

May 31<sup>st</sup>, 2001

Mr William McDonough, Chairman  
Basel Committee on Banking Supervision  
Bank for International Settlements  
2 Centralbahnplatz  
CH – 4002 Basel  
Switzerland  
BCBS.Capital@bis.org

Re: Comments and Response to the Consultative Document “The New Basel Capital Accord”

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Dear Mr. McDonough:

Citigroup appreciates and welcomes the opportunity to comment on The New Basel Capital Accord (“the New Accord”). We anticipated with enthusiasm a new capital adequacy framework that would reflect industry assessments of economic capital by incorporating more risk sensitive capital charges. We are disappointed that, in several key respects, the New Accord does not appear to achieve its main objectives. Citigroup believes that if the New Accord were implemented in its current form, there would be unintended consequences that could have a significant negative impact on the economy in general and the financial services industry in particular. The New Accord, as drafted, would also create increased incentives for regulatory arbitrage which could impact the safety and soundness of the financial system.

As we will describe below, the New Accord imposes on the banking system a significant increase in the minimum level of required capital. For Citigroup, the New Accord would require that capital be increased by a substantial and unwarranted amount to keep its capital ratios at today’s levels. We urge the Committee to keep in mind that although capital has an important role to play in assuring safety and soundness by supporting a banking organization’s assets, it has a significant opportunity cost. Requiring banking organizations to hold more capital than is economically justified would effectively translate into higher costs to users of funds and/or lower returns to investors in organizations subject to the New Accord.

This impact would be felt especially by those customers that rely primarily on banking organizations and their securities subsidiaries for their funding needs. Lower returns, which can be expected by investors, would make raising additional capital more difficult. The resultant imbalance would likely result in a contraction of credit availability with the corresponding negative impact on economic growth. Additionally, the magnitude of the New Accord’s higher capital requirements would create significant incentives for disintermediation and regulatory arbitrage, leaving financial services regulators covering a narrower segment of the financial services industry and reducing competition and choice for customers of banks.



The current draft of the New Accord is incomplete in substantial areas, and the Basel Committee ("Committee") has indicated that it will publish interim papers in areas including Operational Risk, Retail Credit, Project Finance, Counterparty Risk in the trading book, Asset Securitization, Equity exposures and Disclosure requirements. Citigroup urges the Committee not to finalize the New Accord until the industry has had sufficient opportunity to review these interim papers and to comment on a subsequent draft of the New Accord in its entirety. We believe that careful consideration should be given to the New Accord before it is finalized and implemented even if this means that the scheduled year-end deadline needs to be extended.

Citigroup's concerns with the New Accord fall into eight categories, each of which needs to be addressed prior to adoption and implementation:

1. The New Accord does not assure equal regulatory treatment between banking organizations and non-bank financial services providers and across national jurisdictions.
2. The New Accord does not recognize insurance activities as a proper and useful part of Diversified Financial Groups, contrary to recently enacted U.S. legislation.
3. Under the New Accord, the calibration of capital causes regulatory minimum capital requirements to increase to inappropriately high levels when compared to existing rules or internal risk models.
4. The New Accord does not, as originally anticipated, leverage sophisticated internal risk models.
5. The New Accord does not adequately recognize the importance of diversification in assessing capital requirements.
6. The New Accord is incomplete in substantial respects in several key areas, including Operational Risk, making it quite difficult to provide constructive commentary.
7. The New Accord mistakenly sets capital requirements to cover both Expected and Unexpected Losses, without differentiating between the two.
8. The New Accord contains disclosure requirements that are burdensome, would be expensive to implement and are likely to increase marketplace confusion rather than improve transparency of risks and performance.

In the following sections as well as the attached appendices, we describe in more detail the issues that are of greatest concern to Citigroup.

### **Equal Regulatory Treatment**

- Citigroup continues to believe that a consolidated regulatory capital approach should be the ultimate goal of the New Accord. However, we are concerned that by imposing hefty capital requirements on certain businesses, the New Accord would

restrict banking organizations' ability to compete with non-banks in the provision of financial services. Specifically, applying the New Accord to U.S. broker/dealer subsidiaries of banking organizations will require greater capital than will be required of their non-bank competitors under Securities Exchange Commission (SEC) rules. Also, in the Asset Management business imposing Operational Risk capital requirements on banking organizations will put them at a disadvantage to their non-bank competitors. This will frustrate the goal of ensuring equal regulatory treatment across similar businesses.

- Uniform application of capital standards to affected holding companies or Diversified Financial Groups, regardless of the country of incorporation, by the respective National Supervisor is necessary to ensure that competitive equality is maintained. The New Accord, as written, does not ensure equal treatment for Diversified Financial Groups given the discretion for National Supervisors to determine which of such holding companies "engage predominately in banking activities" and thus are subject to the New Accord.
- We believe that these inequalities will disrupt competitive markets and most likely limit the ability of banking organizations to provide liquidity and services to certain markets. Depending on how National Supervisors interpret the scope of the New Accord, Citigroup and other banking organizations could be at a disadvantage against competitors that are not subject to these rules. In addition, uneven application of the New Accord across national jurisdictions could also lead to competitive inequities between banks and non-banks in different geographies. This is clearly not consistent with the objective of the New Accord to ensure equal regulatory treatment across similar businesses.
- If the new capital requirements make banking organizations less competitive, there will inevitably be some withdrawal from the market. Supervisors are well aware that markets tend to become less competitive when participants withdraw. Additionally, to the extent that capital requirements remain an impediment to bank participation in financial markets, the strong likelihood is that any new entrants to the market would be organizations not subject to the New Accord.

### **Recognition of Insurance Subsidiaries**

- We disagree with the proposal to deconsolidate insurance subsidiaries, particularly in light of the decision to apply the New Accord to holding companies of banks. The United States recently enacted legislation that permits the organization of financial holding companies incorporating banks, securities firms and insurance companies under the umbrella supervision of the Federal Reserve. Deconsolidation of any of these subsidiaries is inconsistent with that legislation because it would preclude the umbrella supervisor from using or applying the New Accord to influence the overall level of capital in the holding company structure. We believe that if the capital of holding companies is to be regulated under the New Accord, then the holding company should be able to utilize all of its capital in determining its capital adequacy.
- Insurance is an important component of Diversified Financial Groups because of the lack of correlation between insurance risks and credit and market risks. These

independent risks and the margins and cash flows associated with them, have a positive impact on capital adequacy through their diversifying effect. It should also be noted that sophisticated risk models of insurance portfolios are in use throughout the industry. While definitions and standards need to be aligned between insurance and banking, Citigroup rejects the notion that technical barriers to including insurance are insurmountable. The Committee should give serious consideration to including insurance operations under the New Accord.

### **Calibration of Capital**

- Based on analysis of our own portfolios, Citigroup has found that its capital requirements under the New Accord would be significantly higher than both the current regulatory levels and our own estimates of economic capital. From this analysis, we also conclude that the Quantitative Impact Study (QIS) will show materially higher capital requirements for the industry as a whole. The clear impact of increased capital requirements is an increase in the cost, and to some extent, a decrease in the supply of credit and liquidity to the economy. Since the Committee did not intend to increase significantly industry-wide capital levels, we can only conclude that the New Accord, as currently drafted, has mis-calibrated the proposed capital standards.
- The calibration problems with the New Accord arise in several areas. Increased capital requirements result from the deduction of minority owned investments in financial businesses, the overly conservative treatment of both non-investment grade Corporate credit exposures and high expected loss Retail credit exposures, and the insufficient recognition of proven credit risk mitigation features such as collateral, credit enhancements and asset securitization. This calibration issue does not fall evenly on all industry segments, thereby creating potentially disruptive imbalances within the financial services industry that are not justified by underlying business realities. We caution that the risk of economic disruption from excessive capital requirements could be just as great to the financial system as insufficient capital requirements.
- In developing the Pillar I Minimum Capital Requirements, the architects of the New Accord have made reasonable, but very cautious, choices on every variable. Without recognizing the benefits of diversification across risks, across businesses, and across geographies, this approach leads to a “worst case” level of required capital. This problem is further compounded in the New Accord by the imposition of the “W” factor, which in effect adds an additional layer of required capital on top of the level already determined by “worst case” analysis. The result is that the market-wide capital requirements for credit risk under the New Accord will increase significantly compared to the current system.
- On top of the increased capital requirements noted above, a very substantial additional capital component is imposed for Operational Risk, calculated based on gross approximations and without sufficient risk sensitivity. Although the details are scarce, there does not appear to be any recognition of either the positive effect of diversification in the calculation of Operational Risk or the fact that Operational Risk in well managed firms does not necessarily increase proportionately with size

because of the economies of scale that can be achieved in managing this type of risk. The proposed imposition of capital charges for Operational Risk when based simply on revenues runs wholly contrary to recognizing the benefits of scale in large well-managed organizations and again overstates required capital.

- Citigroup's own internal economic capital framework is risk sensitive and is, we believe, consistent with the principles and objectives of the New Accord. Under that framework, Citigroup applies a more rigorous threshold of default than the one which the New Accord uses. However, as noted earlier, the calibration of capital under the New Accord could require Citigroup to increase its capital by a substantial and unwarranted amount to keep its capital ratios at today's levels. This is the case even though, today, Citigroup substantially exceeds the standards for well-capitalized financial holding companies established by the U.S. Federal Reserve. The New Accord states that the framework is geared towards ensuring the capital adequacy at a BBB level; yet Citigroup, which is a AA rated organization, would be subject to a substantial increase in required capital.

### **Reliance on Internal Risk Models**

- When the New Accord was first proposed, the Committee emphasized the importance of relying on internal risk models developed by sophisticated banking organizations in calculating levels of minimum capital. The purpose of this approach was to allow the capital requirements to reflect the economic capital and risk management methodologies of those banking organizations. The current draft speaks about internal risk models, but does not allow banks to utilize them. Banks are required instead to implement and parameterize a model developed by regulators. This is wholly contrary to the original intent of regulating the models designed by banking organizations, and imposes an entirely new risk model to be implemented solely for the purpose of quantifying regulatory capital.
- The provision within the New Accord which requires that the use of the IRB approaches be subject to an "all or nothing" treatment will discourage development and innovation in risk methodologies. Citigroup recognizes the rationale and motivation of the Committee to ensure orderly progression between the Standardized and IRB approaches, especially to prevent the selective treatment of exposures. Although a general presumption that all material portfolios should migrate to the same approach over time is reasonable, there is a need to allow for justified exceptions such as to accommodate acquisitions, entries into new markets, new product development or immateriality of some portfolios. National Supervisors, under Pillar 2 supervision can assure that banking organizations not choose IRB treatment selectively, but still be allowed to benefit from more advanced practices where they are in use.

### **Diversification**

- Regulators have traditionally viewed, and in Citigroup's opinion properly, diversification of businesses in well-managed organizations as a strength. The statistical benefits of diversification embodied in portfolio investment theory are broadly accepted. Diversification allows holding companies to rely on earnings from

one business line when another business line slows. It allows the continued strength in market or credit performance for some areas to offset weaknesses or problems in others, without necessarily relying on capital. Yet, while the New Accord seeks to recognize the strengths of holding companies, it fails to accomplish this goal by not giving any recognition, in principle or in computation, to diversification in geographies, business lines, asset classes or risk types.

- It is well recognized in financial services risk management that concentration risk is the most challenging risk an institution can face. No matter how attractive the peak risk may be, there is a limit to how much a given company should accept. By expanding into uncorrelated risks, a company can increase revenues and income without a proportionate need to increase capital, ultimately increasing shareholder value added. These principles are fundamental to Citigroup's operations and will be part of any Diversified Financial Group strategy. We believe that the fact that diversification does impact business decision-making is important and this reality should be taken into account in the design of the New Accord.

### **Operational Risk**

- The Operational Risk component of regulatory capital proposed in the New Accord remains extremely difficult to evaluate due to lack of details. We note, however, that at this point quantitative measurement of Operational Risk within the industry is still in its infancy. Most banks have not captured the data necessary to adequately evaluate Operational Risk comprehensively and on a basis that does not overlap with Credit or Market Risk. Portions of our Operational Risk experience are embedded in our historical market and credit losses, and are therefore included among these risks. To avoid double counting, any separate capital requirement established for Operational Risk must recognize this data overlap. The new system must allow for a transition that preserves the integrity of robust historical data while building for greater refinement of Operational Risk measures in the future.
- The available benchmark calibrations for Operational Risk in the New Accord are excessive and do not at all reflect the risk mitigating benefits of diversity or the relative efficiencies that are achieved through scale. The failure to recognize these mitigating effects would result in a significant and unnecessary increase in Citigroup's capital requirements, as well as those of other banking organizations. These issues are too important, and the risks of prescribing any specific process without allowing sufficient time for further research are too significant, to be ignored while imposing requirements in this area without substantial further consideration. This is true for both the quantification of Operational Risk and for the recognition of risk mitigation and risk transfer practices such as insurance and outsourcing, which should also be included in any regulatory capital framework for Operational Risk. Therefore, we believe the Committee should seriously consider including Operational Risk only as a component of Pillar 2 and continue its efforts, together with the industry, to refine the methodologies and further develop Operational Risk practices. Consistent with this conclusion and as suggested in the Appendix, Citigroup will continue its efforts to evaluate Operational Risk and to support methodological development in various industry forums.



### **Definition of Capital**

- The New Accord sets capital requirements to cover both Expected Losses and Unexpected Losses without differentiating between the two. However, the definition of capital is not changed to reflect the provisioning that supports Expected Losses and the pricing margins which act as additional buffers against losses. In the case of credit risk, Expected Losses are reflected as a reduction of capital through a charge to the income statement to fund reserves at the time the exposure is taken on. A further regulatory capital charge would double count this exposure. The result is a systematic overstatement of risk and capital requirements.
- This imbalance creates punitive capital requirements in higher Expected Loss businesses such as credit cards and some consumer lending without taking into account that such businesses have fairly stable Expected Losses and therefore are less volatile. The same fundamental issues apply to a broader set of businesses in the context of Operational Risk where Expected Losses are routinely built into pricing. Credit availability to consumers could suffer due to the opportunity cost of the additional capital requirements, causing a reduction in supply with corresponding higher costs. Again, this would undermine the competitive equality and risk sensitivity objectives of the New Accord. Economic growth could be negatively impacted if traditional sources of consumer credit become less available or more expensive.
- Citigroup strongly urges the Committee to clarify in its proposal that Tier 1 Capital must be sufficient to cover Unexpected Loss only. If the Committee insists that Expected Loss must also be covered, then the definition of Total Capital must change to reflect all of the resources available for coverage. Specifically, Tier 2 Capital should include the full amount of established reserves for each portfolio without limitation and should also recognize the margins in each business which significantly reduce the risk of loss.

### **Disclosure**

- The disclosure requirements outlined under Pillar 3 of the New Accord are detailed and extensive. Citigroup is concerned that the proposal is overly ambitious and would be an enormous burden to the industry without providing commensurate enhancements in risk transparency. The Committee is surely aware of disclosure initiatives under way in the U.S. at both the Federal Reserve Board (FRB) (Working Group on Public Disclosure) and the AICPA (Loan Loss Task Force). Citigroup has been an active participant in these efforts. We believe that it is imperative that the Committee recognize these efforts and coordinate the Pillar 3 requirements with them. In addition, the Committee should clarify that where these disclosures are made at the holding company level, supervisors of subsidiary institutions, as well as other users of this information, should rely on the parent company's disclosures. Public disclosure requirements and recommendations should apply only at the consolidated level, with data at subsidiary levels being provided to regulators as needed for supervisory purposes.

- The disclosure proposals in the New Accord would be very expensive to implement. In addition, much of the information that would be required is not useful for management and would be prepared only to comply with the New Accord. We also question whether, at the proposed level of detail, the information would be useful to investors. Further, the proposal requires disclosure of so much detail that confidential customer data and proprietary competitive data would necessarily be exposed. The proposed disclosures prescribe a single approach to assessing potential credit loss which does not adequately address the timely identification and recognition of credit problems.
- Disclosure raises again the issue of equal regulatory treatment because the New Accord will not apply to all market participants. As a publicly traded company in the U.S., Citigroup provides an enormous amount of data under current SEC and FRB rules. This situation already results in disadvantageous reporting as compared to privately held companies, to banks outside of the U.S. and to non-bank competitors. Citigroup strongly supports the Committee's efforts to bring disclosure standards for internationally active banks to the level which already exists in the U.S. We believe that any additional disclosure should be required only on a supervisory basis, or if demonstrably beneficial to investors. The New Accord does not demonstrate the benefits that investors would obtain from the proposed level of required disclosure.

Despite the serious concerns outlined above, we are hopeful that the New Accord can be modified to provide an acceptable framework within a reasonable timeframe. The Committee must recognize that the rules contained in the New Accord will most likely apply for many years; therefore, the New Accord must be thoughtfully constructed and provide appropriate standards and flexibility to both banking organizations and their National Supervisors to ensure a proper level of capital without creating significant negative unintended consequences.

We understand that the principles and objectives that the New Accord seeks to meet in developing a comprehensive approach to capital adequacy are:

1. To promote safety and soundness in the financial system by maintaining at least the current overall level of capital in the system while at the same time providing for capital incentives for particular banking organizations evidencing more sophisticated risk management processes.
2. To continue to strive for equal regulatory treatment among financial institutions in different national jurisdictions.
3. To allow for approaches to capital adequacy that accurately reflect the degree of risk involved in a bank's position and activities, with a greater emphasis on banks' own assessment of the risks to which they are exposed in the calculation of regulatory capital charges.
4. To constitute a more comprehensive approach to addressing risks including the introduction of a specific Operational Risk component.





5. To focus on internationally active banks, while establishing underlying principles that should be suitable for application to banks of varying levels of complexity and sophistication.

Citigroup supports the stated objectives and looks forward to working actively with the Committee and with its regulators to develop a truly improved Capital Adequacy framework that would achieve these laudable goals. Attached to this document are appendices that address in more detail the topics discussed above. Because the Committee will undoubtedly receive extensive comments on the current draft of the New Accord and because it will release additional interim papers in the coming months, Citigroup respectfully requests that another complete draft of the New Accord be circulated for comment prior to its adoption by the Committee.

Very truly yours,

Jay S. Fishman  
Chief Operating Officer  
Finance and Risk

#### Attachments

- Appendix 1 - Discussion on the Treatment of Corporate Credit Exposures
- Appendix 2 - Discussion on the Treatment of Retail Credit Exposures
- Appendix 3 - Discussion on the Treatment of Operational Risk
- Appendix 4 - Discussion on the Impact on Broker-Dealer/Securities Businesses
- Appendix 5 - Discussion on the Treatment of Asset Securitizations
- Appendix 6 - Discussion on Pillar 3 Market Discipline and Disclosure Requirements

cc: Federal Reserve Board  
Basel 2001 Capital Proposal  
Mailstop 179, 21 st and C Streets, NW  
Washington DC 20551

Basel 2001 Capital Proposal  
Office of the Comptroller of the Currency  
Mail Stop 3-6 250 E Street, SW  
Washington, DC 20019

Comments/OES  
Federal Deposit Insurance Corporation  
550 17th Street, NW  
Washington, DC 20429

## APPENDIX 1

### Discussion on the Treatment of Corporate Credit Exposures

## **SECTION I - CONCEPTUAL FRAMEWORK**

- **Definition of capital**

Internally we measure economic capital for credit risk as a cushion to cover Unexpected Losses (UL) – the difference between the potential loss at a very high confidence level and the Expected Loss (EL). We set aside provisions to prudently cover the EL of corporate credit risk. As discussed in the Introduction of our response, we strongly urge the Committee to define Tier 1 Capital to be sufficient to cover UL only. If the Committee is concerned that EL for corporate credit is inadequately covered by provisions for credit loss because of local accounting standards, it should review that as part of Pillar II. It should not penalize all banks because some banks may not have sufficient provisions.

If the Committee insists that Expected Losses must be also covered, then

- a) The definition of Total Capital must change to reflect all the resources available for that coverage. To do otherwise would be to force banks to double count.
- b) We also recommend that the Committee identify the components of each risk weight that are needed to cover UL and EL respectively. Doing this would make the New Accord more transparent and would facilitate its modification in the future, should the Committee be persuaded to define regulatory capital to cover UL only.

- **Calibration**

As stated in the Introduction, we have found the New Accord to suffer from:

- a) Problems of absolute calibration (as currently drafted, it requires far more regulatory capital than is required by either the current Accord or an economic capital analysis) and
- b) Problems of relative calibration. The Standardized and Foundation approaches are inconsistent regarding the relative capital required as a function of risk rating. The Foundation approach requires more capital than the Standardized approach for the lowest risk rating obligors. This may have the unintended consequence of giving more sophisticated banks an incentive to sell their lowest rated credit exposures to smaller, less sophisticated banks that use the Standardized model. Should that occur, it would concentrate the worst credits in the least sophisticated banks.

- **Arbitrariness**

The effect of the multiple conservative cushions, floors and “arbitrary” parameters (such as the  $w$ ) is to ultimately dull the risk sensitivity of various measures employed and drive a wedge between regulatory capital measures of risk and actual economic risk.

- **Inconsistent treatment of obligors of same Probability of Default (PD)**

The New Accord treats obligors of the same risk rating in inconsistent ways. For example:

- In the Standardized approach, Sovereigns, Public Sector Enterprises (PSEs) and Banks get lower risk weights than corporations with the same probability of default. This directly conflicts with the stated intention of the New Accord that “a sovereign of a given grade should be similarly risky as a corporate borrower of the same grade.”
- Similarly, the New Accord does not recognize anything short of an explicit, unconditional parental guarantee of subsidiaries or affiliates but does not require the same standards for sovereign support of PSEs as a factor in determining risk.
- There are inconsistent requirements for acceptance of financial collateral or guarantees from sovereigns, banks, and corporates. For collateral to be acceptable it must be rated BB- or better if it comes from sovereigns and PSEs. However it must be rated BBB- or better if it comes from corporates, securities firms and banks. This discrepancy is also evident with regard to the minimum PD of 3 basis points for corporates but not sovereigns.
- There are even further discrepancies between types of support – a guarantor or provider of a credit derivative must have a higher minimum rating than a firm which puts up financial collateral.

- **Counterparty Risk**

One of the fundamental principles behind the revision of the Basel Accord is to ensure that regulatory capital requirements are more closely aligned with actual risk. Not only should this ensure a level playing field between banks, but also a level playing field between products.

However, the New Accord proposes no change to the current method of setting capital requirements to cover counterparty risk. Thus the method remains that of the 1988 Accord, together with minor modifications made in 1995, and this method is not well aligned to actual counterparty risk. We discuss the problems of the current method and propose an alternative method in an Addendum at the end of this Appendix on Corporate Credit Risk.

## **SECTION II - STANDARDIZED AND IRB APPROACH**

### **Standardized approach**

- **Treatment of unrated obligors**

Under the Standardized Approach, sovereign, bank and corporate obligors with no external rating are assigned a risk weight that is lower than that assigned to the riskiest class of rated obligors. This will have three unintended consequences:

- It will give non-investment grade obligors a disincentive to obtain an agency rating. There is already a bias in that direction. While we agree that not all unrated obligors are high risk (particularly in some countries), there is no doubt (particularly in the US) that the portion of unrated names that are high risk is greater than the portion of rated names. Companies with ratings tend to be the biggest in their markets and many companies withdraw from getting a rating if they are going to receive a non-investment grade.
- It will provide an incentive for sophisticated banks (i.e. those that have their own internal rating models and use the IRB approach) to sell their unrated loans to less sophisticated banks (i.e. those that have no internal rating model and use the Standardized approach). This would tend to concentrate the riskiest assets on the books of the less sophisticated banks.
- For any bank using the Standardized model there will be an incentive to lend to obligors with no external rating rather than to obligors with an external rating in the lowest risk category – even though the unrated obligors may be riskier. This could especially be a problem in the Emerging Markets.
- **Standards for approval of external credit rating agencies, vendor models and ECAIs**

The requirements imposed on external credit rating agencies, vendor models and ECAIs regarding “approved” use of their ratings need to be publicly disclosed and globally consistent. Currently, many rating agencies produce ratings that are relative measures of obligor risk within a geography or industry but are inconsistent across geographies and industries – e.g., a local firm in India may be relatively excellent and receive a rating of AAA even though its default probability might be comparable to a firm rated BBB in the US. Approving external credit rating agencies or rating model vendors without uniform, rigorous standards will create two problems:

- Systemic Risk  
The requirements for approval should be more severe than for internal bank rating systems because of the potential use of these ratings by many institutions world-wide (systemic risk issue). For instance, if 50 mid to large-sized banks rely on the same external source for risk ratings, the systemic risk of erroneous or poor quality risk assessment is much higher than if one of the largest bank had an error in its own internal ratings model. Rating agencies and vendors should be subject to the same standards and definitions of probability of default as banks which use their own internal models.
- Level Playing Field  
A large multi-national bank, such as Citigroup, that develops and validates its own internal obligor risk rating models may be at a disadvantage, particularly in some markets, relative to banks that a) use the Standardized model and rely on external rating agencies or b) use the IRB approach and rely on vendor software that may assign ratings across regions in an inconsistent manner.

## **IRB approach: Foundation and Advanced**

- **IRB entry requirements**

We are concerned that regulators and supervisors in different countries may apply the New Accord unevenly. Regulators need to ensure they set consistent minimum requirements for qualification to use the Advanced approach. Regulators need to be very public about the minimum requirements in terms of data quality, data history and, most importantly, validation across countries. If these requirements are not made public, there will be no way for banks and regulators in other regions to be sure they are not operating under stricter or looser requirements – violating one of the principles of Basel. Supervisory standards must be transparent and consistent.

- **Concentration of exposure in a risk rating category**

The requirement that the exposure in a specific risk rating should not exceed 30% has no rigorous support. The standard for validating an internal rating model should be the accuracy of the model to assess default probability, not the diversity of the actual credit portfolio across risk ratings. A valid model should be able to differentiate between obligors that have different degrees of risk – for example, by being able to differentially assign probabilities of default or ratings to a diverse set of obligors in a test portfolio. However, it is no reflection on the validity of the model if the actual portfolio has a concentration in a particular risk rating. The degree to which the actual portfolio has a concentration of exposure in any particular risk rating should be left to management's discretion.

This proposal will have several unintended consequences:

- A bank that usually has a relatively even distribution of obligors within each rating category faces a disincentive to rate obligors accurately if doing so would increase the concentration in any one category. For instance, given a crisis in the economy, the most accurate assessment of risk could require significant downgrades, shifting the concentration toward poorer risk categories. The proposal would penalize a bank that accurately assigned more than 30% of its obligors to a single rating category.
- It will create a disincentive for a bank to target a specific segment of the market. For instance, a bank may choose to do business only with large obligors of risk rating A or better. In doing so it will concentrate its risk in only a few ratings buckets but will not have additional risk relative to a bank with many obligors in the non-investment grade range. Its decision to concentrate its risk in only a few rating buckets says nothing about the validity of its risk rating model.

- **Maturity**

Banks should be able to use maturity as a driver in calculating their regulatory capital requirement.



- For some types of assets, banks should be able to use behavioral models (subject to supervisory review) to assess the statistical likely maturity (e.g., taking prepayments into account) rather than the contractual maturity.
- The impact of maturity on a bank’s assessment of its economic capital depends on the structure and diversification of its portfolio, its assumptions about how default probabilities may change over time (e.g., its transition matrix) and the method by which it models prepayments as a function of changes in risk ratings. Under the Advanced approach banks that have sophisticated internal economic capital models should be allowed to calibrate the effect of maturity on regulatory capital.

- **Granularity adjustment**

We recognize that the degree of heterogeneity (“granularity”) of credit exposure across obligors will have a strong effect on the shape of the distribution of potential credit losses. Common sense suggests, and our own modeling demonstrates that having a “lumpy”, heterogeneous portfolio of credit exposure, with a high concentration of exposure to a few obligors, will push out the tail of the probability distribution of potential loss and increase the amount of economic capital required for the credit risk of the portfolio.

We also recognize that the Basel Committee has used its own internal model and, of necessity, had to make assumptions about the distribution of the size of exposures to different obligors in a typical portfolio, in order for it to specify the risk weight tables of the Standardized and Foundation approaches and for it to specify the risk weight function of the Foundation approach. Thus we understand why the Committee wants each firm to measure the degree to which its actual portfolio is more or less granular than was assumed in the Committee’s model.

However, we do not have a clear understanding of either the Committee’s model or the assumptions the Committee made in defining the Standardized and Foundation tables and the Foundation functions. In the absence of that knowledge it is difficult for us to assess the reasonableness of the proposed calculation of the granularity adjustment of the portfolio. We need to have more information about the model and the assumptions used to specify the Standardized, Foundation and Foundation risk rates before we can offer specific criticisms of the granularity adjustment.

We do note that in addition to making some assumptions about the granularity of a typical portfolio the Committee had to make some assumptions about the relative diversification of credit risk. Unfortunately, the Committee adopted a one-size-fits all set of assumptions that will be applied to all banks, independent of the actual diversification of their credit exposure across industries and geographies. This will put a large multinational financial services firm, such as Citigroup, at a distinct disadvantage, because we will not be given the benefit of our extensive diversification across industries and geographies.

- **90 % Floor on Advanced approach**

The requirement to measure both Advanced and Foundation (where Advanced Banks operate at 90% of Foundation for two years), requires banks to run two separate capital calculations over a two-year period. These calculations are sufficiently different that they potentially will require significant systems, calculations and resource requirements.

- **Treatment of Project Finance and Asset-Based Finance**

We do not believe that project finance or asset-based finance (e.g., equipment leasing, aviation financing) require a separate treatment from other forms of corporate credit risk. However, as we discuss below in the section on Credit Risk Mitigation, we strongly urge the Committee to expand the definition of eligible collateral that may reduce the risk weights of the Standardized and Foundation approaches, to include various forms of physical collateral.

We recognize that industry groups will have to objectively demonstrate that some forms of physical collateral can substantially reduce the LGD before the use of those forms of physical collateral would be entitled to a reduced risk weight in the Standardized and Foundation approach<sup>1</sup>.

For Project Finance and Asset-Based Finance, in the Foundation approach we, and every other firm using the Foundation approach, should be able to apply our assessment of PD, LGD and EAD, based on our historical experience, as we would for any other form of corporate credit.

### **SECTION III – CREDIT RISK MITIGATION**

- **The W Factor**

#### **Rationale For W Factor**

The rationale for the W factor is not made clear and as a consequence its imposition in many contexts, for credit derivatives and for collateral, appears to be arbitrary.

- **Operational Risk**

If the intent of the W factor is to cover operational risk (e.g., the risk of incomplete documentation regarding risk mitigation) then that risk will already be covered by operational risk capital. In fact, the single operational risk of insufficient documentation for credit risk mitigation will be allocated regulatory capital three times in the current version of the New Accord:

- As operational risk capital.
- As credit risk capital via the W factor.
- As credit risk capital by its effect on the historical LGD. It is not feasible for banks to go back in time and separate out the component

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<sup>1</sup> For an example of such efforts by an industry group see the Aviation Working Group/International Air Transport Association comment letter to the Basel Committee.

of their historic LGD that could be attributed to weaknesses in risk mitigant documentation. Historic LGD data includes the consequence of any poor documentation that might have existed in the past.

– **Legal Risk**

If the intent of the W factor is to cover legal uncertainty, then it is applied in a broad, indiscriminate manner, independent of legal context - that is, independent of the objective degree of legal certainty regarding the enforceability of the risk mitigant. We note that in contrast to the broad imposition of the W factor, banks are allowed to recognize the benefits of netting on reducing counterparty credit exposure as long as there is legal opinion as to its legal enforceability.

A prudently run bank will take the legal context of risk mitigants into account before making any adjustments to the LGDs it employs or to its measurement of a counterparty's credit exposure. For example, before it reduces its measurement of the credit exposure of a counterparty with whom it has a margin agreement, a prudently run bank will assess the degree of legal certainty that no stay could be placed on each asset posted as margin. By imposing a W factor indiscriminately, the New Accord will create a rupture between how a prudently managed firm measures and manages its credit risk and how it will have to assess the regulatory capital required for several of its businesses.

We also note that markets take the legal uncertainty of risk mitigants into account in pricing in several ways. For example, any degree of legal uncertainty in the enforceability of a credit derivative will be taken into account in the credit spread of the contract.

As an aside, we note that by imposing an arbitrary W factor on credit derivatives, the regulations will distort the pricing of these contracts, which will distort market spreads which will further cloud the relationship between credit risk and credit spreads.

– **Market Illiquidity and Stress Events**

Finally, if the rationale for the W factor is a concern that firms may underestimate their credit exposure during a crisis or a period of high market volatility then the W factor is an unnecessary burden. The Counterparty Risk Management Policy Group (headed by Corrigan and Thieke) made several recommendations in 1999 for the management of counterparty risk. One of their recommendations was for periodic stress tests of exposure to take into account potential market illiquidity in replacing underlying derivatives and in liquidating assets posted as margin. We think if the Committee is concerned about the adequacy of controls on counterparty risk in periods of stress it should evaluate the use of stress tests as part of Pillar II rather than imposing the W factor across the board.

**W Factor, Margin and Pre-Settlement Counterparty Exposure**

Banks enter into unilateral or bilateral margin agreements to reduce their counterparty pre-settlement credit exposure to other financial institutions and to

some corporate end users. A prudently run bank will only reduce its measured pre-settlement exposure if certain conditions hold, such as a) the legal enforceability of the margin agreement, b) a perfected interest in the assets posted as margin and c) a high degree of legal certainty that no stay will be placed on the assets posted as margin in the event of a default by the counterparty. The latter can vary depending on the nature of the counterparty, its home country, etc. Rather than imposing a W factor, legal context should be taken into account, just as it currently is allowed to be taken into account for netting agreements. The evaluation of whether a bank is properly taking legal context into account should be part of a Pillar II review. If minimum legal standards for recognition of collateral remain in Pillar 1, we would recommend that paragraphs 68 – 71 be revised as set forth in The Bond Market Association's May 2, 2001 comment letter.

### **W Factor and Repos, Reverse Repos and Securities Borrowing/Lending**

See Appendix 4.

### **W Factor and Credit Derivatives**

We do not see the purpose or justification for the 15% W factor for credit derivatives. We also think it is inappropriate for regulation to favor one form of contract (i.e. guarantees) over another (i.e. credit derivatives) when there is no legal, conceptual or other basis for such distinction.

- **H Factor (Haircuts on assets placed as collateral)**

### **Assumption of 10 day liquidation period**

The assumption (in standard supervisory haircuts) or the model parameter (in IRB approaches) of 10 business day liquidation period for assets posted as collateral is too long for "capital markets driven transactions (repos/reverse repos, securities borrowing/lending, margin lending, margin on derivatives) where daily mark to market and daily re-margining occurs. Internally, we assume a liquidation period of 5 business days under such conditions. Legal documentation and market conventions for these products provide for a shorter liquidation time period (see further discussion in Appendix 4).

### **Determination of Liquidation Time Period**

The time to liquidate collateral should be measured from the time of last satisfied margin call or default to the time the collateral is liquidated and not, as the New Accord proposes, from the time of last unsatisfied margin call to the time the liquidation proceeds are received. The value of what one receives from liquidation is independent of the period between the liquidation of the collateral and the receipt of the proceeds. During that interval the value of what one receives from liquidation is not dependent on changes in market rates. It is also credit risk to the counterparty to whom one has sold the collateral, not credit risk to the defaulted counterparty.

### **Haircuts and Volatility of Exposure**

Counterparty credit exposure takes into account both the current immediate exposure to a counterparty as well as the potential future exposure that would occur, should market rates changes or cash flows settle. It would be double counting therefore to take into account the potential change in counterparty exposure when ascertaining the appropriate haircuts for assets posted under a margin agreement for counterparty exposure.

- **Eligible Collateral**

#### **Cash Collateral**

We believe the definition of cash collateral should be expanded to include not only a deposit with the lending bank but also cash held by the lending bank's custodian or agent, or cash in an account at a triparty custodian or in a clearing house/depository.

#### **Physical Collateral**

We recognize that under the Foundation approach a bank will be able to use its experience to ascertain the effect of different forms of physical collateral on LGD. However, we believe that the definition of eligible collateral should be expanded in the Standardized and Foundation approach to include various forms of physical collateral (in addition to real estate) that objectively can be demonstrated to reduce LGD. We believe it is up to industry associations to pool data to demonstrate the beneficial effects various forms of physical collateral may have in reducing LGDs. When this can be demonstrated, the risk weights in the Standardized and Foundation approaches should be suitably adjusted

Thus we recommend the Committee give industry groups the time to assemble the data to demonstrate the risk mitigating benefits of different forms of physical collateral. We also recommend that the proposed New Accord be flexible and allow different forms of physical collateral to lower the risk weights in the future, when it can be properly demonstrated to do so.

We believe that a failure to incorporate the risk mitigating benefits of different forms of physical collateral will harm the macro-economy because it will cause an increase in the cost of lending by smaller banks and because it potentially will reduce the market for participation in various types of project finance and asset-based finance transactions.

We discuss **Project Finance** and **Asset-Based Finance** (e.g., equipment leasing, aviation financing) above.

- **Credit Derivatives**

In addition to suggesting that the W factor to be eliminated (see above) we have one additional comment regarding the treatment of credit derivatives in the New Accord. We do not believe that the inclusion of restructuring as a credit event should be required for capital relief.

- **Double Default**

While some or many banks may want to use the substitution method for some risk mitigants, we believe that banks should be given the option of calculating the potentially very low probability of a “double default” of the counterparty and the seller of the risk protection, without being subject to a “floor” of a minimum risk weight (i.e. a floor on a minimum PD). The methods and assumptions underlying the calculation of the probability of a double default should be subject to supervisory review.

If regulators will not have the resources to evaluate the matrix of correlations of default, for every bank that utilizes one, then we recommend that the industry propose and the Committee consider accepting, a broad reasonable method by which pairs of firms can be classified as having a low, medium and high correlation of probability of default

### **Bank Agency Securities Lending**

We generally support the inclusion of bank agency securities lending activity under the New Accord. This activity is not covered by the current Accord, but is covered by current US bank capital rules. Citigroup believes that inclusion of this activity is a first step towards creating a level playing field among bank agency securities lending activity in different jurisdictions.

However, we have serious concerns with the substantive capital treatment being proposed in the New Accord for this activity. The New Accord provides that banks that act as agents for customers in arranging securities lending transactions and “guarantee” its customer against the third party’s performance should treat that risk for capital purposes as if the bank was a principal counterparty to the transaction. We refer to our comments regarding the New Accord’s proposed treatment of securities lending transactions in Appendix 4, which we believe are equally applicable with respect to the agency lending activities of our banking subsidiaries. We also generally concur in the comments made by the RMA Securities Lending Committee in their May 31, 2001 comment letter.

Specifically with respect to bank agency securities lending, we are not sure we completely understand what is intended by the term “guarantee” of the customer for third party performance. Although in many jurisdictions, such as the US market, bank agent lenders typically provide some form of customer indemnification for damage or loss, the contractual provisions of such indemnifications often vary. We would recommend that this provision of the New Accord be clarified to refer to guarantee or indemnification by a bank agent against borrower default or borrower failure to return securities, not to include indemnification of a customer for risks associated with re-investment of cash collateral.

In order to provide for future changes in the securities lending marketplace and flexibility for the bank agency lending product, we suggest that consideration be given to what the appropriate capital treatment should be for bank agency securities lending if a bank agent chooses to provide its customer indemnification against cash collateral re-investment risk.



## Addendum to Appendix 1. Discussion on the Treatment of Corporate Credit Exposures

### Counterparty Credit Exposure

#### Economic Capital For Counterparty Credit Risk

A precise calculation of economic capital for counterparty credit risk will depend on two important choices:

- a) What is the definition of loss for which economic capital is being calculated? Is economic capital being calculated to cover only the potential loss due to default or is economic capital being calculated to cover the wider potential loss of economic value (i.e. the potential loss due to default as well as the potential decrease in value caused by potential changes in credit spreads and potential changes in counterparty risk ratings)?
- b) Over what time frame of loss is economic capital being calculated – one year, three years, the life of the portfolio?

Very different amounts of economic capital will be calculated, depending on the answers to these questions. In all cases, economic capital for counterparty risk should be derived from the potential loss distribution, which should be calculated by full and concurrent modeling of potential exposure and the potential causes of economic loss.

We were unable to discover the exact consistent definition of capital underlying the calibration of the Standardized, Foundation and Foundation risk weights in the New Accord. We are uncertain if the New Accord defined regulatory capital for loans from a default only or an economic loss perspective. We are also uncertain whether the new Accord consistently assumed a loss horizon of one year, three years or the lifetime of the credit exposure.

In any case, we recognize that the New Accord will not initially give us the option to use a full internal model of counterparty risk. Our focus therefore is on improving the calculation of the “**loan equivalent**” for counterparty risk, which will then be plugged into the Standardized or IRB approach.

#### Loan Equivalent

A loan equivalent for counterparty risk is the loan amount that requires the same economic capital as would be required given the full modeling of the potential loss distribution from counterparty risk. As a simple example: Assume that a plain vanilla, \$100 five year loan to a particular obligor requires \$1 of economic capital. Further assume that transacting a five year interest rate swap, of \$15,000 notional principal, with the same obligor would require \$2 of economic capital, as determined by full modeling. Under these conditions the loan equivalent of the \$15,000 notional principal, five year swap would be a five year loan with a principal of \$200.

## Shortcomings of Current Proposal

The essential shortcomings of the current method are:

- **Too little differentiation of potential exposure**

The current method measures the potential increase in the counterparty exposure of a single transaction by means of a set of fifteen add-on factors, specified for five broad categories of products (e.g., Interest rate, exchange rate, equity, etc.) and three broad tenor buckets. In reality the potential increase in the exposure of a contract will depend on many things specific to the transaction:

- The specific form of the contract (e.g., even within the broad category of currency exchange contracts, one should differentiate a forward FX, a European call option, a fixed/fixed cross currency swap with an exchange of notional, a floating/floating cross currency swap without an exchange of notional, etc.).
- The specific volatility and correlations of the underlying market rates (e.g., for a forward FX transaction: the volatility of each particular currency pair, the volatility of the yield curve associated with each currency in the exchange and the assumed correlations between changes in the spot FX rate and changes in each of the yield curves)
- The assumptions, if any, about long term mean reversion of rates.
- The remaining tenor of the transaction, which can be much more finely differentiated than the current Accord's three broad time buckets.

By these finer differentiations, thousands and potentially tens of thousands of credit exposure factors can be specified for each combination of form of contract, volatility of underlying prices and remaining tenor of transaction. However, even this greater specificity does not capture portfolio effects.

- **Too approximate a measure of portfolio effects and the effect of netting on potential future exposure**

The current method calculates the potential increase in the exposure of a portfolio in terms of the sum of the potential increase in the exposure of each individual transaction, thereby ignoring portfolio effects that tend to reduce exposure. The current approach only approximately takes the effect of netting into account. Indeed, given the limitation inherent of the current approach, netting can only approximately be taken into account.

## Current Industry Best Practice For Measuring Potential Credit Exposure of a Counterparty: The Counterparty's Exposure Profile.

The simplest measurement of the potential credit exposure of a counterparty would be a simple transaction method in which the potential exposure of each individual transaction with a counterparty was calculated and then simply summed to obtain the total potential

exposure of the counterparty. While this simple additive method is reasonable to use for a loan portfolio, it is woefully inadequate to measure the potential credit exposure of a portfolio of forwards and derivative transactions. The approach of the current Accord is essentially a modified form of this simple approach.

A more robust approach for measuring the potential credit exposure of a counterparty is to use Monte Carlo simulation to calculate a counterparty's Exposure Profile: the potential exposure to the counterparty, defined at a high confidence level, at a set of future dates over the remaining life of the portfolio of transactions with the counterparty.

The calculation of a counterparty's exposure profile has some similarities to the calculation of the VAR for market risk. Common to both is the use of Monte Carlo simulation to simulate changes in market rates to measure the potential changes in the market value of transactions. The essential difference between the two types of calculations is that the calculation of VAR typically assumes a static portfolio and a one or ten day simulated shock in market rates. In contrast, the simulation of a counterparty's exposure profile needs to be done over many future dates and must take into account how the counterparty's portfolio changes over time given the contractual a) setting of floating rates, b) the expiration of options and c) the settlement of cash flows. The calculation of the exposure profile must also take into account any legally enforceable risk mitigant agreements, such as netting.<sup>2</sup>

### **Why a high CL Exposure Profile is an Inappropriate Loan Equivalent for Economic Capital**

For the purpose of monitoring and limiting a counterparty's potential credit exposure, it is prudent to define and measure the counterparty's exposure profile at a high confidence level. However, for the purpose of calculating economic capital, the loan equivalent for capital is more reasonably defined as the **expected positive exposure profile** of a counterparty. The expected positive exposure profile is the average potential positive exposure, defined at each of a set of future dates, over the remaining life of the portfolio. Using the high confidence level exposure profile as a loan equivalent for capital would normally result in an extremely unrealistic amount of capital.

Consider the following, simple example. Assume for the purpose of measuring credit exposure a firm calculated each counterparty's exposure profile at the 99% confidence level. Assume further that the firm defined capital as a cushion to absorb unexpected losses at the 99% confidence level. If the potential exposure and the probability of default have zero correlation (which is typically the case) then treating the 99% CL exposure profile as the loan equivalent for capital will result in capital calculated at the 99.99% CL (i.e. capital is being assigned based on the one chance in a hundred potential loss that would occur given a one chance in a hundred potential exposure.)

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<sup>2</sup> For a fuller explanation of the calculation of a counterparty's exposure profile with a portfolio simulation technique see: E. Picoult, 1996, "Measuring Pre-Settlement Credit Risk on a Portfolio Basis", in Risk Measurement and Systemic Risk, Proceedings of a Joint Central Bank Research Conference, November 1995, Board of Governors of the Federal Reserve System.

In general there is no evidence of any systemic positive correlation between exposure and default. There is a narrow set of counterparties for which potential exposure is highly correlated with default (and well managed firms measure such exposure appropriately). But there is also a set of counterparties for which potential exposure is negatively correlated with default. For the firm as a whole the assumption of zero correlation between counterparty exposure and counterparty default is reasonable.

### **Expected Exposure Profile as Loan Equivalent for Capital**

Let us consider the pros and cons of using the expected exposure profile as the loan equivalent for economic capital with the following thought experiment. Our thought experiment will assume a default only perspective on economic capital.

Assume a large set of obligors, each with a varied number of forward and derivative transactions. Call this set of obligors “business X”. Assume we calculate the expected positive exposure of each obligor. Further assume we create a parallel portfolio of loans, to the same set of obligors, for which the magnitude of the obligor’s loan exposure over time is identical to the obligor’s expected positive counterparty exposure profile. Call the set of loan portfolios to these obligors “business Y”. In summary, the loan portfolio exposure of each obligor in business Y is specified to be identical to the expected positive counterparty exposure of each obligor in business X

The question is: How much economic capital should be assigned to business X and to business Y? If the amount of economic capital required by each business were identical, for all possible sets of counterparty portfolios, then indeed the loan equivalent for economic capital would be precisely the expected positive exposure profile.

Without going through a rigorous argument we can see that the economic capital for business X and business Y will be roughly the same. On the one hand, the exposure of a given obligor at a future date is uncertain for business X but certain for business Y. All things being equal that would tend to increase the amount of economic capital needed for business X relative to business Y.

On the other hand, not all obligors in business X will have exposure at the same time (because we assume business X has tight market risk limits and will tend to have counterparties with offsetting exposures) while all obligors in business Y have exposure at the same time. All things held constant that would reduce the capital for business X relative to business Y.

The result of this very qualitative reasoning is that the expected exposure profile is a plausible loan equivalent for counterparty exposure.

### **What Aspect of the Expected Exposure Profile Should Be Chosen?**

If economic capital is only needed to cover potential defaults over a one year horizon, then the loan equivalent for economic capital can be calculated from the expected exposure profile of each obligor, truncated at one year. From a default only-one year horizon perspective, the potential exposure beyond one year has no effect on potential loss.

If economic capital is only needed to cover potential defaults over a three year horizon, then the loan equivalent for economic capital can be calculated from the exposure profile of each obligor truncated at a three year horizon (assuming the profile even extends to three years).

**If we assume that default can occur at any time over the one (or three year) horizon, then we can define the loan equivalent for economic capital as the average over time of the expected positive exposure profile of each obligor.**

We have explained the context in which this is a reasonable assumption. As we were unable to discover the exact definition of capital underlying the calibration of the Standardized, Foundation and Foundation risk weights in the New Accord we can go no further in specifying whether the loan equivalent for counterparty exposure should be calculated on a default only vs. economic loss perspective or a one year vs. life time time horizon.

### Proposal for improving the current method

The current accord defines the credit equivalent exposure of a derivative transaction as the sum of its positive mark-to-market (CMTM) and an add-on (A). The add-on depends upon the type of derivative and upon its maturity.

|                   | ADD-ON FACTORS |             |          |
|-------------------|----------------|-------------|----------|
|                   | < 1 year       | 1 - 5 years | >5 years |
| Residual Maturity |                |             |          |
| Interest Rate     | 0.0%           | 0.5%        | 1.5%     |
| Exchange Rate     | 1.0%           | 5.0%        | 7.5%     |
| Equity            | 6.0%           | 8.0%        | 10.0%    |
| Precious Metals   | 7.0%           | 7.0%        | 8.0%     |
| Commodities       | 10.0%          | 12.0%       | 15.0%    |

This table of add-on factors should be revised to give a much closer representation of the expected positive exposure level over a one year (or up to three year) horizon. This may well require more detailed tables – for example, categorising foreign exchange transactions into low, medium and high volatility groups.

The current accord permits the CMTMs of transactions to be simply netted, whenever there is a legally enforceable netting agreement between the counterparties. However, the add-ons are only partially netted using the following formula.

$$A_{\text{Net}} = 0.4 * A_{\text{Gross}} + 0.6 * \text{NGR} * A_{\text{Gross}}$$

where  $A_{\text{Gross}}$  is the original gross add-on  
 NGR is the ratio of net CMTM to gross CMTM

Although this formula is significantly better than ignoring netting, it not does not give sufficient recognition to the material impact of netting on the huge volumes of derivative business conducted between the major internationally active banks. This should be recognized through modeling the expected positive exposure, as explained above.

This profile should then be averaged over the first year or the first three years – depending upon which maturity assumptions are being made in setting the risk weighting factors for loans.

The use of such exposure models should be sanctioned, whether or not the institution proceeds to an IRB approach. This is because they can also be used in the Standardized approach to calculate the exposure that is then subjected to the same risk weights as other exposures to obtain the minimum regulatory capital.

As regards netting under the Standardized Approach, paragraph 178 states that “The Committee plans to continue work in this area including the methodology for calculating the net-to-gross ratio for transactions that are subject to netting agreements and collateralised.” The simplest way to do this would be to model potential future exposure as described above, taking into account both netting agreements and margin agreements.

As regards netting under the Internal Ratings Based Approach, paragraph 117 states that “the Committee will be undertaking further work in the Consultative Period to evaluate the feasibility of own-estimates of PFE, and the requirements which would be needed to underpin such as approach.” As stated above, with the exception that it should be the expected positive exposure and not a high confidence level potential future exposure, such models do not require any further conceptual leaps beyond those already incorporated in market Value at Risk models.

Although under the New Accord the ceiling of 50% on the counterparty risk weights has been removed, this will not affect investment grade banks and A-rated corporates, but only the more lowly rated counterparties. What we propose will certainly be more risk-related than what is in either the proposed in the New Accord or is the current Accord.



## APPENDIX 2

### Discussion on the Treatment of Retail Exposures



We have several concerns with the New Basel Capital Accord as it relates to credit risk for retail lending. Primary concerns with the proposal are:

- 1. Definition of credit capital and the purpose for credit capital**
- 2. Rigidity/inflexibility of the New Accord approach as it applies to retail credit**
- 3. Absolute and relative credit risk levels of retail credit portfolios**
- 4. Detail and scope of Pillar 3 disclosure requirements**

Before discussing in detail the concerns listed above, we provide some background on retail lending at Citigroup. The Global Consumer Group of Citigroup manages over \$270 billion in retail loans in 47 countries. We currently track over 320 separate retail loan portfolios that range in size from under \$1 million in assets to \$85 billion in assets. In most of the countries in which we lend money, we provide a full line of consumer lending products.

Over the last two years, the Citigroup Consumer Credit Group, has been developing an internal economic capital approach. Because of the large size/exposure of the retail portfolios and the vast differences in credit risk and credit risk management across the portfolios, economic credit risk capital has been an important project at Citigroup.

#### **Definition of credit capital and the purpose for credit capital**

The underlying assumption at Citigroup for the purpose for credit risk capital is to provide a buffer to maintain solvency in the event of **unexpected** credit losses. Expected credit losses in retail lending are met either through the general allowance for future loan losses or through spreads established through initial pricing or by re-pricing. It is important to note that most revolving retail credit product terms allow the lender to re-price products or change terms should the need arise.

Citigroup's largest retail portfolio is the North American bankcard portfolio with over \$84 billion in outstandings (excluding Associates card portfolio) and with an additional exposure of \$245 billion in unused lines. In developing the internal credit capital parameters, we have determined that the ratio of Unexpected Loss (UL) to Expected Loss (EL) on this portfolio is only 0.82 (UL = 1 year at 0.9997 confidence interval). Requiring Citigroup to hold credit risk capital for expected credit losses would more than double the capital required for UL only and put Citigroup at a distinct disadvantage vis a vis its non-bank competitors in many high EL retail products: credit cards, sales finance, and personal installment loans to list three.

Citigroup's current internal credit risk capital methodology aims for a capital adequacy level of an AA rated bond or enough credit capital to withstand a 3/10,000 net credit loss event. The amount currently allocated to credit risk capital for the North American Bankcards portfolio represents four standard deviations of annualized net credit loss. Requiring North American Bankcards to hold Tier 1 credit capital for both EL and UL would represent approximately nine standard deviations of annualized net credit loss which is surely too much for a minimum credit capital requirement. Assuming a minimum credit capital requirement of a 99.5% confidence level over a one-year time period. The pre-tax spread for North American Bankcards after net credit losses, cost of funds, and operating expenses was close to the industry average of 3.0% for 1Q-2001. This pre-tax



margin for 1Q-2001 is about equal to four portfolio standard deviations of the 12 years of historical monthly net credit loss data.

Another capital definition issue for retail credit is the proposal to provide for expected operational losses in Tier 1 capital. Most of the operational losses for retail credit come from fraud transactions on cards. Worldwide Citigroup 1Q-2001 fraud losses on \$60 billion of sales were less than 0.1% of sales. For retail credit, our experience indicates that operational losses are more than adequately covered by existing interchange and merchant transaction fee structures and to require substantial economic credit capital against these losses would be unnecessary.

### **Rigidity/Inflexibility of the New Accord approach as it applies to retail credit**

The suggested methodology using  $PD \times LGD \times EAD = EL$  raises many issues for Citigroup retail credit. The first issue is the admonishment that advanced banks must use the  $PD \times LGD \times EAD$  approach instead of the EL approach. Currently at Citigroup we use a simple EL approach where we utilize a minimum of ten years of quarterly historical data. The EL used to calculate the UL is either the 10-12 year actual mean net credit loss rate or a weighted average of the 10-12 year mean and the most recent quarter. If the most recent quarter is less than the 10-12 year mean then the mean is used. If the most recent quarter is above the mean, then a weighted average where both the 10-12 year mean and the current quarter are weighted at 50%.

We thought it was critical in calculating UL to use a conservative, credit cycle neutral EL as the basis for UL. Obtaining 10-12 year history for PD, LGD, and EAD was impossible for most portfolios given system and database constraints. Using the separate PD, LGD, and EAD components makes it very difficult to combine portfolios. The relationships among PD, LGD, and EAD are very different for revolving versus installment portfolios, for secured versus unsecured portfolios, for guaranteed versus non-guaranteed portfolios.

Setting a rigid definition of default (that is a carryover from the corporate credit) forces the LGD and EAD components of the EL equation to become statistical placeholders rather than true risk management tools. Because most consumer unsecured accounts are written off on or before 180 days, the key drivers for LGD are the recovery rate and the ratio of principal balance owed to accrued (or unearned) fees and interest.

Another problematical adjustment to LGD are bankruptcies that can come from not yet defaulted accounts. For unsecured portfolios in the U.S., up to 10% of the total gross dollar loss in any month can come from bankrupt accounts that never were in default.

There are major differences in the relationships of PD, LGD, and EAD across portfolios. These differences arise from accounting differences, of loss recognition, from the nature of the collateral (secured versus unsecured) and from the differences in account management practices: account closure, account collection, account re-write, account renewal, and account extension.

There is no constant relationship between PD levels and LGD levels. In many unsecured portfolios where there is early write-off at 120-180 days past due, there is no relationship. That is once an account has gone 90+ days past due, the probabilities of

loss are random. What varies is the amount of recovery and the probability of filing for bankruptcy (which lowers the chance for recovery).

For secured retail lending, the LGD is more dependent on the value of the collateral rather than on borrower characteristics for both the probability of loss given default and the amount of recovery (loss severity) given a loss.

Building separate, historical, PD times LGD times EAD matrices for 320 retail portfolios would be a massive undertaking with the result being no better for estimating either EL or UL.

In order to obtain statistically valid sample sizes and in order to deal with the risk diversification effects of lending to 100 million retail customers in 47 countries across 320 product segments, Citigroup feels that it is imperative that we be able to aggregate portfolios.

This aggregation and regrouping of portfolios is a dynamic process as the organizational structure of both credit risk management and the economic capital allocation process evolves. EL and UL computed from EL allows Citigroup to compute and allocate economic credit capital that matches both the imbedded credit risk as well as coincides with the actual credit risk management organizational structure and practice. That is, we do not have to set up two separate systems one for risk management and one for economic capital determination.

### **Absolute and relative credit risk levels of retail credit portfolios**

The implicit assumption in the New Accord is that the credit risk of a retail portfolio can be determined by the EL (driven by PD times LGD times EAD) based on borrower segmented risk bands. The higher the EL the more risk imbedded in the portfolio. That is: the higher the EL the higher the UL. For many retail portfolios this simply is not true.

In fact, given a large, diverse, mature and stable portfolio from a large and stable market generally the higher the EL the lower the UL is, as a percent of the EL. A good example would be Personal Installment Loan portfolios sourced from a network of established national branches. Citigroup has 10+ years of historical data for two such portfolios. Both are over \$6 billion in outstandings with long and stable histories. Both have EL values above 3.0%. However, both also have portfolio standard deviations that are less than 35% of the EL.

The New Accord assumes that best way to determine the imbedded risk of a retail portfolio is by segmenting the borrowers within the portfolio using borrower credit risk characteristics. The imbedded credit risk of the total portfolio is then the sum of the risk borrower segmented risk bands.

However, using only borrower characteristics ignores important, external characteristics. The most important external characteristic is size. For example, the Citigroup North American Bankcard portfolio has over 43 million accounts representing a 21% market share of a \$450 billion market, from 85 million households with bankcards, across the U.S. and Canada.



Because of the vast size of the total market, as well as the size of the Citigroup portfolio, the variance in losses is statistically limited. Over the past twenty years the net credit loss rates for either the North American total Bankcard market or Citigroup North American Bankcards have not been more than two standard deviations above or below the mean.

Contrast the U.S. with a much smaller national market like Panama where Citigroup has only 45,000 accounts. Even with identical borrower characteristics, because of the higher volatility of Panama due in part to the small size of the market, the imbedded credit risk is much greater for a Panama Bankcard portfolio with 21% of the Panama total market than for a bankcard portfolio with 21% of the North American market.

A second non-borrower risk characteristic is the maturity of the credit market and the maturity of the credit product in a country or region. Markets where there is a well-developed and well-established infrastructure for underwriting and managing retail credit will be less risky than developing markets. The presence of established credit bureaus with complete, accurate and timely data means far less risk. Presence of third party providers of information, scoring, communication and other account management technologies means less risk. The presence of retail borrowers with established credit histories and developed credit behavior patterns reduces risk.

A third non-borrower characteristic is the maturity and capabilities of the lender. If there are established and successful business paradigms with a track record of success during previous difficult times, the risk is less. If the lenders are operating on the margin, making small adjustments to improve a successful business, there is less risk than if the lenders are breaking new ground or entering into new markets with new products using untested systems. A broad and deep pool of credit risk managers with backups to manage the business will also mean less risk.

Because of the vast differences in retail portfolios, assumptions made in New Accord such as: retail credit is 50% as risky as corporate credit or that the pair-wise default correlation for all retail is assumed at 8% are very likely to be not even close for any particular bank's retail credit portfolio. Ratios such as total capital should be twice Tier 1 minimum capital where Tier 1 capital includes both EL and UL also will not work on a "one size fits all" basis.

For example, Citigroup holds \$17 billion in student loans most of which are guaranteed by the U.S. government. Under our current methodology, reflecting the guarantee, we allocate a very small amount of credit risk capital for this \$17 billion exposure. Any "one size fits all" ratio that would fit guaranteed student loans most likely will not fit well for unsecured consumer sales finance.

The pair wise correlations for Citigroup's large North American retail portfolios that have millions of borrowers spread across thousands of miles of geography in thousands of communities are all less than 1.0%; far lower than the 8% 'average' suggested.

While the risk weights put forward in the Basel paper are not inconsistent with Citigroup's lower EL portfolios such as residential mortgages or small business, the risk weights for higher EL portfolios (unsecured consumer) result in capital levels that are two-to-three times above what the internal economic capital models indicate.

### **Detail and scope of Pillar 3 disclosure requirements**

The New Accord proposal for Pillar 3 disclosure would be very onerous for Citigroup retail credit. To develop, extract and maintain PD and LGD matrices by risk band segments for 320 portfolios in 47 countries would be a massive and expensive undertaking.

The fixed segmentation bands as proposed will not integrate into our current risk management structure. Currently, accounts are managed on a dynamic basis rather than on a fixed segment basis. Most decisions across the account life cycle are made and executed according to rules, systems and scores based on information available at the time of the decision. Systems, scores, rules, data, strategy and tactics all change from day to day and from month to month. Decisions are made based primarily on the freshest information available and not on older information. Citigroup uses hundreds of scorecards built for different purposes using different account/application samples. These scorecards are not aligned (calibrated) to each other.

Interpreting (or explaining) the PD by LGD by EAD matrices would require considerable time, effort and diligence even for the most sophisticated retail credit analysts. Disclosing such detailed results would do little to benefit 'market transparency' or to improve system soundness in relation to the enormous cost and effort involved.

Within Citigroup, we know of no consistent way we could develop PD/LGD/EAD risk band matrices across countries, products, and target markets. To develop a set of consistent rules for risk bands that could be applied across all banks around the world would appear to be an impossible task.



## APPENDIX 3

### Discussion on the Treatment of Operational Risk

Operational Risk management is a complex evolving area, and key elements of the regulatory capital framework such as the alpha, beta, and gamma factors and the details of LDA still need to be specified. At this time, our ability to assess the impact on our total regulatory capital requirement and comment accordingly is quite limited without this information, but we believe that the calibration deviates from our economic capital calculations and is fundamentally flawed. We welcome any additional consultative materials that the Committee might provide this year. The Committee should explicitly provide an extended timeframe for the development of the Operational Risk framework and parameters. We support the introduction of the Internal Measurement Approach (IMA), and see benefits in the inclusion of an additional simplified variation of IMA. We wish to see a clear route to the full LDA approach defined within the current proposal. We also suggest that the Committee seriously consider including Operational Risk only as a component of Pillar 2.

### **Scope and definition**

The Pillar 1 regulatory capital charge for Operational Risk should cover potential direct measurable losses due to operational loss events, but not cover indirect losses such as opportunity costs. Indirect losses can not be measured with precision; they should either be covered through the calibration of the overall accord for all risk types (market, credit, and operational) or excluded entirely to the extent that they do not typically involve rapid and sudden deterioration of the type that is a threat to the depositors.

In general, capital should cover unexpected operational losses. Capital should not be required for expected operational losses in those cases where product pricing is expected to cover such losses. We believe that only highly unusual business circumstances would find us pricing new business transactions at levels below expected operational losses, and the evidence of this is the profitability of our product lines. If a Pillar 2 analysis indicates that a firm is seriously deficient in managing its business in a way that ongoing pricing or other approaches cover expected losses (EL), then the deficiency should be dealt with using Pillar 2 mechanisms.

The BIS and local regulators should use extreme care to avoid imposing regulatory definitions that 1) arbitrarily invalidate decades of data such as Citigroup's extensive loss in the event of default history on commercial loans, 2) require us to incur significant expense to define and capture data in two materially different ways, or 3) do not align well with how we manage risk.

The stated definition of Operational Risk is broad enough to cover losses that we are capturing and capitalizing elsewhere. Care should be taken to eliminate the recognition and capitalization of risks under the Operational Risk rules that are clearly capitalized under market and credit risk rules. The "W" factor represents one clear case of potential duplication. The "W" factor should be modified if not completely eliminated.

The definition of gross income should be tied explicitly to the firm's own GAAP reporting standards. We wish to avoid a costly compliance requirement to create a unique version of our P&L statements for purposes of calculating and reporting regulatory capital requirements.

## **Calibration**

Citigroup does not expect to use the basic indicator approach except perhaps in limited circumstances where cost and practicality make it preferable, yet the beta and gamma factors for the Standardized and IMA have not been provided. Therefore, Citigroup does not have enough information to respond to the issue of calibration of the two more advanced approaches.

We are offering comments on the calibration of the basic indicator approach, on the assumption that the regulators see it as a benchmark level from which the calibration of the Standardized and IMA approaches will be developed. The proposed alpha at 30% of gross income is too high for a large diversified firm such as Citigroup. It produces a capital requirement of \$17.7 billion (excluding Citigroup's insurance subsidiaries) which is well in excess of our economic capital requirements for this risk type.

The stated benchmark for Operational Risk capital at 20% of total capital requirements is too high for a global, diversified institution. Our economic capital for Operational Risk is substantially less than this when calculated for the risk type in isolation, and substantially less again when calculated on a contributory basis assuming a low correlation between Operational Risk and other risks. Operational Risk is assumed to be substantially less than perfectly correlated with market and credit risk and the regulatory requirements against it need to be considered on a contributory basis. Note that since operational loss events are assumed to have a relatively low correlation both within the risk type and across risk types, the materially different conclusion that the contributory view generates is important and perhaps a point missed by the respondents to the earlier surveys on which these parameters were based.

If the benefits of increasing sophistication for credit risk capital calculations will be phased in for the internal rating based approach during the first two years (benefit of IRB can be no more than 10% of Foundation approach) then the implementation of a Pillar 1 charge for Operational Risk should be introduced in similar phases. Otherwise, there would be a period during which Citigroup might be required to carry capital in excess of the BIS' intended standards for soundness.

## **Scale**

The proposal indicates that the level of Operational Risk in a bank will be treated as linearly proportional to scale, at least for the basic indicator and Standardized approaches. The relationship is decidedly non-linear, and so the proposed capital factors introduce a bias against large firms who can typically have better controls due to economics of scale. Larger businesses might have higher EL on an absolute basis, but not on a relative basis. Since large firms can have efficiencies with regard to managing Operational Risk, the level of mis-calibration is much worse for large diversified international financial institutions such as Citigroup than for others.

Some studies have shown that the relationship between size of loss and size of bank is best fitted, but not too well fitted, by a power formula in which the power is considerably less than one. As regards being an increasing function of income, it is clear that as banks increase in size, there is a point at which it becomes cost efficient to introduce

extra controls, which will actually reduce risk. The obvious step is the introduction of computer systems, but clearly duplication of computer systems (redundancy) and the introduction of straight through processing will also lead to reductions in Operational Risk.

The calibration of the scaling factors - alpha, beta and gamma - will be based on an "average" bank. Unless efficiencies of scale are taken into account, it is likely that this calibration will severely disadvantage large, diversified banks. One solution for this, in addition to using non-linear scaling factors, would be to allow an adjustment to the minimum capital charge based on a qualitative assessment of the various controls over Operational Risk.

### **Diversification**

Once capital is defined for each business unit, then a simple summation of the results implies that losses in one unit are 100% correlated with losses in every other business unit. This is extremely unlikely and not consistent with the objective of making the new accord more risk sensitive. There is no recognition in this for running a well diversified bank. Assuming independence between the various business units would be much closer to the true state of affairs but a more conservative intermediate assumption about correlation would be acceptable.

### **Qualitative factors**

Qualitative factors are very important to Operational Risk assessment and the principles described for assessing the soundness of an individual institutions' risk management practices within the context of Pillar 2 have merit. In addition, a qualitative adjustment factor, which might be either favorable or unfavorable, should be incorporated into the calculation of the Pillar I capital charge calculation under both the Standardized approach and IMA. The regulatory approach should reflect the quality of the Operational Risk management and control processes in place and use the bank's own assessment process subject to satisfaction of minimum standards. The assessment processes that are actually used internally to manage the firm are the most relevant. We seek to avoid the burden of complying with a redundant assessment process, imposed on us as a regulatory requirement, that would be costly and not add to our internal management process.

### **Use of external data**

The only criteria for applying the IMA and LDA approaches should be the quality and relevance of the available data set. The regulatory framework should allow for the use of external data of suitable quality from either publicly available sources or from industry consortium efforts. Participation in a loss data sharing consortium should not be a precondition for use of the more advance approach.

### **Standardized Approach**

We support the suggestion in the consultative paper of a separate business line for agency services (custody, corporate agency and corporate trust).

### **Internal Measurement Approach (IMA)**

The regulatory capital regime should align as closely as possible with economic capital and sound risk management practices. In this context, the structure of the IMA falls short because of its orientation to effect rather than risk or event categories, which are more useful for internal risk management purposes. A risk (event) based categorization scheme is also preferable because there is no splintering of the effects of an event.

Two businesses may have different strategies with regard to minimizing their EL but have the same level of unexpected losses. In this case different gammas would be appropriate. Although there is no easy solution to this outside of the full LDA, care should be taken to allow for a reflection of these differences through the Risk Profile Index (RPI).

A simplified variation of the IMA approach should be added as an additional option to enable firms to move more quickly into an approach that is risk sensitive. Under this intermediate IMA measurement approach the only requirement would be the level of expected loss by line of business (not by loss type). In such a methodology, expected losses for each line of business would be multiplied by a gamma for each line of business. This proposal is risk based and much more likely to be achievable in nearer-term than the IMA approach under which estimates of gamma are required not only by line of business but by loss type within that business. This option would limit the difficulties related to data collection and enhance the ability of a firm to achieve the data sufficiency necessary to use Option 3.

There is no mechanism to adjust the gammas for the internal control environment of the firm. Ultimately the gammas need to be developed on a bank specific basis by each qualifying bank, subject to supervisory criteria and review make the calculation of Operational Risk both risk sensitive and directionally consistent with economic capital.

A floor is anticipated for banks moving from the Standardized approach to the IMA. This is a deviation from risk based measurement. If the internal measurement approach is viewed as flawed, then the bank should not be allowed to implement it. Risk capital properly measured should, like economic capital, not be bounded by a non-risk sensitive parameter such as the proposed floor.

### **Loss distribution Approach**

The Accord should provide a more concrete framework for the implementation of a loss distribution approach. Some lines of business may be able to implement LDA sooner than others, and this should be allowed and encouraged by a much more detailed formulation of the requirements within the current Accord. While the Committee's opinion that this will be difficult to achieve initially is valid, we consider it important that the accord define the LDA so that when the industry is ready, it can enter this stage without then waiting for the next major revision of the accord.

### **Risk Transfer and Mitigation**

Treatment for the use of Operational Risk Insurance to mitigate unwanted risk needs clarity. At present, the New Accord does not appear to allow for the effective use of

Operational Risk mitigation, and where it does, it seems to be of very little value. A related issue is whether outsourcing an operational activity is considered an effective mitigant, and if so how the reduction in required capital would be derived under the various proposed approaches.

Mechanisms need to be developed and incorporated to reflect mitigation of Operational Risk through insurance or possibly other risk transfer techniques directly in the Pillar 1 charges. This is fundamental to the objective of risk sensitivity. Similar lines of business at two different banks might have similar expected loss profiles but different unexpected loss profiles because one insures against tail events. When economical, the transfer of risk through insurance should be desirable from the perspective of the banking system overall.

Further, Operational Risk Insurance should have the potential of effectively converting one type of risk (operational) into another type of risk (say, credit) under such an insurance policy, in a way that is arbitrage-free. For example, if the cost of credit risk were much lower in capital terms than Operational Risk, then one would have an incentive to substitute risks. The same will be true for a potential market in Operational Risk derivatives.

### **Geographical Issues**

Citigroup's business has significant geographic scope; care must be taken to ensure that the alpha, beta, and gamma factors do not unfairly miss important regional factors, particularly in the emerging markets. Data for this will be a challenge, but where data exists a regional dimension should be reflected in these multipliers.

Care must be taken to ensure that the strengths of our local banking franchise in emerging markets is not diminished because of a competitive disadvantage versus local banks who may be governed by regulatory regimes that may not adopt Basel II.

### **Pillar 3**

Operational loss disclosure should be "high-level" and not include specific events.

### **Other**

The proposal requires regular reviews of the Operational Risk management process and measurement methodology by internal audit. Our internal audit approach establishes audit frequency based on the relative risk of the specific business, process or function subject to audit. We believe the frequency of internal audit coverage of Operational Risk management and measurement processes should be risk-sensitive also.

## APPENDIX 4

### Discussion on the Impact on Broker-Dealer/Securities Businesses



Although the stated goal of the New Accord is to create a more risk-sensitive capital regime for measuring credit risk, not to raise or lower aggregate regulatory capital requirements, we believe that the impact of some of the New Accord provisions as they relate to our securities businesses will be to burden these activities with a significant net increase in capital requirements in comparison to current levels. In particular, we have serious concerns that the proposed treatment of securities financing transactions -repo and reverse repo transactions, securities borrowing and lending transactions, buy/sellback and sell/buyback transactions, prime brokerage and margin lending- set forth in the New Accord will adversely impact the stability and liquidity of these vitally important markets. We are also concerned that the capital treatment of these types of financing transactions proposed in the New Accord may be applied differently in different jurisdictions, and ultimately lead to competitive inequities in capital treatment between securities financing businesses conducted in Citigroup's securities subsidiaries in comparison to similar businesses operated by competitors that are not, or not owned or controlled by, banking organizations subject to the New Accord's capital requirements.

### **The Securities Financing Markets**

The fixed income and equity securities financing markets fulfill several vitally important functions for the domestic and international markets. First, these markets are often used by financial institutions, including banks and securities firms, to finance their day-to-day operations and securities inventories. In comparison to unsecured funding methods, the securities financing markets often offer a more cost-effective alternative for funding positions. These markets are also a principal tool by which financial institutions finance their customers' investments in debt and equity securities. Securities lending and borrowing transactions facilitate market participants' trading and hedging strategies, and help ensure that securities are available to borrow to avoid settlement failures. Repos offer cash investors a flexible money market investment vehicle. Repo and reverse repurchase transactions are used by certain central banks, including the US Federal Reserve and the European Central Bank, as part of open market operations that implement monetary policy. In short, these activities are critical to the liquidity of the financial markets. Banks and securities firms often provide liquidity to these markets by serving as intermediaries, running "matched books" of repo/reverse repo and securities lending/borrowing transactions. As a committee of banking and securities regulators concluded in a July, 1999 report, "[t]oday, securities lending markets<sup>3</sup> are a vital component of domestic and international financial markets, providing liquidity and greater flexibility to securities, cash and derivatives markets."<sup>4</sup>

Certain market practices and conventions are followed in the securities financing markets in most parts of the world which have helped to make these markets stable and efficient. These practices include the daily marking to market of open transactions to

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<sup>3</sup> In this context, securities lending is intended to include repurchase agreements, securities loans and sell-buyback arrangements.

<sup>4</sup> Technical Committee of The International Organization of Securities Commissions (IOSCO) and Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten countries, "Securities Lending Transactions: Market Development and Implications", July 1999 (the "Securities Lending Study").

determine net exposures; the daily making of margin calls (with satisfaction generally required on a same day or next day basis) to ensure that any unsecured exposures that have arisen through movements in the value of transactions are re-collateralized; and the use in a large number of markets of standard documentation published by industry groups and associations. The standard documentation establishes a legal framework of the parties' rights and obligations in all transactions falling within its scope. Such documentation generally includes specified events of default or termination (including bankruptcy or insolvency of a counterparty); permits the non-defaulting party to accelerate, terminate and/or close-out all transactions, liquidate collateral or other property held by that party, and/or net gains and losses of all transactions so that a single net sum payable by one party to the other is determined; and are often supported by legal opinions or memoranda regarding their enforceability, even in the event of a counterparty bankruptcy or insolvency. In many jurisdictions, some or all types of securities financing transactions enjoy protected status under bankruptcy or insolvency laws that formally recognize parties' rights to exercise remedies promptly.

These standard market practices and conventions, as well as industry standard documentation, all contribute to a robust legal and risk management environment. That is probably the reason that our loss experience in these markets has been so minimal in comparison to the size of our activities. To the best of our knowledge, the only loss in the last several years relating to the securities financing business experienced by the predecessor of one of our subsidiaries totals only slightly more than 0.01% of Citigroup's shareholders equity as of December 31, 2000.

### **The New Accord Treatment of Securities Financing Transactions**

The New Accord essentially treats securities financing transactions as credit transactions (i.e. applying a 100% credit conversion factor)<sup>5</sup> as if there is credit exposure for the full notional amount on each "leg" of the transaction. According to the New Accord, credit exposure is viewed to exist when a financial institution lends securities or posts securities as collateral (such as in a repo or a securities lending transaction), and when an institution's exposure to a counterparty is secured by collateral (such as in a securities borrowing transaction or a reverse repo). The New Accord then permits the credit exposure in these transactions to be mitigated by the effects of collateral and perhaps netting, in accordance with the credit risk mitigation proposals.

The New Accord defines a "collateralized transaction" as one in which banking organizations have a "credit exposure to another party by virtue of cash or financial instruments lent or posted as collateral" and "the exposure or potential exposure is hedged in whole or in part by collateral posted by the counterparty".<sup>6</sup> Although securities financing transactions share many of the same characteristics as collateralized credit transactions, they are also unique in that they are generally "two-legged" as opposed to "one-legged" transactions. Unlike a traditional secured credit transaction where funds are loaned against a pledge of collateral, each "leg" of a securities financing transaction is entered into at the same time, in consideration of each other, forming a part of a whole transaction. Both parties have bilateral obligations to the other- both during the transaction, as part of the mark-to-market margining process and

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<sup>5</sup> See paragraph 44 of the New Accord.

<sup>6</sup> See paragraph 64 of the New Accord.

at the end of transaction, to re-transfer or return exchanged assets (either securities vs. cash or securities vs. securities). We believe that unlike a conventional “collateralized credit transaction”, the true measure of credit exposure in a securities financing transaction is the net difference at any point in time between assets exchanged by the parties, be they securities or cash.

We believe a fundamental flaw in the proposed New Accord treatment of securities financing transactions is that it “de-composes” the transaction into two parts and treats each as a “collateralized transaction” in an attempt to fit the “square peg” into the “round hole” of traditional secured credit transactions. The consequence of this “de-composition” approach, where each leg of the transaction is treated as a separate collateralized transaction, is that the mitigating effects of collateral and netting are undercounted. Under the New Accord proposal, except in the case of the limited government “repo-style” transactions (discussed further below), collateral “haircuts” are applied to each side of a securities financing transaction (even where cash rather than securities are received) in an independent and additive manner, without taking into account any correlations between the assets exchanged. Imposition of a “W” factor as a “floor” charge even for fully-collateralized transactions further exacerbates the problem for securities financing transactions. And, it is not entirely clear from reading the New Accord whether the credit risk mitigation effects permitted for netting arrangements applies to securities financing transactions.

We believe that as in other aspects of the New Accord’s credit risk mitigation proposals (see Appendix 1 of our response, “Discussion on the Treatment of Corporate Credit Exposures”, Section III, “Credit Risk Mitigation”, discussion of “Double Default”), another serious flaw in the treatment of securities financing transactions is that it does not adequately take into account “double default” risk. For a banking organization to suffer a loss in connection with one of these transactions, there must be a failure of *both* the counterparty and the securities collateral involved in the transaction. Although the New Accord stipulates as a condition of recognition of collateral that there be no positive correlation between the counterparty and the security, it fails to take into account the lesser likelihood of loss in the case of an absence of such positive correlation.<sup>7</sup>

### **Impact of New Accord Treatment on Securities Financing Businesses**

Citigroup believes that the net impact of the New Accord’s proposed treatment of securities financing transactions is a significant increase in risk-weighted assets against which capital must be maintained for these businesses. In comparison to today’s treatment under current US bank capital rules, we think that Citigroup will benefit from a decrease in risk-weighted assets for reverse repo transactions (due to the decrease in some counterparty risk-weights and the recognition of additional types of eligible collateral) and margin debits (currently 100% risk-weighted assets). However, this

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<sup>7</sup> “The effective exposure [loss given counterparty default] will also reflect any correlation of price movements in the collateralised position and in the collateral. Positive correlation between the two can provide a kind of automatic cushion against an increase in exposure if both prices follow broadly the same pattern....” Bank for International Settlements Committee on the Global Financial System, “*Collateral in the Wholesale Financial Markets: Recent Trends, Risk Management and Market Dynamics*”, March 2001 (the “*Collateral Study*”).

decrease is more than offset by the large increases in risk-weighted assets in connection with repos and securities loans (liabilities which attract no risk-based capital charges today), loan vs. pledge and borrow vs. pledge transactions (which also attract no risk-based capital charges today), and the securities borrowing transactions (due to the fact that collateral will no longer be fully recognized due to haircuts and “W”). It is difficult for Citigroup to evaluate the potential impact of the new Accord’s treatment of securities financing transactions on our European subsidiaries that are subject to the European Capital Adequacy Directive (“CAD”), as it is not clear whether the New Accord treatment of these transactions is intended to cover transactions in the trading book or simply the banking book. However, we believe that the effect of the New Accord will be a significant increase in required capital for European banks and investment firms. We advocate that securities financing transactions should continue to benefit from the more favorable capital treatment accorded to trading book transactions.

The significant increase in risk-weighted assets and therefore capital is not only a problem on an absolute basis, but is also of serious concern to Citigroup due to its potential competitive implications in certain of the geographic areas in which Citigroup operates. With respect to the US market, many of Citigroup’s principal competitors in the securities financing business are US-based securities firms that are subject to the Securities and Exchange Commission’s capital regime. Citigroup’s broker-dealer subsidiaries, such as Salomon Smith Barney, are subject to the SEC’s capital regime but may also be subject to the New Accord as adopted by the US federal banking supervisors as a consolidated subsidiary of Citigroup (assuming it is determined that the New Accord will apply at the financial holding company level). It is our view that the SEC capital charges for the securities financing business are generally lower than those we believe we would incur under the New Accord. Although the SEC’s regulatory capital regime is quite complex, the treatment of securities financing transactions tend to impose charges based on transaction deficits over a certain level and permit more liberal netting of transactions with the same counterparty to reduce these deficits. We believe the result will be that Citigroup will be required to maintain a much larger amount of capital to support its securities financing than its significant US competitors.

Depending upon how the New Accord is implemented in Europe through a new CAD and assuming the New Accord treatment of securities financing activities is applied equally to trading book activities of banks and investment firms, Citigroup may still suffer significant competitive disadvantages in comparison to its major European-based competitors. Although Citigroup’s European subsidiaries would be subject to CAD on an equal basis with other European banking and investment firms, as consolidated subsidiaries of Citigroup they may remain subject to US rules at the financial holding company level. To the extent that the US rules treat securities financing activities as “banking book” activities, and the new European directives permit a more liberal treatment of these same transactions under the “trading book” rules, Citigroup will be forced to maintain more capital in connection with these businesses than its European-based competitors. Perhaps consideration should be given to treating securities financing transactions as part of the trading book rather than the banking book, given their unique characteristics and relative importance to the trading markets.

In short, Citigroup fears that imposition of the New Accord proposals for securities financing transactions will not only burden market participants with higher aggregate capital levels, but may create a vastly uneven competitive playing field that may force

major firms such as ours to seriously curtail our participation in these markets, thereby adversely affecting market liquidity for all participants and potentially increasing systemic risk.<sup>8</sup>

### **Proposed Alternative Capital Treatment of Securities Financing Transactions**

We believe that a more appropriate and risk-sensitive capital framework for securities financing transactions is one that recognizes their hybrid nature with characteristics of both collateralized secured lending transactions and trading transactions critical to securities market liquidity. We also believe that given the relative efficiency and stability of these markets, the historically low loss experience, and the market discipline and risk management processes principally employed, that there is no reason to dramatically change the capital treatment in such a way that results in much higher aggregate capital requirements for these businesses.

Therefore, Citigroup advocates a capital treatment for securities financing transactions that:

- calculates credit exposure as the differential between the mark to market values of the assets exchanged (if positive);
- permits netting of transactions with the same counterparty on a portfolio basis to determine the net credit exposure;
- applies the counterparty risk-weight to the net counterparty credit exposure; and
- does not apply collateral haircuts ("H") or a "W" factor<sup>9</sup>.

We believe that this capital treatment should apply to securities financing transactions that meet the following criteria (such transactions, "qualifying transactions"):

- are marked to market daily (both transactions and collateral) to determine net exposures;
- are subject to daily margin calls and prompt re-margining;
- involve securities that are eligible collateral under the New Accord or are otherwise eligible for the trading book;
- are capable of being terminated and collateral liquidated in no more than 5 business days;
- involve securities that are settled and cleared through a settlement system customary for transactions of that security and currency type;

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<sup>8</sup> The *Collateral Study* noted the important benefits of collateralized markets in that "[t]he credit protection provided by collateral and frequent margining may somewhat moderate the tendency of credit and liquidity flows in wholesale financial markets to seize up under stress, especially if such markets are not at the epicentre of the initial shock. For example, repo markets ... are often relatively resilient and subject to limited credit rationing in periods of market turbulence."

<sup>9</sup> For securities financing transactions that are not qualifying transactions, we submit that any collateral haircuts should still be applied to the net counterparty exposure on a portfolio basis, not on a transaction by transaction basis. As the *Securities Lending Study* observed, "[p]rovided the agreement is legally enforceable, the credit exposure is the net market value of all the contracts rather than the gross sum of positive market values...."

- are documented under a master agreement or other documentation that permits the non-defaulting party to promptly accelerate, terminate, liquidate and close-out the transactions and collateral;
- are documented under a master agreement or other documentation that is legally enforceable, including in the event of the counterparty's bankruptcy and insolvency; and
- are between "core market participants" (as defined in paragraph 104 of the New Accord) or other counterparties in respect of which the relevant agreement would be enforceable in the event of their bankruptcy or insolvency.

### **Additional Comments on Various Aspects of the New Accord Proposal**

#### **Government "Repo-Style" Transactions**

As should be clear from the capital treatment for securities financing transactions we advocate above, Citigroup believes that the special treatment proposed in the New Accord for Government "Repo-Style" Transactions should be the *rule*, rather than the *exception*, for securities financing transactions. We support the proposed expansion of this special treatment for "repo-style" transactions set forth in The Bond Market Association's May 2, 2001 letter to the Committee, as we believe it is too limited as currently proposed. At a minimum, we believe the exception should apply to all overnight and "open" (terminable at any time) securities financing transactions.

We suggest that even as proposed in the New Accord, the exception should be clarified on a number of points:

- We are not sure we understand the requirement that transactions be settled across a settlement system "proven for that type of transaction in the jurisdiction or currency in which the securities are issued". We are concerned that this description would not include major established cross-border settlement systems (such as Euroclear, Clearstream, London Clearing House) through which a large percentage of securities financing activity involving non-US foreign sovereign debt currently settles and clears. We believe that the capital rules should encourage industry efforts to develop cross-border settlement systems that ultimately greatly minimize systemic risks.<sup>10</sup>
- We are not sure we understand what the requirement of "standard domestic documentation" refers to. We believe that standard documentation developed and used by industry participants for the cross-border marketplace, such as the Global Master Repurchase Agreement (published by The Bond Market Association and the International Securities Markets Association) and the Global Master Securities Lending Agreement (published by the International Securities Lenders Association) should qualify for inclusion, as well as other

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<sup>10</sup> The *Securities Lending Study* concluded that regulatory authorities should adopt sound policies relating to the development of market infrastructure and settlement arrangements for securities lending, including through encouraging the development by market participants of centralized clearing facilities and DVP and DVD (delivery vs. delivery) settlement mechanisms.



industry standard documentation that has industry wide recognition and legal due diligence or legal opinions supporting it. We believe that the capital rules should encourage industry efforts at documentation standardization and harmonization.

- We believe that the requirement that transactions be “immediately terminable” if a counterparty fails to deliver margin or otherwise defaults should be clarified to permit short notice and/or grace periods (e.g., of not more than 2 business days).
- We believe the requirement that a party have the “unfettered” legally enforceable right to seize and liquidate collateral is not entirely clear, given the fact that this condition will need to be interpreted across many jurisdictions and legal systems.

#### “W” Factor

For the reasons set forth in Section III of Appendix 1 to our response (entitled “W” Factor) and due to the legal robustness and market discipline surrounding securities financing transactions, we believe that the “W” factor should either be abolished or set at 0 for these transactions. We believe that the imposition of a “W” factor of .15 even in over-collateralized transactions (which is prevalent in some securities financing transactions such as margin lending) leads to unusually punitive capital charges and in fact acts as a disincentive to take excess collateral.

#### Eligible Collateral

As previously stated, we believe that the special capital treatment for securities financing transactions should be permitted not only for transactions involving the types of collateral eligible for credit risk mitigation recognition in the New Accord as proposed, but also any securities includable in the trading book.

In addition, we would recommend that:

- The definition of cash collateral be expanded to include not only cash on deposit with the lending banking organization but also cash held by a banking organization’s custodian, agent, clearing house or depository, provided appropriate segregation is maintained;
- Convertible bonds that are exchange-traded and/or readily convertible into equities that are exchange-traded or included in a major index be eligible collateral; and
- Serious consideration should be given to how financing activity involving corporate and mortgage loans through the repo market structure could be factored into the capital framework.

#### Collateral Haircuts

The assumption in both the standard supervisory haircuts (Standardized Approach) and the model parameter (in the Internal Ratings Based Approaches) of a 10 business day



liquidation period for securities financing transactions is too long. We believe that a 5 business day liquidation period, which is what we internally assume, is more than adequate. In fact, market conventions and legal documentation for securities financing transactions often permit liquidation in an even shorter time period. It is our view that the New Accord's insistence on a 10 day assumption will not provide an incentive for banking organizations to promptly liquidate transactions and collateral when problems arise.

We also believe that the time to liquidate collateral should be measured from the time of the last unsatisfied margin call or default to the time collateral is sold, not the time liquidation proceeds are actually received. The value of what a non-defaulting party receives is independent of the period between the liquidation of the collateral and the receipt of proceeds. During that interval the value of what the non-defaulting party receives is not dependent on market rates. Rather, it reflects credit risk of the counterparty to whom the non-defaulting party has sold the collateral, not the credit risk of the defaulted counterparty.

The haircuts applied in loan vs. pledge and borrow vs. pledge transactions, where securities are exchanged for securities, are particularly punitive. The New Accord treats the value of the securities on each side of the transaction as statistically independent, when in fact there is often a high degree of correlation between securities put out on loan or repo versus the securities taken in. As we propose above, we believe that haircuts should be applied solely on the difference, at any point in time, between the assets exchanged. At a minimum, banking organizations should be permitted to factor objectively validated correlations into account in assessing appropriate haircuts for the transaction.<sup>11</sup>

We believe that no haircut should be applied to the cash side of a securities financing transaction –e.g., when cash is taken in. The New Accord's rationale for collateral haircuts- to reflect the "cash value" of collateral- is obviously not necessary when the collateral received is cash.

#### Netting as it relates to Securities Financing Transactions

As discussed above, in an effort to reflect more accurately the true credit exposure in securities financing transactions, Citigroup supports the idea that the credit risk mitigation benefits of on-balance sheet netting described in the New Accord should be expanded beyond "loans and deposits" and should include securities financing transactions with the same counterparty, whether or not the transactions have the same end date or are open. We also support the recognition of netting for on-balance sheet and off-balance sheet transactions with the same counterparty. In order to ensure an equal competitive playing field, we believe that the New Accord should establish broad netting standards that encourage the risk-mitigating effects of netting arrangements whether or not the netting would be permitted under accounting rules of the particular jurisdiction.

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<sup>11</sup> We believe that precedent exists under the 1996 Amendment to the Capital Accord to Incorporate Market Risk for permitting banking organizations to take into account correlations in their models in evaluating risks.



We support the concepts outlined in The Bond Market Association's May 2, 2001 letter regarding netting.

#### Maturity Mismatch and Securities Financing Transactions

The New Accord provides that there will be no recognition for credit risk mitigation purposes if a hedge has 1 year or less residual maturity. It is not clear how this would be applied to securities financing transactions where there commonly is a right of substitution of securities/collateral. We believe there should be no capital charge for a maturity mismatch if the security matures before the transaction terminates since another security can simply be substituted.

#### Other

In securities financing transactions that do not meet the criteria for special capital treatment we have outlined above, due to the fact that a non-defaulting party may be stayed in liquidating collateral upon the bankruptcy or insolvency of the counterparty, we believe that some capital recognition should be given to collateral if the non-defaulting party has a first priority security interest or equivalent rights in the collateral (supported by appropriate legal due diligence). Otherwise, the transaction is treated the same as a transaction that is not supported by any collateral, which does not create an incentive to take collateral. We believe that further consideration should be given to the appropriate haircuts and other conditions for these types of transactions so that at least some capital benefit can be recognized.

## APPENDIX 5

### Discussion on the Treatment of Asset Securitizations



The following suggested comments are made with respect to the Asset Securitization sections of the New Accord.

**The Standardized approach; the treatment for originating banks.**

Citigroup supports making appropriate revisions to the rules for assessing risk-based capital and strongly agrees with the basic principle of the New Accord on Asset Securitization, which we interpret as moving toward a system of assigning regulatory capital on the basis of the risk inherent in a specific securitization position. However, Citigroup has several major reservations. In general, there should be no difference per se in capital allocation among bank, corporate or securitization exposures.

The distinction that the New Accord makes between an originating bank and an investing bank is not a relevant distinction when it comes to evaluating the risk of a specific securitization position. To apply different capital rules to the same risk position based on the character of the party holding such risk position seems to be a deep contradiction with the basic purpose of the New Accord. Citigroup strongly objects to treating credit enhancements provided by an originating bank any different from the same credit enhancement provided by an investing bank. This unnatural distinction merely creates an opportunity for regulatory arbitrage in favor of investing banks in the market for providing credit enhancement.

**Minimum Operational Requirements for Revolving Securitizations with Early Amortization features**

Citigroup objects to the imposition of a 10% risk weight to securitizations that contain early amortization features. The New Accord states that early amortization features “results in the originator’s interest in the securitized assets effectively being subordinated to the interests of the investors.” This statement is fundamentally incorrect.

In revolving securitizations the assets can be looked at as assets that exist at any point in time (“current assets”) and assets that may be generated in the future (“future assets”). Currently, regulatory capital is assessed against current assets only. The existence of an early amortization feature does not effect the division of credit losses between the originator and the investor with respect to current assets. Early amortization means that principal payments received with respect to current assets are not reinvested into future assets but rather paid to the investor. Since regulatory capital is not assessed against future assets, the shift of credit risk with respect to those assets from the investor to the originator should not attract a capital charge.

Additionally, losses are always allocated between the investor and the originator pro-rata. Amortization does not effect the formula for allocating credit losses. Rapid amortization has the effect of reducing the investor’s exposure to future assets faster than alternative methods, but this should not be confused with subordination. At all times the investor is exposed to credit losses to the extent of its pro-rata interest in the pool of receivables.

Finally, Citigroup believes that liquidity concerns should be dealt with in the context of a regulator’s normal supervisory review. Concerns about implicit recourse should be dealt with on a case-by-case basis between a banking organization and its regulator.

### **The treatment for sponsoring banks in conduit programs**

Currently, the New Accord would convert an exposure that is primarily liquidity enhancement at 20% and risk weight such exposure at 100%. Citigroup believes that this formulae should be modified by the risk weight of the underlying asset or obligor. If the asset or obligor would be assigned a 20% risk weight, then the liquidity associated with that exposure should be assigned the same risk weight.

Required capital for liquidity commitments should be determined by multiplying the amount of the off balance sheet commitment by the risk weight or rating of that underlying exposure and then applying the related conversion factor.

The conversion factor of 20% for short-term liquidity commitments in securitization positions overstates the risk of the position. We believe that the appropriate conversion factor should be 10% for one-year commitments due to their structure and purpose. In particular, asset-quality tests serve to protect commitments from funding against non-performing assets. Additionally, commitment draws are the decision of the conduit administrator, not the customer and are supported by the underlying assets. Historically there has been minimal utilization.

### **Implicit and residual risks**

Citigroup believes that the risks to the banking system raised by implicit recourse are best dealt with by national regulators on a case-by-case basis. The overly harsh and inflexible approach outlined in the New Accord would tie the hands of national regulators in responding to potential threats to the banking system. Since it is hard to quantify and/or qualify the situations which would give rise to implicit recourse, Citigroup believes it is unwise to determine in advance how the regulators would deal with such problems.

### **Treatment of Credit Enhancement**

Minimum capital requirements for first loss credit enhancement positions provided by conduit sponsors should be established based on the credit quality not the fact that a sponsor is providing it or the fact that it is first loss. Also, it should be made clear that the IRB approach should be applicable to the calculation of first loss credit enhancement positions.

## APPENDIX 6

### Discussion on Pillar 3 Market Discipline and Disclosure Requirements



We fundamentally disagree with the scope of Pillar 3, Market Discipline. As drafted, the New Accord would mandate an unprecedented and massive volume of additional public disclosure by banks.

We support and are willing to work towards enhanced public disclosure, but it must be investor-oriented, cost-justified, evolutionary, and even-handed. The disclosures proposed in Pillar 3 far beyond the information needs of existing and prospective investors. They are burdensome beyond the benefit, they represent a radical departure from existing practice, and they fall exclusively on banking organizations. In fact, they fall most heavily on the more sophisticated and better managed banks, less so on banks with less developed risk management capabilities, and not at all on the nonbank competitors of banks.

We agree with the objective of improving disclosures by *all* market participants, and we believe that a better informed market will make better choices, but we do not agree with the view that 'market discipline' can in any way substitute for vigorous and informed supervision. Excessive disclosure may even detract from the quality of risk management controls of banks, as disclosure considerations can affect judgments where corporate governance is weak or under stress. In any case, excessive disclosures will bring high costs and added pressure on controls to produce data not needed for management purposes.

With particular regard to disclosures about credit risk, we do not agree with disclosures that directly or indirectly tend to move loss reserving away from the robust, judgmental practices followed by a safe and sound institution and towards a more constrained, specific, and formulaic process. Loss reserving must be sufficiently broad and judgmental to encompass all losses estimated to exist in the portfolio, not just those that are calculated according to a model, and sufficiently flexible to adapt to changing conditions and evolving risk management methods.

Many of the prescribed disclosures about credit risk appear to be keyed to a flawed approach to assessing potential loss, insufficiently judgmental and lacking in flexibility. In addition, the disclosures are so intricately detailed that they create an unreasonable cost burden, jeopardize customer confidentiality, and unfairly expose banks to criticism and possibly litigation based on hindsight when unforeseen developments arise.

We believe that the totality of the disclosures proposed in Pillar 3 would carry a negative tone and send a misleading message to investors and potential investors in banks. Corporate reports should provide a balanced presentation of strategy, results, risks, and opportunities, but the overwhelming volume of risk-oriented data that would be disclosed by banks under the proposals would heavily weight their reports towards the intricate dissection and elaboration of exposure to loss. This is without precedent or parallel in corporate reporting, and it is unfairly punitive towards banks.

We are in no way opposed to enhanced public disclosure by financial market participants. We participated in the Working Group on Public Disclosure convened by the U.S. Federal Reserve Board, Office of the Comptroller of the Currency, and Securities and Exchange Commission, and we are prepared to work with other financial institutions to implement expanded disclosures along the lines of its recommendations.



We also support the objective of further enhancements to public disclosure as envisioned by the Working Group.

However, we urge the Basel Committee to reconsider the disclosures proposed in Pillar 3. The disclosures are burdensome, they risk a number of unintended adverse consequences as discussed above, and yet they are of uncertain utility for regulatory, management, and investor purposes.

Establishing the proposed public disclosure requirements, even with an implementation date in the future, would be premature at best. At this time, the proposed statistical analyses should be promulgated only as possible guidance for national regulators, to be studied and adopted as confidential supervisory data requests to the extent they are found to be cost-justified.

Public disclosure requirements should be developed through a collaborative process with established rule-making bodies, including the International Accounting Standards Board. Requirements should be designed to respond to investor needs, and they should apply equally to all financial market participants. As part of this process, the usefulness of existing national disclosure requirements, such as the market risk disclosure requirements of the U.S. Securities and Exchange Commission, should be considered.

The Basel Committee and national regulators should participate in this process. They can offer their unique experience and perspective, and they can help to ensure that all market participants in all countries are prepared to provide information with substantial consistency. Effective disclosure requirements developed and implemented in this fashion will contribute to the safety and soundness of banking and of the broader financial markets, which should be the goal of us all.

In summary, we believe that the proposed disclosures:

- are excessive in scope and detail,
- are burdensome beyond any benefit,
- depart radically from existing practice,
- are punitive to banks, and particularly to banks with better developed risk management capabilities,
- are potentially harmful to banks' risk management,
- place added stress on controls,
- go beyond any data needed for management purposes,
- are inconsistent with sound loss reserving,
- jeopardize customer confidentiality,
- unfairly expose banks to risks of criticism and litigation based on hindsight, and
- carry a negative tone and send a misleading message to investors.

We urge the Basel Committee to reconsider the full range of disclosures prescribed in Pillar 3 and to work with standard-setting bodies to develop enhanced disclosures that will be investor-oriented, cost-justified, evolutionary, and even-handed. In addition, we have specific comments as presented below.

## **Core and supplementary disclosures**

The Committee recommends that sophisticated internationally active banks make the full range of core and supplementary disclosures. We can see no justification for a lesser standard applied to banks simply because they are less sophisticated, or because their geographic scope is within national boundaries.

## **Appendix 1 – Scope of Application**

To the extent that disclosure requirements and recommendations apply at sub-consolidated levels or to unconsolidated entities, the unreasonable burden created by the prescribed disclosures would be further compounded. Public disclosure requirements and recommendations under the New Accord should apply only at the consolidated level, with data at sub-consolidated levels provided to regulators as needed for supervisory purposes.

## **Appendix 2 – Capital**

Template 2.3 calls for disclosure of an item identified as “undisclosed reserves.” It is not clear what this item refers to, and added clarity would be helpful.

## **Appendix 3 – Credit risk disclosures**

### *Section I – Disclosures applicable to all institutions*

The detail of both core and supplementary disclosures in this section goes far beyond the information needs of investors. Substantial costs would be incurred to gather this data for public disclosure, whereas investors are primarily interested in material trends and developments. Disclosure requirements and recommendations should be oriented towards reasonable investor needs.

Statistical data are required to be presented for derivatives and securities as well as for loans, but the data will be of little or no relevance because derivatives are carried at market under U.S. accounting principles, and because of the risk characteristics and accounting treatment of securities. Unnecessary disclosures should be eliminated.

The industry breakdown of impaired loans will be of little value to investors but will carry the risk of damaging breaches of customer confidentiality, if a bank must effectively reveal an adverse assessment of a company in difficulty. Banks should only be required to discuss material trends and developments in impaired loans.

### *Section II – Credit risk disclosures under the Standardized approach*

Since rating agencies will be evaluated by regulators, disclosures about the particular rating agencies employed would seem to be unnecessary and should be omitted.

Data on historical cumulative default rates by rating category would be difficult to gather and, as raw data, would be of little usefulness. Before the data would have any value,

extensive analysis and judgmental adjustment would be needed to take into consideration such matters as past trends and developments in the portfolio and the economy. Any data that must be gathered along these lines should be treated as confidential supervisory data.

### *Section III – Credit risk disclosures for the IRB approach*

The extensive and detailed disclosures that would be prescribed for the internal ratings-based approach are prohibitively burdensome and should be reconsidered in their entirety.

### **Appendix 4 – Market Risk**

Leading financial institutions currently provide disclosures that give investors an effective overview of market risk, and these existing disclosures meet investor needs. We are not aware of any demand for the sort of disclosures prescribed, which go far beyond current practice, and we do not believe that they would add appreciably to investor understanding. We recommend that the Committee reconsider these disclosures and focus instead on requirements that reflect, and where appropriate incrementally improve on, current practice.

### **Appendix 5 – Operational Risk**

We agree that banks should explain their approach to Operational Risk management, but we believe it is premature at this point to establish more extensive, specific disclosure requirements and recommendations in this area.

### **Appendix 6 – Interest Rate Risk in the Banking Book**

As the Committee notes, there is a wide range of approaches among banks to measuring and managing interest rate risk in the banking book. Leading institutions currently provide disclosures that enable investors to understand this exposure, and we believe those disclosures should be continued.

We do not believe that the proposed core and supplementary disclosures would add appreciably to investor understanding, but they could be burdensome to prepare and disclose. We recommend that the Committee look to established rule-making bodies rather than establish new disclosure requirements in this area.

### **Appendix 7 – Capital Adequacy**

We agree that banks should disclose capital requirements under the New Accord, but we believe that the detailed allocations that would also be prescribed are excessive without benefit.