Good morning and welcome to the Basel Committee’s Risk Management Group Conference on “Leading Edge Issues in Operational Risk Measurement.” At the outset, I want to thank the Federal Reserve Bank of New York for hosting this conference. As I think will be clear during these two days, our hosts have put a great deal of thought and work into making this conference worthwhile.

Also, at the outset, a disclaimer is in order. I personally do not speak for the Federal Reserve Board, the other U.S. regulatory agencies or the Basel Committee. Fortunately, the Basel Committee has issued CP3, which I am sure many of you have read at least with regard to operational risk. I am sure this document, which does represent the current thinking of the Basel Committee, will be frequently referenced during this conference. Such reference is entirely appropriate and worthwhile, but I must strongly emphasize that the proceedings of this conference in no way represent a decision-making process relating to Basel 2.

As a further disclaimer, the approaches presented represent emerging thinking and practice but have not been formally endorsed by supervisors as qualifying for AMA treatment. Although they may represent possible candidates for AMA qualification, there may well be other approaches not represented here that are also solid candidates. Indeed,
we expect that leading practices will continue to develop and evolve during the years leading up to implementation at the end of 2006 and beyond.

Having done the disclaimers, I will next turn to a procedural issue. Attending this conference are a few journalists from the specialized financial press who have been following OR issues. To achieve an appropriate balance between transparency and attaining an open dialogue among conference participants, journalists in attendance have agreed to the following ground rules: they are free to quote from any prepared text. However, they are being asked to obtain approval from any speaker for quotes they wish to use from the discussion that names an individual or his or her institution. This condition applies to comments made either by speakers or conference participants in the course of discussion.

Having made it through all of the health warnings, I will turn now to the substance of the conference. The purpose of this conference is to broaden and deepen the understanding within the banking and regulatory community of OR measurement techniques (both quantitative and qualitative), particularly as they relate to the development of AMAs.

In this regard, we are fortunate to have a group of highly capable speakers from a variety of banking organizations who will share their practical experiences in designing and implementing operational risk measurement systems.
I should note at the outset that, while the focus of this conference is OR measurement, as supervisors we are mindful that one of the fundamental objectives of the AMA is better OR management. Better risk measurement is critical not only for the purpose of more accurately assessing capital as a buffer against OR, but also as a tool for better risk management.

The Basel Committee has played an important role in creating an environment conducive to industry development efforts in this area. However, I think we will hear very clearly during this conference that the banking industry is implementing substantial enhancements in its measurement and management of OR because this makes sense as a sound business practice.

Some Observations:

As part of my opening remarks for this conference, I would like to offer some observations. These hopefully will provide some insight into the ongoing development efforts that are the focus of this conference.

My first observation is that the development of techniques for the measurement and management of OR is very dynamic, with much progress being made even within six-month intervals. This dynamic development process is apparent in recent industry surveys. For example, many of the banks present here have participated in recent surveys
conducted by Marsh & McLennan Companies. One of these surveys was conducted last summer and consisted of over 75 interviews of global banking institutions along with written questionnaires. Among the findings from this survey were the following:

- The benefits of a consistent definition of OR have outweighed any costs associated with implementing it;
- Most firms have only begun to collect OR losses systematically and globally within the last three years; and
- Most firms currently assess economic capital for OR but with much disparity in methodology.

A follow-up survey was conducted by MMC in December 2002 and January 2003, that included 30 firms selected for their robust thinking on OR management issues. In comparing these firms’ progress over the prior six months, the following was observed:

- Firms’ economic capital allocation models have evolved, with much progress towards developing quantification techniques;
- All firms in the phase 2 study are currently collecting internal loss data and plan to incorporate the data into their operational risk measurement approaches by 2006;
Nearly 80 percent of the firms also use external data, with the vast majority using it to simply benchmark themselves; and

Many firms also rely on scenario analysis as an important tool to estimate their exposure to tail losses.

The upshot is that both industry observers and supervisors have been seeing an acceleration in industry progress towards developing operational risk quantification techniques and rolling those out across the firm.

My second observation is based on numerous communications, including with the presenters at this conference. Specifically, I think you will hear a common theme that there is value added to the firm when OR measurement is integrated with the business unit management processes. In other words, there is merit in creating an interactive process that involves the business lines as partners in the process of developing the firm-wide operational risk measurement framework. While firms generally are developing corporate level operational risk management functions and firm-wide policies and procedures to bring greater consistency to how operational risk is measured throughout the institution, business lines can add significant value to this effort through their understanding of inherent risks and controls in their areas. And finally, the more business lines are involved in the development of the measurement framework and the more transparent the framework is, the more credible will be the process of allocating the total
capital number back to the business lines—an effort in which many firms are now engaged.

A third and final observation relates to the exercise of judgment in the measurement process. Here too I think you will hear the presenters sound a note of caution. The quantification of OR must be forward-looking to be meaningful. This means that a mechanical focus on historic loss data series will not work. There must be recognition of the role of qualitative factors and a well-reasoned assessment of what I will call stress events or scenario analysis. In this regard, the burden is on management to exercise judgment. Clearly, this judgment must include consideration not only of a soundness standard but also of contingencies and actions taken to reduce the risks posed by those contingencies. In this regard, a self-assessment of the internal control structure and overall risk management process is crucial. Clearly, this is not a simple process if the results are to be relevant to the specific risk profile of the firm.

**Structure of Conference:**

Let me next turn to a synopsis of the structure of the conference we have planned for you. The first three presentations focus on different “stylized” operational risk measurement approaches. For presentation purposes, we will refer to these as the Loss Distribution Approach, the Risk Drivers and Controls Approach, and the Scenario-based
Approach. Be warned at the outset that there are common elements among all three approaches and that differences in emphasis among these common elements may be a useful way to view these different approaches. There are considerable overlaps across these approaches, and in practice, a number of banks are attempting to use elements of all three approaches.

First, we have asked Tony Peccia from BMO Financial Group to present the Loss Distribution Approach. Next, Mark Lawrence of ANZ will present the Risk Drivers and Controls Approach. Finally, Ulrich Anders of Dresdner Bank will present the Scenario-based Approach.

Each of these presenters has been asked to work with other institutions to bring together emerging industry thinking. We have then asked these three presenters to participate in a panel discussion. Clearly one question for the panel is “What do they envision the future holds?” Or to put it another way, “What approaches appear most viable from a cost/benefit or market value added perspective?”

The second part of the conference will consist of individual presentations highlighting practical experience in tackling various issues related to the development of an AMA, including internal data collection, the incorporation of external data, and the inclusion of qualitative factors. In addition, some of the presenters will be talking about how all the pieces come together to form a firm-wide OR capital assessment.
A Final Observation

Let me conclude with a final observation. It has often been argued that measuring operational risk is much more difficult than measuring market or credit risk. Lack (until recently) of a consistent definition of operational risk; the central role of the internal control environment; the relatively short time span of historical loss data; and the important role of infrequent, but very large, loss events are just some of the challenges that operational risk measurement systems have had to confront. Coming up with credible ways of capturing the tail of the loss distribution and, just as important, of verifying that it has been captured in a reasonably accurate and consistent way, have presented interesting challenges to those developing operational risk measurement frameworks.

But in a very real sense, these “challenges” have become the true strengths of the operational risk measurement discipline. As will be very evident from the presentations over the next two days, tremendous creativity and insight have been brought to bear on the issue of operational risk measurement. To address the difficulties presented by the very nature of the risk, the designers of operational risk measurement frameworks have had to be more innovative, take bigger steps into new territory, and be more willing to step away from traditional (and comfortably familiar) techniques than their counterparts in the market and credit risk arenas.
Designers of operational risk measurement systems have had to do some really fundamental thinking about the goals of risk measurement and about the tools used to achieve those goals. As a result, we have seen innovation in the use of “soft” data derived from scenario analysis, risk self-assessments, and the judgement of senior business managers. We have seen creativity in the melding of internal and external loss data, both in terms of actual loss amounts and in using external events to guide thinking about internal loss exposures. Perhaps most significantly, we have seen some truly path-breaking thinking about ways to integrate operational risk measurement into the broader framework of operational risk management.

My guess is that, five years down the road, we will see these innovations and others being adopted in other risk arenas. Market and credit risk measurement will likely benefit from the progress operational risk managers have made towards blending qualitative and quantitative assessments in a more disciplined, structured manner.

I hope you will enjoy the conference and that you will benefit from the rich dialogue and exchange of ideas over the coming two days.