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Pilot Exercise—Pre-Commitment Approach to Market Risk

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An international group of ten banking organizations (the "Participating Institutions") participated in a pilot (the "Pilot") of the pre-commitment approach to capital requirements for market risks (the "Pre-Commitment Approach"). The Pre-Commitment Approach was described in the request for comments published by the Board of Governors of the Federal Reserve System (the "Federal Reserve Board") in 60 Fed. Reg. 38142 (July 25, 1995). In brief, under the Pre-Commitment Approach, banks would specify the amount of capital they wished to allocate to cover market risk exposures over a given period, subject to penalties if trading losses over that period exceeded this precommitted amount.

The Pilot was organized by The New York Clearing House Association (the "Clearing House"). The Participating Institutions were BankAmerica Corporation, Bankers Trust New York Corporation, the Chase Manhattan Corporation, Citicorp, First Chicago NBD Corporation, First Union Corporation, the Fuji Bank Limited, J.P. Morgan & Co. Incorporated, NationsBank Corporation, and Swiss Bank Corporation. This is their report on the Pilot.

Summary

Set forth below in Part I is a discussion of the background of the Pilot; in Part II, conclusions arising out of the conduct of the Pilot; and in Part III, the Participating Institutions' views as to the next steps. The Pilot left the Participating Institutions with three core conclusions:

- that the Pre-Commitment Approach is a viable alternative to the internal models approach for establishing the capital adequacy of a trading business for regulatory purposes. When properly structured and refined, it should be implemented *as an alternative, and not an "add-on," to existing capital standards*;
- that, for progress to be made, it is essential that the bank regulatory agencies participate actively with the banking industry in the effort to refine how the Pre-Commitment Approach would be implemented in practice; and
- that the most important remaining question requiring an answer is what penalty would result for an institution that incurs losses in its trading business exceeding its pre-committed amount for a relevant period.

I. Background

The complexity and diversity of activities conducted by banking organizations and other financial institutions have developed at a rapid pace in recent years. It has become

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increasingly apparent to the Participating Institutions, and increasingly recognized by bank regulators as well, that a standardized "one-size-fits-all" regulatory approach, whether as to capital or other matters, is becoming less and less appropriate. With regard to bank capital standards for market risks, the Basle supervisors recognized this view in 1995 by developing the internal models approach as an alternative to the standardized model issued two years earlier. The Pre-Commitment Approach builds upon the logic of the internal models approach by having each banking organization develop its capital requirements in relation to the organization's own activities. By relying on economic incentives instead of on fixed rules, the Pre-Commitment Approach stands at the opposite end of the spectrum from the one-size-fits-all approach.

In a comment letter to the Federal Reserve Board dated October 31, 1995, the member banks of the Clearing House suggested that the Federal Reserve Board and other regulators consider adoption of the Pre-Commitment Approach for two reasons. First, the Pre-Commitment Approach might constitute a way to establish effectively a relationship between an institution's calculation of value at risk for management purposes and prudent capital requirements for regulatory purposes. Second, the Pre-Commitment Approach by its nature results in capital requirements for market risks tailored to the particular circumstances of each institution; it thereby solves the one-size-fits-all problem of the standardized model in the Basle capital standards while avoiding the inaccuracies created by the rigid, uniform quantitative standards imposed by the internal models approach. The letter also suggested that one or more institutions apply the Pre-Commitment Approach on a trial basis; the suggestion was the genesis of the Pilot described in this report.

The purpose of the Pilot was to provide further information and experience to the Federal Reserve Board, the Federal Deposit Insurance Corporation ("FDIC"), and the Office of the Comptroller of the Currency (the "OCC")—collectively, the "U.S. Agencies"—as well as to the Ministry of Finance, the Bank of Japan in Japan, and the Federal Banking Commission in Switzerland—together with the U.S. Agencies, the "Agencies"—as well as to the Participating Institutions themselves, as to the usefulness and viability of the Pre-Commitment Approach for regulatory purposes as applied to the Participating Institutions' trading portfolios and activities. In addition, the appropriate relationship between (i) "value at risk" and other measurements of risk, on the one hand, and (ii) the appropriate regulatory capital level, on the other, is unique to each institution and its circumstances. It was hoped that the Pilot would generate practical experience concerning that relationship for the Participating Institutions.

The Pilot was conducted under the assumption that, in practice, the Pre-Commitment Approach would be a substitute for other market risk capital standards, and not an additional capital measurement or requirement to be added to other capital standards or requirements. In addition, the Clearing House, as well as several of the Participating Institutions individually, are on record as believing that the appropriate penalty for exceeding pre-committed capital levels is disclosure by the affected institution that a loss exceeding its pre-committed capital amount for the relevant period has occurred. The Participating Institutions conducted the Pilot under the assumption that the penalty would be disclosure.

Prior to commencing the Pilot, the Participating Institutions held several meetings with the U.S. Agencies to discuss the upcoming Pilot, how it should be conducted, and what it might accomplish. The non-U.S. Participating Institutions met with the relevant Agencies in their countries as well. Following these meetings, the Participating Institutions agreed upon the purpose, scope, and mechanics of the Pilot.

In particular, the Participating Institutions agreed that the Pilot would be conducted for four quarterly measurement periods ("Measurement Periods") corresponding to calendar quarters as well as to customary reporting periods for both call report purposes and reporting under the Securities Exchange Act of 1934. The Measurement Periods were (i) October 1, 1996, through December 31, 1996; (ii) January 1, 1997, through March 31, 1997; (iii) April 1, 1997, through June 30, 1997; and (iv) July 1, 1997, through September 30, 1997.

The Pilot was conducted by the Participating Institutions on a consolidated basis. Accordingly, pre-committed capital amounts and related P&L Changes (as defined below) were identified for, and took into account, the consolidated trading operation, including activities in bank subsidiaries as well as Section 20 subsidiaries.

Prior to the commencement of each Measurement Period, (i) each Participating U.S. Institution will identify in writing to the Board and to the Agency that is the primary regulator for its lead bank subsidiary (together, its "Primary Regulators"), as well as to the Clearing House, its pre-committed capital amount for the upcoming Measurement Period; and (ii) each non-U.S. Participating Institution will identify to the Agency that is its primary regulator (its "Primary Regulator"), as well as to the Clearing House, its pre-committed capital amount for the upcoming Measurement Period. That amount was eventually compared with the change in the relevant Participating Institution's trading profits and losses (the "P&L Change") for the relevant Measurement Period based upon all of such Participating Institution's consolidated trading activities (both proprietary and for its customers), not just its proprietary account. Accordingly, the P&L Change took into account, in addition to net gains or losses from proprietary trading, (i) brokerage fees, (ii) dealer spreads, (iii) net interest income before taxes associated with trading positions, and (iv) the net change between the beginning and end of the Measurement Period in the Participating Institution's reserves maintained against its trading activities.

The pre-committed capital amount identified by a Participating Institution for a Measurement Period covered both general market risk and specific risk arising out of such Participating Institution's trading portfolios and activities for the relevant period.[1] This approach is consistent with defining the P&L Change with which a pre-committed capital amount is compared as the change in the relevant Participating Institution's trading profits and losses for the relevant Measurement Period from all sources and risks.

Each Participating Institution delivered to the Agency that is its primary regulator an "Individual Institution Report" for each Measurement Period. These Individual Institution Reports contained both pre-committed capital amounts and P&L Changes for each Measurement Period. Thus, the reports made possible a simple comparison of the pre-committed capital amount for each Measurement Period with, if applicable, the negative cumulative P&L Change calculated as of the end of such Measurement Period. Each Participating Institution reported its P&L Change for each Measurement Period irrespective of whether the P&L Change was positive (a profit) or negative (a loss).[2]

The Clearing House also prepared and distributed to all of the Agencies and to the Participating Institutions an "Aggregate Data Report." The Aggregate Data Report is cumulative (see table). It shows, for each Participating Institution (identified by number instead of name for confidentiality reasons) and Measurement Period, the ratio of such Participating Institution's P&L Change to its pre-committed capital amount for the relevant Measurement Period.

PRE-COMMITMENT PILOT EXERCISE: AGGREGATE DATA REPORT

Bank	Fourth-Quarter 1996 P&L:PCA Ratio	First-Quarter 1997 P&L:PCA Ratio	Second-Quarter 1997 P&L:PCA Ratio	Third-Quarter 1997 P&L:PCA Ratio
1	0.56	1.21	1.39	1.09
2	2.27	1.20	2.18	0.96
3	3.56	3.79	3.25	3.61
4	0.44	0.59	0.74	0.84
5	1.84	2.92	1.89	1.81
6	0.42	0.68	0.75	0.54
7	0.81	1.01	1.12	1.12
8	0.77	0.42	1.15	0.91
9	5.43	5.89	5.11	6.60
10	1.46	1.99	1.36	1.88

Notes: P&L is trading profit and loss on consolidated trading activities for the Measurement Period. PCA is the pre-committed capital amount for market risk for the Measurement Period.

II. Conclusions from the Pilot

The Participating Institutions drew the following conclusions from the Pilot of the Pre-Commitment Approach:

1. In the view of the Participating Institutions, steps should be taken to implement the Pre-Commitment Approach, when properly structured and refined, as a replacement for existing market risk capital requirements. The Pilot demonstrated that the Pre-Commitment Approach is a viable alternative to the internal models approach for establishing the capital adequacy of a trading business for regulatory purposes. The Participating Institutions believe that the Pilot demonstrated that the Pre-Commitment Approach provides strong incentives for prudent risk management and more efficient allocation of capital as compared with other existing capital standards. The Participating Institutions were able to establish and report in a timely manner pre-committed capital amounts and P&L Changes for the relevant Measurement Periods.
2. The Pilot in effect assigned to the Participating Institutions the responsibility for determining an appropriate level of capital, free of any regulatory preconceptions as to what that specific level should be. As a result of having to focus on an appropriate amount of capital, the Pilot contributed to the development and depth of the Participating Institutions' thinking as to the purpose of capital and the distinction between the economic capital maintained for the benefit of shareholders to accommodate the variability of revenue and income and the regulatory capital available to protect the safety and soundness of the financial system from the effects of unanticipated losses.
3. At the outset of the Pilot, it was anticipated that the Aggregate Data Report would include the ratio of the pre-committed capital amount to the market risk capital requirement for each Participating Institution in each Measurement Period. This turned out not to be feasible because the Participating Institutions became certified to use the internal models approach for market risk capital requirements at different times. Nevertheless, each Participating Institution has, on an informal basis, compared its pre-committed capital amount with its estimated market risk capital requirement under the internal models approach; generally, pre-committed capital amounts were significantly less than the market risk capital requirements estimated to apply under the market risk provisions. The Participating Institutions believe that the results of the Pilot suggest that the "3X" multiplier, as well as the specific risk component, even after the Basle Committee's revision dated September 17, 1997, lead to excessive regulatory capital requirements for their trading positions.
4. As reflected in the Aggregate Data Report, no Participating Institution reported a negative P&L Change exceeding its pre-committed capital amount. The Participating Institutions recognize that the Pilot was conducted during a period of moderate market volatility and generally favorable trading results reported by financial institutions. Nonetheless, the pre-committed capital amounts were calculated to cover losses stemming from unusual spikes in volatility and market reversals, and the Participating Institutions would not change the procedures, methods, and vetting processes applied during the Pilot in light of the unsettled markets in October 1997 following the conclusion of the Pilot.
5. The ratios of P&L Changes to pre-committed capital amounts varied significantly. For example, the ratios reported by Participating Institution no. 9 were generally five times that of Participating Institution no. 4. The Participating Institutions are not uncomfortable with the differences. Such differences arise from differences among the institutions in the nature of their trading books, the varying risk appetites and risk management techniques among firms, differing ratios of proprietary trading revenues to customer flow revenues among firms, and differing views as to the relationship between economic and regulatory capital. It would be of interest to know whether the Agencies, which have access to the full spectrum of the data underlying the Aggregate Data Report, have additional insights as to the sources of differences among the Participating Institutions, which did not share their own underlying data with each other.

III. Looking Forward

The Participating Institutions believe that the Pre-Commitment Approach is a viable alternative to the internal models approach for determining the capital adequacy of a trading business, and that steps should be taken to refine and ultimately implement the Pre-Commitment Approach. Before further effort by the banking industry can be justified or progress made, it is essential that the Agencies participate actively in the effort to refine how the Pre-Commitment Approach will be implemented in practice.

Assuming the Agencies concur with the Participating Institutions' views, implementation of the Pre-Commitment Approach requires that the Agencies confirm what penalties would apply if a banking institution violates the criteria for capital adequacy specified in the Pre-Commitment Approach. The Participating Institutions believe that disclosure is the appropriate penalty, and they conducted the Pilot under the assumption that disclosure would indeed be the penalty. It would be useful to discuss with the Agencies whether they concur with this view, and how they believe such disclosure might occur.

Finally, although the Pre-Commitment Approach was initially proposed (and the Pilot was conducted) for the market risk of trading businesses, the Participating Institutions believe that the benefits of the Approach are likely to exist when applied to other risks of trading businesses. The Pre-Commitment Approach goes directly to the basic question of whether a business possesses adequate capital to absorb unanticipated losses. The pre-committed capital as applied to a business covers any risk—market, specific, operational, legal, settlement—that has the potential to create a loss. As a result, the Pre-Commitment Approach avoids many of the complications and inefficiencies generated when capital charges are set separately for each category of risk. Furthermore, institutions differ in how they measure and manage the component risks, and the correlations between the risks likely will vary according to each institution's business mix. The Pre-Commitment Approach recognizes these differences while providing incentives to ensure that minimum prudential standards are maintained within the industry.

Endnotes

[1] A Participating Institution's pre-committed capital amount for a Measurement Period did not cover, however, foreign exchange and commodities positions outside the trading account (activities that are covered in the market risk rule that was recently adopted).

[2] If the Pre-Commitment Approach is implemented, only a negative cumulative P&L Change for a Measurement Period having an absolute value exceeding the relevant Participating Institution's pre-committed capital amount for such Measurement Period would give rise to a disclosure requirement or other penalty.

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