in the Standardized Approach, there arises the 'moral hazard' that some financial institutions may avoid seeking shadow credit ratings for those borrowers they feel are of less than investment grade, in order to avoid recognition of a new, higher capital requirement at the 150% risk weighting bucket.

It is also a proven possibility that some corporates benefit from lower capital risk weightings than the sovereign nation in which they are located. Although many observers have pointed out that this is a counter-intuitive and rare situation, it does find economic justification and does not, in our opinion, contradict the general principles of the approach.

Finally, if ratings are to be developed in local markets by local agencies or other bodies, it will become essential to ensure that those efforts are subject to the same quality and consistency standards that are applied by international ratings agencies in order to avoid potentially uneven treatment between countries or country arbitrage for loan booking purposes. We consequently recommend that clear guidelines be established to cater for such an eventuality.

Defining Default

Of concern to us is the potential diversity of notions of default, whereas ratings agencies have a single view of that concept when defining what a "poor" rating represents. In particular, it needs to be ascertained that the concept of non-performance in loans that remain on a financial institution's books is fully aligned with the notion of default that underpins external ratings. For example, the Proposal's wording introduces a potential mismatch in the Foundation Approach in the implied meaning of the term default between "loss given default" (the LGD of 100% for unsecured loans suggests total loss) and "probability of default" (which explicitly accommodates a wide range of possibilities consistent with LGDs less than 100%). Defining these terms more explicitly will be essential to ensure that the relative use of, and the boundary between, loan loss provisions and capital are clear and consistent.

Methodology

The method by which credit-related risk capital is aggregated raises certain issues on methodology that we explore in the following paragraphs. As we noted earlier, the Committee has adopted a considerably more sophisticated approach toward risk assessment, and recognizes in part the value of certain internal models, falling short of accepting a full model approach. Nevertheless, regardless of the level of mathematical sophistication present, the new Accord's method to measure and collate credit risks across a financial institution is itself a model, and as such will be open to the same degree of critical examination that any financial institution's model is in the community. We therefore think it is useful to identify key propositions of the model that are implicit in the Committee's thinking.

The first underlying proposition is that all credits are fully co-monotonic, *i.e.*, they all succeed or fail at the same time. As a result, there is inadequate recognition of the portfolio effects accruing to financial institutions that have put together well-balanced and diversified obligor portfolios. We recognize that granting such recognition requires the approval of a statistical model governing the concept of co-monotonicity. We further understand that the Committee is justifiably concerned about the robustness of these models in general, and specifically of one of the commonly calculated measures of co-monotonicity. Nonetheless, in the same way that the Committee has found it prudent to permit financial institutions to calculate their own risk ratings for corporate and other credits – using a model – we believe the Committee should allow financial institutions to compute some measure of co-monotonicity with the caveat that such a measure be demonstrably stable over time and coherent with the remainder of the theoretical framework adopted by the financial institution. For example, correlation coefficients, which are justified only in the case of joint normal distributions, should not be allowed for models that rely on non-normal statistical calculations.

Alternatively, the Committee could establish a set of standardized parameters for financial institutions to use to account for portfolio effects present in well-diversified portfolios, much in the same way that the Committee proposes to publish '*beta*' and '*gamma*' operational risk parameters. We urge the Committee to revisit its position on this point as current wording overlooks the benefits of one of the very fundamental concepts of banking.

The second underlying proposition in the Committee's model is that the protection afforded by conditional guarantees is only marginal. This is reflected in the proposed treatment of credit derivatives and guarantees, which in both cases leads to a significant over-estimation of credit risk. Although the proposed criteria for defining these transactions are satisfactory, the capital treatment should be revisited. In the case of bank guarantees, the Committee finds no comfort in any model dealing with the truism that loss on a guaranteed transaction requires two defaults (the obligor's and the guarantor's), and that the probability of both happening is less than the probability of default of the obligor alone. In calling for use of the arithmetic average of the weightings of the two levels of obligors, the current proposal can only reduce the attractiveness of a highly relevant risk mitigation and sharing technique.

Conversely, the Committee has made a well thought-out and welcome move in recognizing the beneficial effects of collateral management as a risk reduction technique. The Committee has signaled that it is prepared to recognize covered exposures after haircuts as not-at-risk, except for a small charge connected with documentation and handling risk. The approach represents a major stride in granting capital relief for risk-mitigating behavior. Behind the intent lies the implicit understanding that the appropriation of collateral requires a single default - that of the obligor/counterparty - and that there is no additional need to account for the likelihood of default of the collateral.

Some clarification will be useful regarding the treatment of certain types of collateral. For example, it is unclear whether a claim on a AAA-rated corporate secured by residential property will be risk-weighted at:

- 20% per Part 2/II/A/1 (vi) paragraph 35
- 50% per Part 2/II/A/1 (vii) paragraph 37, or
- $10\% = 20\% \times 50\%$ per the Foundation Approach

Property other than commonly traded securities remains an issue as there are active markets with reliable price discovery in a variety of tangible collateral types which the Committee should consider.

We would suggest that the Committee consider adapting the collateral management approach to the treatment of credit derivatives and guarantees. In the event that a comparable treatment is not possible, the Committee could fruitfully investigate the use of the cross-default probability, summarily rendered as the product of the two risk weightings in question, tempered by introduction of a 'w' floor factor comparable to what is envisaged for collateral management.

Our final credit risk-related comment concerns another risk mitigation technique: asset securitization. We view the asset securitization market as a healthy mechanism to trade or reduce credit risk, thereby supporting a financial institution's natural tendency to diversify its sources of risk. While there is a clear need, in aggregate, to rationalize some of the national discrepancies in the treatment of asset securitization, the Proposal in terms of the Standardized Approach appears more penal than risk-sensitive. We would be concerned that demand and supply may be affected, and thus adversely affect the market's development, as a result of the interaction of:

- Risk weightings for investment in lower-rated assets in an asset-backed security that are higher than the risk weightings applied to direct lending to the same entities;
- The high (100%) risk weighting for liquidity facilities granted by the issuing bank; and
- A possible future *ex-ante* charge for implicit and residual risks, to be more clearly defined.

We consequently urge the Committee to pursue further research to ensure consistent treatment across the gamut of risk mitigation and sharing techniques.

Other Issues

- The Accord fails to address geographic and sectoral concentrations of credit risk.
- The risk weights applied to residential property loans are generally overstated and should reflect actual loss experience in different countries.

Operational Risk Considerations

For the first time, financial institutions will be asked to set aside regulatory capital to cover operational risk. We endorse the attention given to this type of risk, especially given the growing body of evidence that financial institutions are increasingly suffering incidents and operational losses. The heightened awareness will undoubtedly serve to promote better working practices.

Tier Structure

The introduction, as elsewhere in Basel II, of a tiered sophistication structure is conceptually appealing and representative of different levels of feasibility at each institution. Sound risk management will benefit, however, from a more explicit statement that the three tiers are intended to (a) evolve over time toward greater sophistication, aided by an accelerated review process, and (b) represent only each financial institution's current abilities as anticipated for the year 2004. In particular, we believe that financial institutions opting for the simpler structures in 2004 should not expect to remain in that framework permanently and should be expected to migrate to a more sophisticated approach over time.

Mechanistic Approach

The Consultative Document has adopted an approach that is reminiscent of Basel I in its more mechanistic aspects and leaves several important questions unanswered.

Regarding the mechanistic approach we feel that the Proposal, as currently worded, runs several risks, namely:

- The fundamental concept underlying the Standardized and IMA Approaches rests on the *conversion of expected losses into unexpected losses*. This draws two comments on our part. First, the banking community would likely derive some comfort from an explicit recognition that statistically "expected" losses are those that are covered by current income and/ or operating provisions, whereas "unexpected" losses are covered by capital. As a result, decreases in losses generate immediate benefits to a financial institution in the form of reduced cash outflows and operating expenses, but not necessarily in reduced capital requirements. The second comment follows from this, namely that variations in expected losses do not necessarily entail a linear change in unexpected losses, although the proposed model explicitly links the two.
- *Risk profile indices, betas and gammas* that will be used to calibrate the model will, at least initially, not be statistically significant as they will be representative of only those institutions that have voluntarily reported loss data into public databases. In this respect, it is worth noting that there are two categories of external databases: commercial ones and industry pooling bases under the aegis of a not-for-profit industry association or regulatory body. We would strongly suggest that the latter be given the focus of attention as they represent the free access for data collection that is consistent with transparency and the need for equitable treatment of all categories of reporting institutions. Further, we believe it is in the best interests of both the banking and regulatory communities to ensure prompt updates to the parameter values being used, as they are progressively refined through the availability of new data. The historical way in which the Accord has been updated is relevant for major overhauls that impact theory and process, but will not be adequate to support the communication of new parameter values as these are gradually refined. Consequently, we advocate the design of an *expedited consultative process* to address changes in certain numerical values as well as the introduction of the new fourth pure models-based approach. Additionally, given the dependency on complete and accurate industry loss data, it should be ensured that financial institutions shall in fact communicate relevant and accurate data to a regulator-maintained loss database on a frequent basis; the Committee should also recommend the establishment of stringent procedures to update parameter values and verify the quality of data submitted to industry initiatives.
- A corollary to the above is that *beta figures* calculated from currently available data assume total linearity, *i.e.* operational risk losses within a given class are in identical proportion to an economic indicator, regardless of the size of the institution. Although it is too early to determine whether in fact larger institutions benefit from "economies of scale" in this regard, this is a worthwhile investigation we urge the Committee to undertake going forward.

- It will be essential for financial institutions to classify their operational risk losses using a unique framework to avoid *double-counting, which may result from imperfectly defined risk classification schemes*. Institutions currently often use different databases in different business units and may be recording the same fundamental event under several different manifestations as the loss makes its way through the organization, from front to back office, for example; this can thus take the form of double-counting the same event as two operational risk losses, or simultaneously as an operational risk loss and a credit risk loss. We suggest that the local regulator make itself available to examine the risk classification scheme to provide guidance where applicable.

Refinements needed

In addition, the implementation of the concepts will require more refinement than is currently available to address qualitative issues. These appear at their most obvious when breaking down financial institution business lines, as the proposed breakdown is representative mainly of the universal bank model, and therefore not necessarily fully applicable to other types of financial institutions.

Less obvious is the fact that operational risk is experienced differently across geographies. Although any given risk type can be meant to cover an identical phenomenon anywhere in the world, there are strong grounds to believe that financial institutions in different parts of the world experience different types of incidents in different proportions relative to both size and likelihood. Although this does not contradict the workings of the Proposal, it highlights the different causalities present in financial institutions and justifies (a) recognition in the minimum capital requirement of the existence and reliability of management and controls, and (b) refinement of the loss types to account for the proximate cause of the events being reported. Regarding this latter point, the current grid of operational risk loss types represents the effect of the loss, and omits reference to the causes of these losses. The understanding of causes, however, is essential to ensure management focus on remediation, which should always remain the fundamental preoccupation of operational risk management rather than pure measurement.

In addition, fundamental drivers of operational risk include the quality of a financial institution's internal control processes and management. However, none of the advocated approaches is specifically sensitive to the quality of operational risk management and control structure in the regulatory capital calculation. In addition, there are minimal behavioral incentives in place (especially in the short term) to improve risk controls and proactively manage operational risk.

The absence of qualitative factors in the approach is reflected in the fundamentals of the calculus. Severe losses experienced in the recent past, but which have subsequently received quality attention and mitigation efforts, will drive up the institution's capital charge at a time when the risk of that event type has potentially been reduced through introduction of a better control environment. This is counter-intuitive; additionally, it may introduce unfairness due to the difference in the way *betas* and *gammas* are calculated. Financial institutions opting for the Standardized Approach using *betas* will not pick up the "blip" and will find themselves at an advantage relative to the more sophisticated financial institutions that have opted for the Internal Models Approach using *gammas* (which are applied to the full value of losses on the recent past). This entire discussion is motivated by the use of the term "expected" versus "unexpected". Whereas in credit and market risk it is desirable to use the terms literally, referring to pure

The Secretariat
Basel Committee on Banking Supervision
Page 9
May 29, 2001

statistical calculations, the very nature of operational risk suggests that the term "expected" can and should incorporate some notion of anticipation, rather than a pure retrospective average.

Consequently, we recommend that the Committee investigate different approaches to examining the relationship between expected and unexpected losses and the procedure for converting expected losses into capital, and consider introduction of an adjustment factor to take into account the quality of managerial oversight and its current effectiveness in reducing the likelihood of future losses. The Committee should recognize that the currently planned *betas* and *gammas* are temporary measures pending satisfactory inclusion of risk mitigation and controls, as well as more accurate methods to reflect the potential loss position of an institution that is experiencing an increase or a decrease in its historical expected losses.

Finally, although the Consultative Document signals acceptance of the concepts of indirect losses on the one hand, and of the potentially positive effects of risk mitigation and transfer (including insurance) on the other, greater clarity as to exactly how both of these shall be recognized is required, in our opinion.

On the topic of operational risk we strongly urge the Committee to ensure that the final form of the approach reflects contemporaneous thinking in the banking community in order to ensure that an artificial and expensive distinction between regulatory and economic capital ceases to exist. It has been our experience that for credit and market risk many large financial institutions traditionally apply Basel I rules and calculations merely by obligation, while ignoring the regulatory output in economic decision-making. Ideally, financial institutions will recognize that the methodology adopted by the regulator is economically founded in principle and serves the useful purpose of allocating capital efficiently.

We trust the above comments are of use to the Committee and regulatory and industry bodies at large, and remain at your full disposal for any further clarification you may require. Any questions should be forwarded to Joseph A. Tarantino, Partner in our New York office at 1 212 708 3777.

Sincerely,



Arthur Andersen LLP

cc:
Federal Reserve Board
Basel 2001 Capital Proposal
Mail Stop 179
21st and C Streets
Washington, D.C. 20551