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### Testimony by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, United States Senate

Alan Greenspan

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Testimony by

Alan Greenspan

Chairman, Board of Governors of the Federal Reserve System

before the

Committee on Banking, Housing & Urban Affairs

United States Senate

February 2, 1988

Mr. Chairman, I appreciate this opportunity to appear before the Banking Committee to address questions about the Federal Reserve's response to the turbulence in financial markets last October, the functioning of our financial markets during that period, and proposals for structural and regulatory reforms.

Federal Reserve Response to the October Crisis

During the stock market crash, and in the days following, the Federal Reserve undertook a number of actions to deal with emerging problems and restore confidence. Our purpose was to limit any damage from the collapse in financial markets on the economy.

History teaches us that central banks have a crucial role to play in responding to episodes of acute financial distress. Before the founding of the Federal Reserve, the early stages of stock market crashes or their equivalent were compounded by a sharp escalation of short-term interest rates and a reduction in credit availability. For example, during the Panic of 1893, rates on call loans to brokers in New York City were quoted at the extraordinary level of as much as 74 percent per annum; the rates on prime commercial paper reached 18 percent. Interest rate quotes during the Panic of 1907 were similar. Moreover, these rates were for the most part purely formal quotes; even at such high interest rates, very little money was actually forthcoming from nervous lenders.

These rates are a product of natural market reactions to the dramatic increases in uncertainty that accompany such

episodes. Fearful people tend to withdraw; they pull back; they endeavor to become safer and more liquid. Savers and lenders attempt to disengage from markets, especially those involving risk-bearing instruments, and look for principal preservation rather than capital gains and earnings potential. This increased demand for liquidity and safety is a phenomenon that in recent years has often been described as a flight to quality. At the same time, some private borrowers might find that their credit needs have been enlarged by a stock market crisis, especially the securities dealers who need to finance a larger inventory of equity shares acquired from a panicky public. Others may increase their borrowing just to have a larger cushion of cash on hand, given the financial uncertainties.

This combination of supply and demand factors can add up to a situation in which private borrowers could have difficulty obtaining credit, or at least find it very much more expensive. Short-term interest rates on private instruments and the cost of borrowing from intermediaries could rise sharply, compounding the crisis and increasing the potential for major damage to the economy and financial markets.

There certainly can be a rational component underlying the heightened demand for liquidity and increased reluctance to lend to private borrowers. A stock market crash can patently increase the credit risk involved in lending to certain borrowers, such as those dealers holding large inventories of equity relative to their capital, or firms planning to retire debt by

selling shares of stock, or companies that may experience reduced demand for their products as a result of the decline in equity prices. But there can be, and almost always is, an exaggerated market reaction as well, based on little hard evidence, that builds on itself and ultimately affects borrowers whose creditworthiness has not been materially impaired by the drop in equity values. This irrational component of the demand for liquidity may reflect concerns that the crisis could affect the financial system or the economy more generally, spreading beyond the individual participants directly involved. It also can be a strong reaction to heightened uncertainties, before firm information becomes available on which potential borrowers have been weakened and which still are sound.

The irrational aspect of the flight to liquidity and quality is similar in some respects to a run on a bank that is fundamentally sound. In the days before deposit insurance, banks attempted to fend off such runs by putting cash in the front window. By reassuring depositors that ample supplies were on hand, the run might be discouraged from even beginning.

In a sense, the Federal Reserve adopted a similar strategy following October 19, one aimed at shrinking irrational reactions in the financial system to an irreducible minimum. Early on Tuesday morning, October 20th, we issued a statement indicating that the Federal Reserve stood ready to provide liquidity to the economy and financial markets. In support of that policy, we maintained a highly visible presence through open

market operations, arranging System repurchase agreements each day from October 19th to the 30th. These were substantial in amount and were frequently arranged at an earlier time than usual, underscoring our intent to keep markets liquid.

By demonstrating openly our determination to meet liquidity demands, we could, in practice, reduce those demands to the extent they arose from exaggerated fears. Through its actions, the central bank can help to assure market participants that systemic concerns are being addressed and the risk contained--that isolated problems will not be allowed to infect the entire financial system.

The Federal Reserve's activities seem to have contributed to a calming of the extreme concerns generated by the stock market collapse. Gradually, risk premiums for private borrowers subsided, suggesting that the flight to quality had abated. However, there remained fear-based demands for liquidity, generated temporarily in the course of the financial turmoil, and there was also understandable and reasonable demands for excess reserves at depository institutions, whose reserve management turned appropriately more cautious. In addition, demand deposits bulged following the stock market fall, probably in conjunction with the surge in financial transactions. The Federal Reserve supplied extra reserves to accommodate these needs.

By helping to reduce irrational liquidity demands, and accommodating the remainder, the Federal Reserve avoided a tightening in overall pressures on reserve positions and an increase in short-term interest rates. In fact, we went even further and eased policy moderately following the stock market collapse in light of the greater risk to continued economic expansion. The federal funds rate dropped from over 7-1/2 percent just before October 19th to around 6-3/4 percent in the first half of November, and regular adjustment and seasonal borrowing at the discount window fell from around \$500 million to under \$300 million in November. Rather than the spikes in rates observed in panics earlier in our history, short-term rates actually declined after October 19, even on private instruments.

At the same time, I should add that it was very important that our actions not be perceived as merely flooding the markets with reserves. That would not have addressed the problem. We undertook open market operations in a measured and calibrated way. Haphazard or excessive reserve creation would have fostered a notion that the Federal Reserve was willing to tolerate a rise in inflation, which could itself have impaired market confidence. We were cautious to attack the problem that existed, and not cause one that didn't.

In addition, the Federal Reserve took a number of other steps following the stock market crash focused on the functioning of the markets and the financial strength of important participants. These were designed to enable us to be in a position to

address the consequences of the crash on markets, especially if they threatened further disruption to the financial system, and assure the markets of our efforts to contain the damage. Our actions dealt with a number of actual and potential specific problems, but more generally were also a key aspect of our strategy to contain the effects of the market disruption by maintaining a high visibility that would calm markets and reduce irrational demands for liquidity.

We recognized that the safety and stability of the banking system is essential to the success of this strategy. History teaches us that stock market declines that do not adversely affect the banking system have a much less serious effect on the overall economy than ones that do.

For example, the stock market crashed in March 1907, but the Panic of 1907 was not initiated until the failure of the Knickerbocker Trust Company in October. The damage to the economy following the stock market crash in October 1929 was much magnified by the series of bank failures which occurred in 1930-33. Conversely, the stock market fell sharply in May and June of 1962; however, the banking system was not seriously affected, and the effect on the overall economy was limited.

Accordingly, during the recent events, the System placed examiners in major banking institutions and monitored bank developments carefully in a number of ways.



For example, the Federal Reserve Banks kept close track of currency shipments to banking institutions in order to identify potential emerging bank runs. These shipments did increase after October 19, but seemed to involve banks that were taking precaution against runs that never occurred. In addition, there was a generalized increase in the demand for precautionary balances in currency by the public, not associated with runs on banks, that was also satisfied.

We reviewed the potential impact of stock market activity on pending bank holding company mergers and acquisitions. We monitored the announced or unannounced intention of bank holding companies to buy back their stock. When discussing these possible actions with holding companies, we took the position that such purchases would be inappropriate other than on a limited basis to restore order in the market for their stock.

We paid particular attention to the credit relationships between banks and securities dealers. We assessed the banking industry's credit exposure to securities firms through loans, loan commitments, and letters of credit. We were in contact with both banks and securities firms regarding the liquidity and funding of brokers and dealers. We recognized that banks needed to exercise caution in their credit judgments to protect their financial stability. At the same time, banks have always been relied upon as important sources of credit in financial markets, especially when those markets are troubled and normal access may have been impaired. In our conversations with

banks, we stressed the importance of ensuring adequate liquidity to meet legitimate customer funding needs, even if they were unusually large, while recognizing explicitly the responsibility of market participants to make their own independent credit judgments

In the event, banks did make a large volume of securities loans following the stock price decline. They apparently reviewed their credit exposure carefully, in some cases asking for additional collateral. However, our information suggests that there were only a few instances in which credit was withdrawn or requests for new credit were refused, and these involved relatively minor amounts. The generally good performance of this key lending function may be attributable, at least in part, to the knowledge that the Federal Reserve was making reserves freely available, so that banks would not be facing escalating funding costs

The Federal Reserve also took particular interest in the government securities market. We have long had a special involvement in this market through our open market operations and as fiscal agent for the Treasury.

In the wake of the stock market decline, we stepped up our daily monitoring of primary government securities dealers and inter-dealer government securities brokers. We held discussions with regulators and other market practitioners regarding particular situations where firms were having difficulty meeting capital requirements. Officials of the Federal Reserve Bank of

New York met with representatives of government securities dealers and with inter-dealer government securities brokers with regard to concerns about counterparty risk, especially in when-issued trading associated with the Treasury's November refunding.

One problem that arose resulted from a reluctance of some holders of government securities to lend them as freely as they typically do. As a consequence, the incidence of failures to deliver particular government securities rose, potentially disrupting trading and liquidity in this key market. In response, the Federal Reserve temporarily liberalized the rules governing lending of securities from its portfolio. For a time we lifted per dealer and per issue limits on such lending, and set aside the rule against lending to facilitate short sales.

Beyond these efforts in the banking and government securities areas, the Federal Reserve was in frequent contact with market participants and officials at the Treasury and at other regulatory agencies regarding the functioning of other markets as well. The efforts proved essential to gather information, identify developing problems, and coordinate responses with other authorities.

Many of the contacts occurred through the Federal Reserve Banks of New York and Chicago, which have special knowledge and understanding of nearby markets and contacts with key officials. Through them and at the Board of Governors, we were in touch with officials at the stock, options, and futures exchanges, as well as with the Securities and Exchange Commission

and the Commodity Futures Trading Commission, regarding the liquidity of the markets, the functioning of market makers, operational problems, and settlement issues. In addition, we discussed the possible effect of sharp swings in markets on participants' financial conditions, to obtain advance warning of any problems that might be developing. To facilitate timely margin collections in futures markets, the Federal Reserve extended the hours of operation of its funds transfer system on October 19 and 20.

Furthermore, we closely monitored the international ramifications of the stock market crash, and the effect of developments in foreign markets on U.S. market participants. We communicated with officials of foreign central banks with regard to general market conditions, and with various market participants abroad regarding the effects of the stock market developments in specific markets.

In summary, the Federal Reserve acted in response to the stock market crash to reduce irrational fear-based demands for liquidity, to meet remaining unusual liquidity demands and to monitor developments in the government securities and equities markets and in the banking system. Our reactions to provide liquidity apparently prevented the sharp interest rate spikes observed in earlier crisis periods. Interest rate spreads have come back more into line, and market functioning appears to have returned toward more normal conditions. Although it appears that

the acute crisis period has passed, markets remain quite sensitive, and could react strongly to developments that seemed to portend more market instability

Stock Market Functioning at the Break

Regarding the matter of the overall functioning of our markets for equities and derivative instruments during the October turbulence, we now have the benefit of several major studies. More studies will be forthcoming. Clearly, the findings and the recommendations of these studies deserve careful consideration. Senator Brady and the other members of the Presidential task force, along with their staff, have done a remarkable job of assembling information and preparing their report on the October plunge in so short a span of time. The nation owes them a debt of gratitude for their efforts. We find their analysis of the causes of the stock break particularly instructive and subscribe to its general lines. We differ in part on some of their recommendations for reform. The Brady report, along with those of the CFTC, the GAO, and various private organizations, are adding much to our understanding of these events and the vulnerabilities of our securities markets to rapidly changing developments.

It hardly needs to be said that we are dealing with an extremely complex set of issues involving the factors that influence price movements in securities markets and the capability of our financial institutions to withstand extreme shocks. Not only do the studies emerging on this matter reinforce the

point that there are close relationships among the various domestic securities markets and between these markets and their derivative counterparts but also the extent to which our financial marketplace has become intertwined with those abroad

In addressing the issues before us, we must keep these dependencies in mind. We must also recognize that the financial system is in the process of evolution and that much of the change since mid-October has been in reaction to weaknesses displayed at that time. Some of these adaptations--such as a reduction in the use of portfolio insurance strategies--are taking forms which limit pressures that would be placed on the system in the event that circumstances similar to those of mid-October were to recur. Others are adding to the system's capacity to bear large shocks.

A central question is the cause of the market collapse and its suddenness. Only if we understand why it happened can we gain insights into how the structure of markets for equities and their derivatives can be improved. Not only was the stock price break very large but it was compressed into a very short span of time. We can point to a number of price declines in our history of a magnitude similar to last October but none have been as rapid. Also, the plunge was an international phenomenon. The drop was of fairly uniform severity across the major equity markets, affecting those with well-developed and less-developed derivative markets similarly.

Prior to the drop, the market had run up to very high levels. The bull market from 1982 onward was nurtured by a

favorable economic setting for businesses, which investors came increasingly to view as likely to be sustained. In particular, inflation expectations were greatly reduced over this period, even as the economic expansion continued. However, stock prices finally reached levels which stretched to incredulity expectations of rising real earnings and falling discount factors. Something had to snap. If it didn't happen in October, it would have happened soon thereafter. The immediate cause of the break was incidental. The market plunge was an accident waiting to happen. Measures of real rates of return on equity investments indicated that such returns were at historically low levels last summer--a situation that in the past has been restored to more normal levels either by a subsequent sharp increase in earnings or a pronounced drop in share prices. In the event, we got the latter

Probably contributing to high share prices were efforts by investors previous to October to extend their cash equity positions on the thought that the availability of liquid markets for derivative instruments would enable them to promptly trim their exposure and limit losses should they fear a turn down in prices. Many users of portfolio insurance strategies, especially those aggressive formal programs that were model driven and executed by computers, believed that they could limit their losses in a declining market, and hence were willing to be more than usually exposed in cash equity markets. However, the experience of last October vividly illustrates that timely

execution cannot be assured, especially under those conditions when it matters the most--when the markets are under heavy selling pressure. In essence, there was an illusion of liquidity that likely encouraged larger equity positions on the part of many investors. Of course, while an individual investor can in principle reduce exposure to price declines, the system as a whole with rare exceptions cannot.<sup>1</sup> Thus, strategies by so many investors to shed risk associated with a large decline in price were vulnerable in ways that had not been fully contemplated. The nearly simultaneous efforts of so many investors to contain losses pushed the system beyond its limits, exacerbating problems of execution and leading to portfolio losses that had not been envisioned when these strategies were adopted. The dramatic experience of October has, however, introduced more realism into such risk-shedding investment strategies, and in the process has defused some of the potential pressures on the system in the future. The mere fact of sharply lower prices has significantly reduced the risk of a replication of October 19.

Modern technology coupled with the greater presence of sophisticated institutional investors undoubtedly contributed to the suddenness of the October drop. Through modern telecommunications and information processing, investors can follow events as they unfold and react very promptly. What formerly took hours or

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<sup>1</sup> To the degree that derivative instruments facilitate a better redistribution of price risk to those most willing and able to bear it, they can add to the appeal of cash equity investments to investors, encouraging them to hold larger permanent equity positions.



days now can be done in seconds or minutes. Moreover, institutional investors have taken on a major role in the market for equities and derivative products--accounting for about two-thirds of trading volume--and these sophisticated investors are capable of reacting almost instantaneously to information as it becomes available; these investors also were heavy users of portfolio insurance programs that key off movements in market prices and reinforce buying or selling pressures.

Modern technology along with major institutional presence in the market implies that an enormous volume of buy and sell orders can be sent to the markets at any moment, leading to very sudden pressures on prices. Furthermore, sharp downward price moves by themselves, such as those occurring last October, can act to heighten uncertainty in the markets and efforts to disengage, thereby compounding selling pressures. Under these circumstances, many potential buyers become reluctant to enter the market as the sharp price move, outside the range of normal experience, leads to doubts about underlying values. In other words, a rapid decline in prices can act to raise the uncertainty premium in share returns adding, at least for a while, to downward price momentum and pressures on execution capacity. In earlier periods of large market declines, such as the Panic of 1907, news of the initial drop reached investors more slowly, for many, the next day. As a consequence, price declines were spread over a longer period of time and some of the trauma caused by a

sudden price break and the corresponding pressures on system capacity was thus avoided.

On top of these factors, system capacity became an influence on investor behavior. As investors came to recognize that the capacity of the system to execute trades was faltering, they sought to get out while they could. In other words, the realization by investors that the system cannot simultaneously accommodate all the efforts underway to reduce long positions in stocks or their derivative instruments prompts still others to attempt to get out, too. This situation is not at all unlike the conditions associated with a classic bank run once it becomes apparent to depositors that the bank's liquidity will be exhausted. The problem is compounded. The confusion and uncertainty about execution last October likely contributed to uncertainty premiums in share returns and thus to additional downward pressures on prices.

The emerging incoherence between the prices of stocks, stock index futures and options last October also contributed to uncertainty premiums and the downward pressure on prices. There is, of course, only one valuation process in these markets, that being the underlying value of the primary claims to corporate ownership. Index futures and options are claims on the primary claims and can have value only to the extent the underlying stocks have value. In fact, index futures and options merely gross up the demand and supply for equity-related products.

Every such contract has equal outstanding long and short positions, the net of which is, of necessity, a wash. Stocks, in contrast, reflect a net long position representing the total value of the combined equity and derivative products. In normal circumstances, when markets are functioning efficiently, arbitrage keeps the prices of these so-called derivative instruments in line with equities. But under the strains of last October, the individual markets for these instruments were fragmented, generating considerable price disparities. These disparities were able to persist for extended periods of time--adding to confusion and doubt--owing to a breakdown of the arbitrage process associated with the withdrawal process and execution problems

Other factors added to strains on the markets last October. The lack of coordination of margin collection and payment cramped the liquidity of some market makers and their ability to maintain positions. Also, rumors and discussion of exchange closings and possibly insolvent clearing houses added to confusion in the markets and evidently encouraged some investors to liquidate portfolios before the markets shut down, further adding to strains on the system. In short, the initial rapidity of the price correction to an overvalued market, and a faltering execution capacity, sharply raised risk or uncertainty premiums, which contributed to historic declines in prices.

While much of the attention given to the performance of the equity and derivative markets last October has been on the

strains and weaknesses displayed, we must nonetheless not lose sight of the fact that we came through the crisis remarkably well, given what happened. No major brokerage firms failed, unprecedented margin calls by the futures clearing houses were met by their members, and stock prices reached a new trading range shortly after the plunge.

#### Structural and Regulatory Reforms

Turning to recommendations for structural reform, I particularly appreciate the opportunity to appear after Senator Brady. The Brady task force observes, as do others, that the weight of the evidence clearly indicates that the markets for securities and their derivative products are very closely interrelated and can and should be viewed as one market. They conclude that these circumstances require a common regulatory approach.

Recognizing that we are dealing fundamentally with a single market system is basic to addressing the structural and regulatory issues before us. We must appreciate that there is a single valuation process affecting stocks, index futures and options, and arbitrage across these markets in the normal course of events acts to keep the prices of these various instruments in alignment. Thus, we must not jump to the conclusion that movements in futures prices by themselves cause movements in the cash market just because they frequently precede them. We must be careful to avoid confusing symptoms with causes. When information affecting the value of equities becomes available, portfolio

adjustments naturally occur first in those markets where the costs of making adjustments are lowest, which commonly has been in the futures markets. Arbitrage, including index arbitrage, acts to ensure that values in the cash market and elsewhere reflect the new information.

We must also recognize that some of the factors contributing to the October break cannot realistically be corrected by public policy. In part the sharpness of the October decline reflected modern telecommunications and information processing systems. But this technology also tends to enhance the efficiency of our markets and is beneficial to many other aspects of our welfare, and nevertheless, is here to stay. We must learn to adapt to this development as we have to so many others that have advanced our society. Similarly, we do not want to lose sight of the important role that professional institutional investors play in managing our retirement programs and the assets of nonprofit institutions, though their very sophistication and rapid response accelerated price moves in October. It also is important to realize that the so-called portfolio insurance programs that institutions have used are strategies and not products. These strategies frequently involve active use of derivative instruments but they would exist, though probably on a smaller scale, even without the availability of such products. Moreover, the experience of last October demonstrated to these investors that aggressive strategies aimed at eking out a little more yield are inherently much more risky than had been thought, especially in

those circumstances for which protection is most sought. Thus, the pressures that they would place on the system in the event of a future market contraction would be much diminished.

It is clear from the Brady report and from other studies that the capacity of the infrastructure of our financial system to absorb the extraordinary demands placed on it last October was insufficient. We must be aware that demands on the system could again exceed execution capability and that remedies may well be needed that expand capacity or that establish an orderly adjustment process once capacity limits have been reached.

Execution capacity expansion which rarely comes into play may imply a misuse of resources. As a consequence, the Brady task force recommendation for circuit breakers has some appeal. We now have a better idea of the consequences of relying on a disorderly process for dealing with massive volume and demands on market-maker capital in the context of volatile price behavior. Relying on the disorderly process of last October discourages buyers from entering as well as compounds investor uncertainty. The Brady report suggests circuit breakers in the form of price limits and coordinated trading halts as worthy of consideration. In a sense, this could be viewed as a way of slowing things down when market conditions become hectic and threaten to get out of control, thereby replicating conditions of the past. The use of price limits, provided that they are known in advance and sufficiently wide to permit trading in all but the

most extreme circumstances, could prove to be a constructive measure for prompting a pause in trading, especially if there is unusual uncertainty on the part of lenders about the financial position of various market makers and brokers and uncertainties on the part of such borrowers about access to credit. They could also provide more time for policymakers to respond, if the conditions giving rise to the trading halt were deemed to be an emergency.

On the other hand, large price moves may lead to fears that the limits will be reached and that portfolio adjustments will not then be possible, putting more pressure on the system and assuring that the limits are hit. The recent proposal of the New York Stock Exchange to place temporary price limits on individual stocks could prove helpful in assessing the viability of price limits. Ad hoc methods for closing markets should best be avoided, as reliance on such methods is likely to encourage rumors of closings and add to market confusion. Also, a system that leads to market closings should be one that is coordinated among the markets, perhaps internationally; if not, trading likely would shift to those markets remaining open, potentially pushing them beyond their capacity constraints. Price limits and other circuit breakers must be viewed as being inherently destabilizing, but they may be the least bad of all the solutions. When orders exceed execution capacity, the system will break down. The only question is whether it is better for it to take

the form of a controlled disruption or leave the solution to a haphazard set of forces.

On the matter of regulatory structure, the Board in 1985 reviewed the appropriate form of margin regulation and suggested that margins on stocks and derivative instruments be set by self-regulatory organizations subject to federal oversight. It was thought that SROs were in the best position to determine the appropriate level of margin and had the incentive to do so to protect the integrity of their markets. It also was thought that federal oversight would be appropriate to assure coordination of margin setting across cash, futures, and options markets, and a direct federal role might be needed in emergency situations. The CFTC and SEC were viewed as playing an important role in federal oversight, given their knowledge and expertise in the markets that they regulate. The Board expressed its willingness to be a part of such a system.

We have reviewed the matter of federal oversight again and believe that such a concept continues to be appropriate. We appreciate the confidence that the Brady task force has implicitly placed in the Federal Reserve and also its reasons for recommending that a single agency have full intermarket oversight authority. However, we seriously question this recommendation. To be effective, an oversight authority must have considerable expertise in the markets subject to regulation, something that the CFTC and SEC have developed over some time. Moreover, were the Federal Reserve to be given a dominant role in securities



market regulation, there could be a presumption by many that the federal safety net applicable to depository institutions was being extended to these markets and the Federal Reserve stood ready to jump in whenever a securities firm or clearing corporation was in difficulty. Coherence of federal oversight over the market for equity instruments could be achieved through merging the relevant portions of the CFTC with the SEC or by a joint oversight authority including the SEC, CFTC and perhaps the Federal Reserve or the Treasury.

We continue to view the achievement of consistent margins across the various instruments as being appropriate and that a federal oversight authority would be well positioned to accomplish this. The proper level of margin, though, is a very complicated issue and must be addressed carefully. There are fundamental differences in the price behavior of individual stocks, stock indexes, options, and futures that are likely to call for different levels of margin if our primary objective is to preserve the integrity of these markets while promoting liquidity. We must recognize that setting margin too high on an equity instrument would discourage the use of such an instrument and reduce its liquidity, indirectly affecting the markets for the other instruments as well.

On the related matter of clearing mechanisms, we concur with the spirit of the Brady task force that improvements in the clearing system are needed, based on a more unified approach. The evidence for mid-October shows that lack of synchronization

of margin collection and payment across the markets led to cases in which brokers or market makers were in a position of having to pay out margin in one market before being able to collect from another; this situation tended to squeeze liquidity and contributed to the overall problem. The need for better coordination of margin calls and collection and payment seems clear if the system is to be better able to withstand the kinds of strains that were placed on it last October. Whether a single clearing organization servicing all of the exchanges or tighter coordination of the clearing process among the existing exchanges is required remains an open question at this point. Another approach would be for a new intermarket clearing corporation to be established to handle the accounts of brokers, market makers and investors with intermarket positions. In any event, the relation between margin and clearing suggests a role for federal oversight in the intermarket clearing process.

Finally, the Brady task force proposes that detailed trading information be collected on a regular basis for purposes of monitoring market developments and identifying market abuses. The information to be collected would include, in addition to the trade, the time of the trade and the ultimate customer. While recognizing the potential value of such information, my colleagues on the Board and I oppose such data collection, except on a voluntary basis. The right to privacy is important for a free society and we believe that the case for collecting such information must be a compelling one, which this one does not seem to

be Also, such an action by the United States alone could well reduce the attractiveness of our securities markets to foreign investors, at a time when we are heavily dependent on foreign capital for financing our external deficit

In sum, the Brady proposals and those formulated by others represent an important basis for public discussion. Reactions to these and other proposals by a wide cross section of the public will prove helpful in clarifying methods for strengthening our securities markets.