Oliver, Wyman & Company

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

To the Members of the Basel Committee on Banking Supervision:

We are pleased to submit Oliver, Wyman & Company's comments on the proposed New Basel Capital Accord (the "New Accord") to the Basel Committee on Banking Supervision (the "Committee"). As the leading international management consulting firm specializing in financial services, Oliver, Wyman & Company has been at the forefront of advances in risk and capital measurement and management over the last fifteen years. In particular, we have worked extensively to develop and implement internal credit rating models and economic capital frameworks of the type contemplated by the New Accord for several of the world's largest and most complex bank and non-bank financial institutions. Our risk management clients have included leading banks, investment banks, insurance companies, financial conglomerates, multilateral lending organizations, industry associations, and regulatory agencies in the United States, Canada, the U.K., Germany, Switzerland, France, Italy, the Benulux countries, Scandinavia, Hong Kong, Singapore, and the Emerging Markets. Based on our consulting experience, we feel we have a unique perspective on both the technical underpinnings and the broader market and business implications of the New Accord.

Our comments are divided into two sections: The first section summarizes our perspective on the general principles of the New Accord. Overall, our view is that the New Accord is a major step in the right direction, and will go a long way towards improving the effectiveness of capital regulations and achieving a better balance between economic risk taking and prudent banking. This should be in the interests of bank borrowers, depositors, and shareholders alike. Despite our agreement with many of the principles of the New Accord, however, there are some aspects of the proposed framework that we think may prove to be problematic if implemented as proposed. The second section discusses what we see as the main limitations of the existing proposals, and makes specific recommendations for addressing these issues.

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I. GENERAL PRINCIPLES: A MAJOR STEP IN THE RIGHT DIRECTION

Given the challenges of crafting an international regulatory framework for bank capital, we think the New Accord is a major step in the right direction. It moves towards a regulatory capital regime that is truly risk-based, and attempts to reflect - insofar as possible in a rules-based system broadly applicable to a large number of banks - the economic risks undertaken by a financial institution. The New Accord will help create appropriate incentives for risk taking, risk management, risk mitigation and risk pricing. At the same time, it generally strikes a good balance between a desire to advance the state of regulatory capital with an understanding of the practical limitations of current technology and the business environment

We see five key areas in which the New Accord represents a significant improvement on the current state of capital regulation:

- *Removes the worst perverse incentives of the old system*

  The existing capital regulations, due to their simplicity, contain many arbitrary distinctions that have led capital requirements for some activities differ significantly from the true, economic risks. An obvious example is lending to high-quality, investment grade borrowers, for which the current equity requirement far exceeds the true level of economically-implied capital. This has led banks to reduce lending to the highest quality borrowers - and worse, to overlend (and underprice) - loans at the riskier end of the quality spectrum. The result has been bad both for the safety and soundness of the banking system, and for the optimal allocation of capital within the economy.

- *Recognizes the advances in risk measurement technology*

  Working with many of the G10's leading banks, Oliver, Wyman & Company has helped pioneer the introduction of sophisticated risk measurement tools and internal economic capital frameworks. We are pleased to see that the New Accord will make use of these tools and the concepts underlying economic capital. In particular, rigorous, quantified, internal credit ratings are now deservedly at the heart of the capital requirements for credit risk. We are also pleased to see that the Internal Ratings Based approach is built around the Default Probability X Loss Given Default X Exposure at Default framework we have advocated for over 10 years.

- *Provides incentives for continued improvement in risk measurement and management*

  The three pillar approach found in the New Accord is designed to provide incentives for banks to improve their risk measurements in order to advance to the next level of sophistication and take advantage of the more rational capital requirements. The strict requirements for operational controls and reporting, necessary to apply the more advanced methods, will also encourage banks to drive measures in day-to-day business practices.

- *Flexibility of Supervision*

  Although we feel that the Committee has done as good a job as could be could be expected in setting minimum capital requirements, no set of rules, even running over 500 pages, can capture every possible nuance of risk. Even if it could, the pace of innovation in today's financial markets means that the rules would soon be incomplete. That is why we think Pillar II of the New Accord - the supervisory review of banks' internal capital measurement - is also of considerable importance. While the rulebooks may be slow to accommodate change, responsible banks and supervisors must not be.

- *Increases role of the market*

  We think that ultimately financial markets will generate the most accurate, timely and bias-free assessment of risk and value. However, in the case of large complex financial institutions, current disclosure practices provide the market with a very opaque, rear-window view of risk-taking. This explains the need for government supervision. Nevertheless, Pillar III of the New Accord recommends far-reaching extensions to the amount of risk information banks should disclose. Years from now, increased market disclose may well be seen as one of the most significant changes in the 2001 Accord.

Oliver, Wyman & Company also approves the Committee's decision *not* to take several steps which have been suggested by some constituencies. These include:

- Using internal credit portfolio models as a basis for setting capital requirements
- Marking-to-Market credit portfolios for accounting and risk measurement purposes
- Allowing unlimited capital reduction for credit risk mitigation
- Over-relying on capital market solutions for risk assessment

While we support the development of these techniques, we agree with the Committee that they are not sufficiently evolved at this time to serve as a foundation for a broadly applicable regulatory framework. To the extent that particular applications are robust within individual institutions, we hope that supervisors will give them appropriate credit in the Pillar II review. In the future, these techniques should play an increasingly important role in internal risk management and capital setting.

II. RECOMMENDATIONS FOR IMPROVEMENTS TO EXISTING PROPOSALS

Notwithstanding our support for the general principles of the New Accord, there are some aspects of the proposed framework that we think may be problematic if implemented as currently proposed. Rather than focusing technical details, we want to draw the Committee's attention to three major issues that we think should be re-examined:

- Calibration of minimum capital requirements
- Eligibility requirements for the Internal Ratings Based (IRB) approach
- Cyclicality of capital requirements

A. Calibration of Minimum Capital Requirements

In the months since the New Accord was published, we have worked with several major banks to assess the likely impact of the proposed rules on the banks' capital requirements. We are also aware of similar work by many other banks, much of which will be shared with the Committee either as part of the Quantitative Impact Study or included in the banks' own comments. In looking across these analyses, two worrisome trends stand out. The first is that, compared to current requirements, the total minimum capital requirements under pillar I will rise for many banks. The second is that application of the Internal Ratings Based option – especially the Foundation IRB approach -- to the middle market lending business results in a significantly higher capital requirement than the existing rule. We fear that both of these could damage the acceptance and the effectiveness of the New Accord and urge the Committee to review the parameters they have set.

i. Overall Minimum Capital Requirement

The Committee has stated its intention that minimum capital requirements should, on average for the industry, remain unchanged with the New Accord. We agree with that principle. The original Basel Accord has been quite successful in its aims of raising bank capital ratios to a level where these has been not only a low incidence of socially costly bank failures, but also a reasonably profitable banking sector. Significant increases or decreases in the required level would seem unwarranted. It is also important to allow room for both supervisors and the markets to impose higher capital requirements for those banks that have either poor risk management practices or hold significant risks not adequately measured by the minimum capital requirements. This is the essence of Pillars II and III of the New Accord. If the Pillar I minimum capital requirement is too high, there will be no flexibility to set graduated levels of capital for banks with moderately higher risk; any requirement above that of Pillar I will be punitive. Finally, an increase in the general risk weighted assets level will have the effect of lowering reported capital adequacy ratios. Even if these remain above the minimum requirements, it will seem to investors that the banking industry has become less sound; indeed many may conclude that this is the belief of the Committee.

In looking more closely at the impact analyses that we have either prepared or reviewed, it seems that there are two reasons for the increase in capital requirements. The first is that for most banks, the credit risk capital requirement appears to increase relative to the existing risk-weighted asset determination. We suggest that this is a calibration problem. The new rules for credit risk under the IRB approach appear to establish an appropriate *relative* capital requirement with respect to the main determinants of credit risk – in general, reflecting the risk gradient used in advanced internal economic capital frameworks. But in absolute terms, the total amount of credit risk capital appears to go up. The quantitative impact study currently underway should shed light on whether this is an industry-wide phenomenon, as we suspect. We comment below on the specific impact of the calibration on middle market commercial lending.

The second cause of the increase in overall capital is the introduction of new capital requirements for Operational Risk. We endorse the principle of requiring capital for operating risks, although we are surprised that the Committee has defined Operational Risk to cover only event risks and not to cover business risks.[1] Indeed, properly defined, we feel that the proposed 20% level of capital for operating risks is, if anything, modest.

Significantly, however, under the New Accord, the incremental capital requirement for Operational Risk is simply added to existing requirements for credit and market risk, with no attempt to reflect the impact of diversification across risk factors. Operational Risk – because of its non-systematic component – tends to be uncorrelated with credit and market risks. As a result, the incremental requirements for Operational Risk should be offset, at least in part, by reductions in the requirements for the other risk factors. The exact balance between incremental risk requirement and diversification offset is an empirical question – we have addressed this issue for a number of banks in their internal economic capital frameworks – but is not something that can be ignored by the Committee.[2]

Recommendation: We urge the Committee to review carefully the results of the Quantitative Impact Survey, as well as the quantitative impacts described in other comments. We expect that such a review will confirm our view that the New Accord, as proposed, will increase the general level of capital requirements. If so, we would recommend that the Committee a) adjusts the calibration for credit risk capital under both the Standard Approach and the IRB approaches; and b) adjusts the aggregation of credit, market, and operational risk capital to reflect cross-risk factor diversification. The levels of these adjustments should be based on the QIS with the goal of maintaining consistent level of risk weighted assets for the average bank in the survey.

ii. Capital Requirements for Middle Market Commercial Lending

The quantitative impact analyses we have seen point to another, more specific problem with the calibration of the new risk weights for middle-market commercial lending. To our knowledge, all of the quantitative studies show that, under the Foundation IRB, capital requirements will increase steeply for middle-market commercial lending activities. While we understand that a key goal of the New Accord is to increase capital requirements for those businesses that contain greater than average risk, we are concerned that the capital requirements for mid-market lending are extreme, and not supported by historical loss experience in that sector. Since mid-market lending is the largest component of the balance sheet for many banks, problems with the capital requirements for this sector would have a significant impact on the success of the New Accord.

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[1] We define "the risk of direct or indirect loss resulting from inadequate or failed internal processes, people, or systems or from external events" as event risk. Business risk, by contrast, refers to the potential of incurring an operating loss due to a decline in volumes, a contraction in margins, or an unexpected rise in costs. In our experience, business risks are actually the dominant Operating Risk faced by banks, and in internal economic capital frameworks account for over 60% of Operating Risk capital.

[2] We have recently addressed the impact of cross-risk factor diversification in the context of financial conglomerates in work for the Dutch Council of Financial Supervision. Our report to the Dutch Council can be found on the web site of the Dutch Central Bank at www.dnb.nl/persberichten/index2.htm

We have looked closely at the formula for determining the risk weighted assets under the Foundation IRB approach to try to determine why it results in such a high requirement for middle market lending. Unfortunately, it is difficult to pinpoint a single culprit. There are many parameters that work together to determine the outcome. For each parameter individually, the value adopted in the New Accord does not seem unreasonable, and we are very cognizant of the difficulty in choosing a single value to apply to different classes of loans across different geographies. It is also crucial that the formula be considered in its entirety; making one or two changes might produce a reasonable overall result, whereas adjusting every parameter would likely be an overreaction. The following are suggestions as to elements of the formula that may call for adjustment:

- The 0.70% level of Default Probability (DP) at which credits get a 100% risk weighting
- The 3 year average maturity assumption, which seems unrepresentative of the contractual maturity of most lending assets
- The 50% Loss Given Default assumption for virtually all commercial lending. This may be either reduced overall, or a new, lower option should be given for credit secured by business assets (inventories, receivables, equipment) under standard, effective facility structures
- The correlation[3] assumption for commercial credits. This could either be lowered, or an intermediate tier (between wholesale and retail) be added for smaller commercial lending
- The structure of the formula itself

Failure to adjust the capital weight for middle-market lending under the Foundation IRB approach could undermine many of the goals of the New Accord. The primary effect may well be to discourage the use of the Internal Ratings Based approach. Despite the more rational allocation of capital, few bank executives would be willing to undergo the implementation efforts and increased supervisory scrutiny of the IRB approach in order to see regulatory capital burdens increase. Those banks that do use the IRB will have two unfortunate incentives. First, they may respond by reducing the amount of credit they provide to the middle market. This would be bad both for regulated banks (reducing their share of one of the few financial sectors where they still retain a big advantage over non-banks) and their customers (reducing their access to credit.) Banks using IRB will also have an *increased* incentive to arbitrage the capital requirements, either through balance sheet transfers, or by attempting to classify smaller commercial loans as retail.

Recommendation: We urge the Committee to review carefully the results of the Quantitative Impact Survey, as well as the quantitative impacts described in other comments. We expect that such a review will confirm our view that the Foundation IRB approach, as proposed, will significantly increase the capital requirements for middle market commercial credits. If so, we would recommend that the Committee adjust one or more of the parameters in the IRB risk weighted assets formula to reduce the burden on this asset class.

[3] The correlation factor used in the risk weight formula has a particularly large impact on higher than average default probability credits, such as most mid-market lending.

B. *Eligibility Requirements For The Internal Ratings Based Approaches*

The New Accord requires that banks demonstrate the accuracy and robustness of their internal ratings systems in order to be eligible to use the IRB approaches. The proposed eligibility criteria are extremely rigorous by contemporary standards. In our view, even banks whose credit rating systems are currently at the state-of-the-art would fall short of the standards set under the New Accord. The New Accord seems to be adopting a "best of the best practices" approach which may result in an unrealistically high threshold for IRB certification by 2004.

Some of the key issues we see with the proposed eligibility requirements include:

- *Standards for Empirical Validation*

  While ultimately the power of a rating system is an empirical question, we think that the validation requirements for the Foundation and Advanced IRB approaches expect too much in the way of internal, portfolio-specific empirical validation.[4] Given that default is a rare event – with a frequency of less than 1 in a 100 for most commercial borrower segments – empirical validation of rating systems is a notoriously difficult exercise. Even banks with large customer bases, stable rating systems and good historical time series often lack sufficient default observations to establish the DPs of individual ratings, particularly for higher quality credits. This is equally true for the LGD and EAD components of the Advanced IRB approach, which not only suffer from the same limitations on number of observations, but also encounter difficulties in the standardization of definitions and measurement. As a result, banks tend to use a combination of techniques – development sample statistical validation, post-development empirical performance, external data mapping, market benchmarks, and expert judgment – for calibrating and validating a rating system.

  To put our comments here in perspective, Oliver, Wyman has long championed the use of quantitative methods in risk management. At the same time, we are aware of the practical limits of how much information can be squeezed out of banks' internal data sets. This is one reason why we encourage the Committee to promote the use of market-wide solutions – such as third-party rating models and industry-wide benchmarks for LGD and EAD parameters – as opposed to an exclusive requirement of internal, portfolio-specific validation.

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[4] Our concerns about the validation requirements stem from language such as that used in Paragraph 270 of the New Accord. Paragraph 270 states "A bank must estimate a one-year PD for each of its internal rating grades. Each estimate of PD must represent a conservative view of a long-run average PD for the borrower grade in question, and thus must be grounded in historical experience and empirical evidence. At the same time, these estimates must be forward looking." Apart from the requirement of empirical validation for *each* PD (including those for which default rates are likely to be extremely low), we are struck by the contradictions in this provision. Is a "conservative" estimate meant to be a "best estimate" (i.e., point estimate)? If not, how is it "grounded in historical experience"? How is the "long-run average PD for the borrower grade in question" reconciled with a "forward looking estimate"? The Committee needs to clarify these apparent contradictions.

- *Portfolio Stability*

  The problems of empirical validation are compounded when internal history is not representative of the current business mix. This can happen for a number of reasons: a change in the credit cycle, such as has occurred in the U.S. over the last year; a major shift in business mix, such as the decision to withdraw from a market segment such as leveraged finance; or a merger or acquisition. We have experienced firsthand the difficulties of integrating the internal rating systems of banks that have merged. Given the current pace of industry consolidation, we expect that this will continue to pose a major problem for certification under the New Accord.

- *Fixed Rules*

  Although we recognize the desirability for standards in a framework that is widely applicable and will be enforced on an international basis, we think the New Accord leans too heavily on fixed rules and checklists in prescribing the types of rating systems that are acceptable. A specific example is the nine-point checklist of criteria for borrower risk assessment in Paragraph 265 of the New Accord. If read literally, this provision would imply that only rating systems that incorporate all of these criteria would qualify for IRB certification. Such an interpretation would rule out many existing credit rating models (some which have proven to be very powerful), and stifle innovation. Equally, the nine-point checklist – even if a valid statement of best practice – would prove to be prohibitively costly for rating smaller companies.

- *Application Across Portfolios*

  Under the New Accord, banks that elect to use the IRB must do so for their entire portfolios. This is an understandable requirement to prevent cherry picking among different capital requirements. Nevertheless, many banks have quite reasonably devoted more time and effort to internal ratings in the core portions of their credit portfolios (e.g., domestic commercial lending) than to less material subportfolios or non-conforming segments. Subjecting all portfolios to a single IRB requirement may well mean that some banks will be held back from using the IRB approach for their core portfolios because of a relatively minor issue in their treatment of a smaller sub-portfolio.

The above problems are mutually reinforcing. The challenges of empirical validation are exacerbated the lack of portfolio stability. They are further heightened by fixed rule requirements that may force banks to adopt rating approaches that are less predictive, but conform to the Committee's notion of best practice. Finally, the comprehensiveness requirements suggest that the same standard will apply to all bank subportfolios, irrespective of materiality.

We understand that the burden of proof for an internal rating should rest with the bank seeking eligibility. The standard set under the New Accord, however, seems to be closer to that for criminal rather than civil liability: in other words, proof beyond a reasonable doubt, as opposed to proof by a preponderance of the evidence. In our view, the Committee should seek to strike a new balance that places less emphasis on extensive, internal empirical confirmation and adherence to explicit, pre-established checklists, and more emphasis on internal risk controls and the effectiveness of management processes.

In our proposed solution, supervisors should insist on strict adherence to the control aspects of internal rating, including the authority for assigning ratings, the procedures for exceptions, ongoing performance monitoring, and the independent review of both the rating system and individual rating decisions. Similarly, supervisors should be strict in their review of the *average quantification* of risk parameters. Together, these should create confidence that the bank as a whole is adequately capitalized. At the same time, supervisors should maintain a stance of being cautious but flexible when it comes to the details of the design of internal ratings. Here we would include the format of the rating system; the classifications used; the factors that drive the assignment of a rating; and the ability to customize rating approaches for different subportfolios.

In the end, the best proof of a rating system's credibility will probably come from the fact that it is being used to drive actual business decisions. The New Accord is right to require that banks demonstrating their confidence in a rating system by using the output for a variety of business processes. Looking ahead, if the pace of credit securitization continues, the capital markets may ultimately become the most important judge of a bank's internal rating systems.

Recommendation: We recommend that the Committee review the wording of the language of the accord specifying the eligibility requirements for the use of Internal Ratings Based (IRB) approaches. In particular, they should ensure flexibility by avoiding making descriptions of good practice into fixed requirements. At the national level, we recommend that in setting their policies for enforcement of the IRB approaches, supervisors take a cautious but flexible stance to issues of rating design.

C. Cyclicality Of Capital Requirements

The chief aim of the New Accord is to bring capital requirements more in line with risk. One important aspect of this is that when the risks within a bank increase, the capital requirements should increase accordingly. This, indeed, one of the key benefits of the New Accord: it will increase the capital requirement for banks that increase risk-taking, both maintaining their solvency and decreasing their return on capital. If the changes in risk are due to changes in the bank's risk taking policies, this is all to the good.

However, if a bank's risk is increasing due to changes in the business cycle, the effects of an increase in capital requirements are more mixed. On the one hand, if increasing capital requirements lead the bank to increase its capital resources, or to improve the credit quality of its portfolio, the change may help to prevent a bank failure. On the other hand, if there is an economy-wide recession, it may be very difficult for a bank to raise new capital, as earnings will disappear and equity markets will likely dry up. The bank would be thus forced to reduce its risk exposure. However, other banks would be facing the same pressure, so that there would likely be limited ability to offload risk. The resulting consequences are all unattractive.

First, banks would be forced to stop lending, and possibly even to recall loans from good borrowers in order to maintain their minimum capital ratios. This would remove credit from the economy at exactly the time when the commercial sector is most in need of credit. Banks reporting sharply reduced capital adequacy ratios may be subject to a withdrawal of investor confidence, increasing the probability of bank runs. Workloads for supervisors would be increased, as many banks may fall below the minimum capital requirements. Finally, to avoid some of these consequences, banks may be tempted to avoid the timely review of borrower credits.

The issue of cyclicality is inherent in a risk-based measure, so it can not be avoided. However, there are a few actions that can reduce the problems. Credit ratings systems vary significantly in their sensitivity to cyclical variations in borrowers financial health. Some put a very heavy weight on earnings, cashflow, interest coverage and growth trends. These systems will show rapid and severe swings in the average rating of a portfolio across a business cycle. Other rating systems have a greater emphasis on the factors influencing a borrower's long-term viability, such as future projected earnings, leverage, access to capital markets, and competitive position. These tend to be more stable in how their ratings change with the cycle. Banks must be allowed to use these more stable ratings systems, especially in respect to long-term relationship business.

Supervisors can also use their flexibility under Pillar II to cushion the impact of the business cycle on fundamentally healthy banks. If, during good times, banks are required to hold capital in excess of the Pillar I minima, supervisors will have some room to allow banks to barely meet the Pillar I minima at the worst of times. Supervisors can also help to lead the markets and depositors by being vocal in their acceptance of reduced capital ratios at these times.

Recommendation: We recommend that supervisors allow and encourage banks to adopt internal ratings systems based on a long term view, understanding that the ratings will react slowly to changes in economic conditions. We further recommend that supervisors use the discretionary authority given by Pillar II to require additional in such a way as to dampen the effects of economic cycles.

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Oliver, Wyman & Company is committed to supporting the Committee in its efforts to finalize the New Accord. We would be pleased to elaborate on the views we have expressed in this letter in further dialogue with the Committee.

Respectfully submitted,

OLIVER, WYMAN & COMPANY

cc: Federal Reserve Board