For release on delivery
11:00 am, EDT
July 28, 1993

Remarks on the Global Derivatives Study

Sponsored by the Group of Thirty

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Washington, D.C.

Before the
International Swaps and Derivatives Association
Summer Conference

New York, New York

July 28, 1993

I appreciate the opportunity to offer my reactions to the much-anticipated Group of Thirty sponsored study of global "over-the counter" (OTC) derivatives. Today I intend only to highlight what I see as the strengths and weaknesses of the study. I will then devote the bulk of my remarks to the challenges that the study poses for the derivatives industry, for central banks and regulators, and for legislators.

When one assesses this field, I think it is not hyperbole to suggest that the development and growth of financial derivatives constitute one of the most dramatic success stories in modern economic history. In the short span of 25 years, financial derivatives have sprung from conception to global prominence, spanning the world's financial markets and institutions, permeating the global financial system.

To date the most visable element of central bank policies toward derivatives has been the capital requirements for banks' activities in the OTC derivatives markets, manifested most notably in the Basle capital standards issued in 1988, and the recent proposals of the Basle Supervisors addressing netting arrangements, market risks and interest rate risk.

But central banks' interests in derivatives extend well beyond capital adequacy to include the overall stability, efficiency, and competitiveness of these markets, as well as their nexus with other markets and the financial system. This interest is also manifested in the recently released Promisel Report on interbank bank activities

under the auspices of the G-10 Governors and the recent G-10 study of last September's episode in the foreign exchange markets.

The Federal Reserve has taken a keen interest in developments affecting the structure of the derivative markets including some important recent legislative and regulatory developments in the United States. And, this is the perspective we bring to the assessment of the G-30 study--not only that of bank regulators, but concern about the stability, integrity, and efficiency of financial markets, institutions and the overall financial system.

Though the G-30 study has been completed, the debate about appropriate public policies toward derivatives is certain to continue. As you know, this study will be followed by others (indeed, many others) including, in particular, studies by the General Accounting Office (GAO) and the Commodity Futures Trading Commission (CFTC). In the United States, there are indications that once the studies are complete, Congress may undertake a thorough review of the appropriate regulation of derivatives markets.

In the interim, market participants have an opportunity to build on the Group of Thirty Study in ways that increase the likelihood that a regulatory framework consistent with market efficiency and market integrity will, in fact, be the outcome of this process.

The G-30 Sponsored Study

As I understand it, the Global Derivatives Study Group had two major objectives. First, it sought to promote understanding and discussion of derivatives. The second objective was to help dealers

and end-users manage derivatives activity by setting out principles of sound risk management in the form of a set of recommendations for dealers and end-users of derivatives.

The first objective is well met by an overview section, which, as advertised, sets out in relatively plain language what derivatives are, the needs they serve, their risks, and their relationship to traditional instruments.

I can think of no better treatment of these issues for senior managers of financial institutions and interested regulators and legislators. Even those who are not mystified by derivatives will find valuable insights into derivatives activity.

The discussion of the benefits of derivatives activity is especially valuable because it not only presents these ideas in the abstract, but offers concrete examples of how financial institutions, institutional investors, nonfinancial corporations, and governmental entities use derivatives to manage risk.

Financial practitioners have long understood the obvious benefits to derivatives in reducing the transactions costs of participating in some markets, in effect arbitraging some of the administrative and regulatory costs and other associated impediments and inefficiencies. For years, financial economists have explained that it is transparently obvious that derivatives improve Pareto efficiency--allowing different components of risk to be segregated and isolated and passed around the financial system to those willing and able to bear each risk component at least cost. This clearly reduces the overall cost of risk bearing and enhances economic efficiency.

Nonetheless, there is ample evidence in the public debate that some, for example, still cannot understand how contracts that seemingly constitute a zero-sum game can serve any need other than those typically met in Las Vegas or Monte Carlo. Concrete examples showing how local governments now use derivatives to manage the risks associated with volatile fuel costs or how exporters (and the jobs they create) depend on derivatives to manage foreign exchange rates make the point far more effectively than any abstract economic analysis.

The analysis of the risks associated with the use of derivatives also is comprehensive and lucid. The essential message is that the types of risk associated with derivatives--market risk, credit risk, legal risk, and operational risk--are no different than the types of risk associated with traditional instruments--loans, securities, and deposits. But, as clear as the exposition of these risks is, I suspect that for most readers it will underscore the other key conclusion about risk--the complexity and diversity of derivatives activities make the measurement and control of risks more difficult and more important than is the case with traditional instruments.

A concluding section goes beyond the risks posed by derivatives to individual firms that use them to consider the risks derivatives might pose to the financial system as a whole. For some time I have felt that it is important not to overstate the systemic risk potential of derivatives. In that respect, the report is entirely successful. Perhaps a bit too successful, in my view. Of course, it is the job of practitioners to focus on managing risk at the firm level. Public

policymakers necessarily consider the external impact of individual firm problems on the financial system and the economy. In particular, it is the job of central bankers to worry about events that have small probabilities of occurrence, but would impose large costs on the financial system and the economy were they to occur.

While the analysis contained in the report does provide useful perspective to systemic risk issues, in my view it does not offer new insights that are likely to alter materially one's estimates of the probability of a systemic disturbance or of its potential costs. (Indeed, at some point it may be worthwhile to clarify the nature of systemic concerns. I shall defer that task in favor of focusing on this report.) Nor does the report contain a rigorous examination of the appropriate capital levels required to support the risk associated with derivatives activities, an issue of interest to central bankers and regulators. Moreover, the report's statement that the existing regulatory framework is adequate does not appear to be derived from or supported by an extensive analysis of the full range of public policy issues associated with derivatives activities. In my view these should not be viewed as notable deficiencies in the report, since addressing public policy issues was not the primary objective of the study.

Of course, there is no question that sound risk management at the level of the individual firm is a key ingredient in addressing and reducing system risk. It is through this avenue that the report constitutes a useful public policy contribution. Concerns about systemic risk should be diminished, perhaps appreciably diminished, if

market participants strengthen their risk management systems in the ways recommended in the report.

G-30 Study Recommendations

Thus, as useful as the overview of derivatives is, the most valuable product of the study is a set of sound risk management principles for dealers and end-users, summarized in a set of recommendations and elaborated in a series of working papers. The recommendations also point to ways in which legislators, regulators, and supervisors could work with market participants to strengthen the financial infrastructure for derivatives activities. I believe this is the right approach for practitioners to take and responds to articulated public policy concerns about risk management.

Overall, the recommendations seem to me to address quite successfully the full range of issues associated with the measurement, control, accounting, and disclosure of derivatives activities.

A study so comprehensive can be expected to contain some details which one might question, and this study is no exception. A few examples might illustrate the sorts of issues raised by the recommendations.

- With respect to the role of senior management (Recommendation 1), the flavor of the G-30 recommendation is one of general awareness by senior management that derivatives merit attention, approval of policies and control procedures, and shared responsibility for policy

enforcement with all levels of management. In contrast, central banks and supervisors tend to stress the importance of a clear understanding by senior management of the nature and magnitude of the institution's exposure to risk, an affirmative role in establishing the limiting parameters of risk-taking, and assumption of ultimate responsibility for overseeing the management of risk; arguably a somewhat different perspective, leading perhaps to a more stringent standard. The supervisors' perspective is reinforced by survey evidence reported under Recommendation 16 that senior management is "worried about its own lack of understanding ... and about overreliance on a few specialists."

- With respect to market valuation models (Recommendation 3), more guidance would be useful since bid and offer prices for many products, especially options, must be determined by statistical models, subject to specification error and judgemental inputs.
- Valuation based on mid-market levels less adjustments (Recommendation 3) may lead to inconsistent reporting without greater agreement on the adjustments that are necessary and how to perform them.
- Although "value at risk" is, in my view, the best approach to measuring market risk (Recommendation 5), the one-day time horizon might be given more thought. Despite daily marking to market, for some products it may be unrealistic to assume large positions can be promptly

liquidated without substantial adverse market impact. Although stress tests (Recommendation 6) are important and useful, they seem to be focused on contingency planning for extraordinary conditions, rather than routine risk management for less liquid products.

- The report strongly and in my view, correctly, endorses an independent risk management function (Recommendation 8), then notes that "the risk management function is rarely involved in actual risk-taking decisions." This invites an obvious question. If involved at all in risk-taking, how can it be independent? Left unaddressed is the compensation dilemma. If risk managers do not share in the benefits of risk-taking, how can they be compensated adequately to avoid migration of the best personnel to risk-taking functions? But, if they reap the benefits of risk-taking in some direct manner, how can they truly be independent?
- The recommendation on systems (Recommendation 17) seems less forceful than the Subcommittee report (Appendix 1, Section 4), which makes an excellent case for the importance of strong backoffice systems in view of the complexity and diversity of the derivatives business. Shouldn't adequate systems be in place before new activities are pursued in scale?
- The greater scope for deferral of losses under "risk management accounting" (Recommendation 19) could be subject

to abuse, especially if the amount of deferred losses is not disclosed.

- Finally and importantly, one wonders whether the recommendations on disclosure (Recommendation 20) go far enough to address the serious deficiencies that the study notes. Noticeably absent from recommended disclosure is a summary measure of market-risk exposure.

On the other hand, a very useful aspect of the recommendations on accounting and disclosure is the affirmative view that the industry should move ahead on its own to strengthen these areas, and not wait for the accounting profession, not known for rapid response to change, to mandate progress.

And I was especially gratified that the recommendations imply that certain dubious practices should be abandoned. Examples of these discredited practices include "limited two-way payments" (walkaway clauses as regulators see them) which could jeopardize the orderly winddown of a troubled dealer and so-called "grand-slam netting" of receivables and payments which grossly understates credit exposures.

The report also sounds an appropriate note of caution about the potential adverse impact on liquidity of contractual unwind provisions based on a downgrade in a counterparty's credit rating or on a material adverse change in its financial condition. Indeed, even in the absence of such provisions, supervisors of regulated entities may encounter significant difficulties dealing with weak and failing institutions active in derivatives. The strengthening of policies and

procedures for dealing with such situations is a regulatory task not listed in the report.

Despite questions on some of the specifics, the chief strength of the report is its emphasis on an independent risk management function responsible for an intensive, at least daily, mark-to-market approach to the measurement and management of risk exposure with rigorous market risk limits and stress simulations. As a set, the report's recommendations do constitute an important and useful contribution to developing practice in this market.

Implementation of G-30 Study Recommendations

Looking to the future, the study suggests two central questions. First, how widely are the recommended practices employed by active market participants? And, secondly, what mechanisms, both regulatory and self-regulatory, are available or need to be developed to encourage firms to adopt sound risk management practices consistent with these recommendations?

On the first question, the recommendations are anything but a sanctification of the status quo. With respect to the match between recommendations and current practices, the findings of the study are decidedly mixed. The Survey of Industry Practice suggests that most end-users and many dealers do not follow all (or, in some cases, very many) of the report's recommendations. The clear implication is that, as far as implementation is concerned, much work lies ahead of this industry.

Nonetheless, an answer to the second question, the issue of implementation, seems noticeably absent from the report. Despite a tone that some may find sanguine, these are not timid recommendations; they are, in part and in sum, an ambitious approach and require a substantial commitment of financial resources and expertise to the process of risk management.

As the report indicates, implementation of the recommended portfolio approach to risk management has required the most sophisticated dealers to make substantial investments to integrate back-office systems for derivatives with front-office systems for derivatives as well as with other risk management systems.

The report also notes that implementation of such an approach requires a new breed of specialized, qualified operational staff. This implies substantial training costs. It also requires development of new compensation policies adequate to attract and retain staff in areas that are not typically seen as profit centers.

One wonders whether we can depend solely on the forces of managerial responsibility and market discipline as sufficient incentive to motivate firms to incur these implementation costs. The cost and difficulty of implementing the recommendations seem to offer a powerful motive to find excuses for avoiding implementation. Nonetheless, the report does not discuss the appropriate mechanisms to encourage implementation of its recommendations.

Also absent from the report is a clear statement concerning what types of firms need to implement which specific recommendations. In

fact, the study offers the caveat that the recommendations "are not necessarily the only means to good management." No doubt that is true. I myself would take issue with some of the details. But, it would seem that an unarticulated implication of the study is that every active dealer should study the recommendations carefully and implement each one unless it can demonstrate that it employs an equally effective means of reaching the risk management objective to which the recommendation is directed. If this is not an implicitation of the report, then a clear and rigorous delineation of which firms need to do what would have been useful.

The Role of Regulation in Implementation

Central banks, regulators, and supervisors must do their part and, I am confident, will do their part to ensure implementation of sound risk management procedures consistent with the conclusions of the report as well as to strengthen the legal and regulatory infrastructure for derivatives activity.

- We must continue to work to strengthen the legal framework for derivatives in the United States and abroad. As many of you know, the Federal Reserve has supported past legislative efforts to ensure enforceability of netting contracts under U.S. law. For example, acting upon authority provided by legislation that we supported and Congress passed in 1991, the Board has proposed to expand the coverage of provisions legally validating netting contracts to include contracts between

all active dealers in OTC derivatives, including affiliates of securities firms and insurance companies as well as banks. And we have worked to ensure that U.S. commodities laws cannot be used to challenge the legality of OTC derivatives transactions among institutional counterparties.

- We must ensure that inconsistencies and uncertainties in tax laws and regulations do not inhibit the use of derivatives for risk management.
- We must continue to push for modernization of accounting and disclosure standards to address the new products and new risk management techniques that have emerged.
- And, we must promptly implement the recent proposal by the Basle Supervisors to recognize, in capital adequacy standards, the risk-reducing benefits of legally enforceable netting arrangements.
- Finally, and perhaps most importantly, we must continue to improve our supervisory policies and procedures for regulated financial institutions and build supervisory expertise in light of the report's recommendations.

In my view, there is clearly no simple, mechanical mapping of the report's recommendations into supervisory standards. We must be concerned about efficiency and flexibility in the regulatory process. Regulatory micromanagement would be particularly counterproductive in this innovative marketplace. The appropriate focus of supervisory standards derived from public policy fundamentals is not identical to the perspective of the report--that of the private sector practitioner.

Thus, compared with the report's recommendations, appropriate supervisory standards are likely to be different and on some specific dimensions perhaps somewhat more stringent. Nonetheless, this study provides a most useful input to the ongoing process of developing sound supervisory standards and practices for derivatives. In this respect, I share the hope and expectation, expressed by former Chairman Volcker in his foreword to the study, that market practices and regulatory practices can be harmonized.

The Role of Self Regulation in Implementation

Of course, central banks and regulators alone cannot ensure implementation of sound risk management by all relevant parties. As the report notes, some major dealers are not subject to regulation nor are most end-users. Thus, I believe the industry generally should do its part to encourage implementation.

As to the role of the Group of Thirty in fostering implementation, one can't help but note the contrast between this report and the Group of Thirty sponsored study of securities clearance and settlement systems. In the latter case, the report set a timetable for implementation of its recommendations and created a secretariat to monitor implementation efforts in more than a dozen countries.

To be sure, implementation of the clearance and settlement recommendations may inherently require a higher degree of coordination and cooperation among market participants. Nonetheless, I think the excellent quality, timeliness, and importance of this report argue for the Group of Thirty to promote implementation of the recommendations

by market participants. The presentations at this conference by Dennis Weatherstone and others who contributed to the study constitute a good first step toward the goal of widespread implementation. Serious thought should be given to how the momentum created by this effort and the release of the report can be maintained, perhaps through periodic surveys of industry practice or other monitoring mechanisms. ISDA may wish to consider its appropriate role in this process as well.

Other Public Policy Issues

Turning now from the specific focus of the report to broader issues, the industry, whether though the G-30 Study Group, through ISDA, or by other means, needs to do its part to ensure that the full range of public policy concerns about derivatives are addressed. Those concerns extend beyond the sound management of individual firms, the primary focus of the Group of Thirty study, to include not only systemic risk issues but also the traditional concerns of market regulators--market integrity, customer protection, and market transparency.

What other avenues might market participants explore to reduce systemic risks? An example might be the discussions among some market participants examining the potential benefits of a clearing house for OTC derivatives. However, such a multilateral netting facility would not necessarily reduce systemic risk. The report correctly notes that a clearing house would concentrate credit risks in the central counterparty. The impact on systemic risk would be determined

primarily by the quality of the risk management structure employed by the clearing house.

Provided that the clearing house adopted a sufficiently robust risk management system, systemic risk could be reduced. Useful guidance on the appropriate credit, liquidity, and operational safeguards for such a clearing house are provided by the standards outlined in the Lamfalussy Report on netting systems published by the Bank for International Settlements (BIS) in 1990. If market participants chose to develop a clearing house, a by-product would be the centralization of information about market prices and transactions. This might provide a cost-effective means of addressing concerns expressed by some about market transparency were that deemed necessary or desirable.

Moreover, the industry also needs to be alert to the possibility that more attention may be focused on other public policy issues such as customer (or investor) protection issues. My approach to the customer protection issue would be to start with the fundamental concerns of public policy and derive policy prescriptions from a careful and rigorous assessment of the need to achieve specific public policy objectives in an effective and efficient manner. Who are the participants in these markets? Are they unsophisticated parties in need of protection? If market participants are sophisticated institutional investors what (presumably very different) investor protection measures are appropriate? Do existing regulatory frameworks, for example banking and securities regulation, provide the necessary protection? If not, how can it be provided most efficiently

and effectively? Applied to derivatives activities, essentially a wholesale business among institutions, this conceptual approach would seem to elicit very little concern about custmer protection public policy issues in the derivatives markets.

However, the industry should be aware that this approach to customer protection issues may not be fully shared by all those in influential public policy positions. There is intense interest in investor and customer protection issues in the public policy arena. Much of securities regulation and many recent initiatives in futures regulation have been motivated by the desire to protect investors. Although users of derivatives products mostly are institutions, they are not necessarily sophisticated institutions. The report highlights the legal risks of dealing with a counterparty that is legally incapable of entering into a contract (i.e., ultra vires), but it does not address the political risk of entering into a contract with a counterparty that may be viewed, rightly or wrongly, as incapable of understanding the risks entailed. We have had notable examples of this in the government securities market. In an analogous fashion some may ask this industry to develop and promulgate suitability standards for transactions with end-users (e.g., local governments) that may be viewed by legislators as unsophisticated and in need of protection.

In the United States, at least, market participants have ample motive to address the full range of public policy concerns that I have noted. They need only look to the recent history of the banking industry or to the ongoing battle over regulation of the government

securities markets to convince themselves that if the industry does not assume the responsibility for addressing public policy concerns and do this job well, others are quite willing to take discretion out of the industry's hands and do the job perhaps much less well.

Conclusions

I have ranged far afield from the narrowly stated purpose of reviewing the G-30 sponsored study of derivatives, and let me now return to it to sum up. In my view, the G-30 Study is an excellent effort. The focus is on the right issues. The recommendations are comprehensive and, by and large, compelling. I share the study group's conviction that the derivatives markets provide important benefits to the financial system and the economy. However, to continue to be successful, the derivatives market must, in my view, develop in a manner consistent with sound risk management principles, and this study constitutes a ground-breaking contribution to that end. While the report provides an excellent blueprint, it is clear that recommendations are not reality, and the important task of implementation lies ahead. In the public policy arena, we at the Federal Reserve are committed to doing our part to ensure and enhance the efficiency and integrity of this important market.